Medical Understandings of Lifestyle
An Interpretive Study of 'Lifestyle' as a Medical
Explanatory Framework

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Submitted in Fulfilment of the Requirements
for the
Degree of Doctor of Philosophy

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May 2001
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Medical Understandings of Lifestyle

Thesis Abstract

This thesis provides an overview of lifestyle as a medical explanatory concept, explicating contemporary medical understandings of lifestyle and situating these within a wider social and historical framework. It argues that ideas about lifestyle have a long history in medical thought but that what is meant by lifestyle and how this is seen as relating states of sickness and health has shifted according to audience and time period.

This thesis also addresses the sociological critique of a lifestyle approach to health and disease. It argues that this critique has focused on medical understandings of lifestyle only as an epidemiological and public health concept. This has resulted in a neglect of wider medical understandings and the constructions of individual doctors. This lacunae in sociological knowledge is addressed through empirical investigation of wider medical understandings of lifestyle within the framework of an interpretive qualitative study of medical texts, in-depth interviews with doctors from a variety of different medical specialities, observation of doctor/patient consultations and participant observation during medical consultations.

The results of this analysis demonstrate that while the sociological critique of a lifestyle approach to health, and disease does reflect many features of the wider medical understandings of lifestyle found in this project, that there is no single unified medical conception of lifestyle. Instead lifestyle is a shifting medical concept that is interpreted and applied differently between different medical fields, and between different medical doctors. Furthermore, as an explanatory concept, lifestyle has several features which make it an unusual and extremely useful medical concept. These features include flexibility, the ability to explain health and not just disease, the capacity to utilise lay understandings and offering the capacity for the self management of risk.
Acknowledgments

THANK YOU

To the doctors and others who participated in this research, for your time and for sharing your experiences and opinions. I greatly appreciate your generosity.

To my primary supervisor Associate Professor Gary Easthope for your unstinting support. I especially enjoyed the lovely dinners. Also to my associate supervisor Dr Doug Ezzy for many useful suggestions.

To Dr Nerida Cook and Dr Bob White, for reading drafts of the thesis. Your suggestions have been very valuable, and our conversations have been a lot of fun. An extra special mention to Bob for helping proof the final draft.

Della and Lynne, for all of your help with printing and binding.

To all my friends who have helped me to proof read thesis drafts, suggested books or articles to read or just listened patiently while I talked endlessly about my research.

To my parents, Margaret and Paul and my grandmother Rita, thank you for making this possible.

Finally, to Joel Stafford, thank you for everything.
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Introduction

Explaining health and illness in terms of lifestyle has become increasingly common throughout medicine due to the popularity and widespread application of models of disease from the fields of epidemiology, public health and preventive medicine (Crawford 1978, 1980; Lupton 1993, 1994b; Hughes 1994; Fitzgerald 1994; Peterson 1996).

Medical explanatory models which focus on lifestyle have received a mixed reception from sociologists. Some writers have welcomed lifestyle models of disease as an indication that medicine is transcending a tradition of biological reductionism by recognising the importance of social determinants of health and disease (e.g. Kickbusch 1986a, 1986b; O'Connor and Parker 1995). In contrast, other sociologists have been highly critical of medical understandings of lifestyle, arguing that a lifestyle approach to disease prevention has only limited potential to produce measurable reductions in disease; also that such an approach is based on problematic assumptions and has a range of negative implications (e.g. Le Fanu 1986; Macdonald and Bunton 1992; Peterson and Lupton 1996; Hughes 1996).

Whichever perspective they take on the issue, sociological writers have acknowledged that a lifestyle approach indicates an important shift, within popular conceptions of health (e.g Crawford 1978, 1980; Featherstone 1987; Blaxter 1990; White et al. 1995), within health related policies at national and international levels (Ashton and Seymour 1988; Bunton and Macdonald 1992), and within medical thought in general (Davies 1984; Hughes 1994; Armstrong 1995).

This thesis argues that while sociological research and theorising about medical understandings of lifestyle has achieved considerable insight, it remains underdeveloped for three main reasons. First, the sociological critique of medical
understandings of lifestyle is based on the assumption that medicine is an homogeneous body of knowledge and practice peopled by 'like-minded practitioners'. Second, very little sociological attention has been paid to the way that doctors construct and apply understandings of lifestyle. Empirical evidence on the ways that individual doctors understand lifestyle in relation to sickness and health is minimal and these few studies have not been incorporated into the sociological critique. Third, sociological authors criticising medical understandings of lifestyle have failed to explore the inter-relationship between lay and medical understandings of lifestyle.

These areas of underdevelopment in sociological knowledge about medical understandings of lifestyle are addressed in the thesis through an exploration of medical beliefs, understandings and accounts of lifestyle within an interpretive/constructionist paradigm. The research data were drawn from medical and lay texts, twenty in-depth interviews with medical doctors, the observation of fifty-two general practice consultations and participant observation of eight doctor/patient consultations.

Guiding the analysis of these data were the following questions: How are ideas about lifestyle being constructed and used in medical fields other than epidemiology and public health? How are doctors constructing ideas about lifestyle? How do lay and medical ideas about lifestyle inter-relate in medical texts and doctors' accounts?

The results demonstrate that sociological writing about medical understandings of lifestyle has failed to recognise the variability and the complexity of these explanatory frameworks. Furthermore, lifestyle is shown to have a number of advantages as an explanatory concept that would not have been recognised without the type of empirical research conducted for this thesis.
In addition, medical understandings of lifestyle are shown to be of considerable sociological importance for reasons in addition to those already identified in other sociological research and writing (e.g. Crawford 1978, 1980; Fitzgerald 1994; Williams 1995, 1998; White et al. 1995). Medical understandings of lifestyle relate to a number of issues of theoretical importance within medical sociology/sociology of health and illness. For example:

- Differences and similarities between expert and lay knowledges about health and disease;
- The usefulness of traditional sociological characterisations of medical knowledge and practice (disease/illness distinction, the medical model, medical/lay dichotomy);
- How doctors deal with the social aspects of ill health in the context of a training and a knowledge base which focuses almost exclusively on the physical;
- The relationship between sociology and medicine both of which lay disciplinary claims to being the legitimate authority on the social determinants of health and illness.

**Structure of this thesis**

Chapter One (Medicine and Lifestyle)

This chapter describes the complexity of medical understandings of disease. Medical explanatory frameworks focusing on lifestyle are described and located historically and in relation to other medical frameworks used by doctors to explain disease. They are also discussed in relation to wider social processes of late/high modernity, demographic changes associated with advanced capitalist societies and government policies on public health. Medical understandings of lifestyle are compared with lay understandings of lifestyle.
Chapter Two (Sociological Writing about Lifestyle as a Medical Explanatory Framework) This chapter outlines the sociological response to medical use of lifestyle as an explanatory concept with particular attention being paid to sociological criticism. It then identifies three main areas of weakness in sociological knowledge about medical understandings of lifestyle, arguing that these areas of underdevelopment will be addressed through this research project.

Chapter Three (Research Methodology and Research Methods) This chapter outlines the qualitative methodology used in this research and the research methods associated with this approach. Chapter three also describes the types of data used in the research and the techniques used to manage and analyse these data.

Chapter Four (Lifestyle in Medical and Lay Texts) This chapter presents the results of a thematic review of medical and lay texts. It describes a range of different ways that lifestyle is conceptualised within these medical and lay texts. These are presented as a typology of different medical and lay conceptions of lifestyle.

Chapter Five (Doctors' Understandings of Lifestyle) This chapter presents evidence from in-depth interviews with doctors, observation of doctor/patient consultations and participant observation of doctor/patient consultations to describe six different ways that doctors explain health, illness and disease in terms of lifestyle.

Chapter Six (Discussion) This chapter provides an overview of the thesis and a summary of results. These results are discussed in relation to the sociological critique of lifestyle as a medical explanatory framework and wider theoretical issues for medical sociology/sociology of health and illness. Finally the results are discussed in terms of wider social issues and
some practical implications of the results are raised. See following page for a visual summary of the thesis structure.
The Structure of This Thesis

INTRODUCTION

MEDICINE AND LIFESTYLE
theoretical
social/historical background
medical context

SOCIOLOGICAL WRITING ABOUT LIFESTYLE AS A MEDICAL EXPLANATORY FRAMEWORK
outlines sociological critique and identifies research problems

METHODOLOGY AND RESEARCH METHODS
outlines research methodology, data and analysis

LIFESTYLE IN MEDICAL AND LAY TEXTS
presents results of thematic review of texts
Identifies a range of different medical and lay conception of lifestyle

DOCTOR'S UNDERSTANDING OF LIFESTYLE
presents results from analysis of interview, observation and participant observation data
Demonstrates that lifestyle is not a stable explanatory concept rather doctors construct a range of different understandings of lifestyle

DISCUSSION
links results together and relates both sets of results back to research problem and theoretical socio/historical background, medical context
Chapter One
Medicine and Lifestyle

1.1 Introduction

This chapter describes how medical explanatory frameworks (such as that provided by medical understandings of lifestyle) operate. It then describes contemporary medical understandings of lifestyle and locates these in relation to other medical explanatory frameworks and within a wider social and historical context.

Throughout the chapter I demonstrate that understanding disease and health in terms of lifestyle is not a new approach. Ideas about lifestyle were present in ancient cultures, non-western cultures and in western culture before the advent of modern medicine. They are a long acknowledged feature of lay understandings of health and disease and have been a feature of modern medical thought since its inception. However, these ideas about lifestyle are not stable; instead they are dynamic and permeable, altering in response to medical thinking at the time and wider social and cultural conditions and beliefs. This chapter also demonstrates that contemporary medical understandings of lifestyle are sociologically interesting because they provide a distinctive medical explanatory framework which is socially based, takes a multi-causal approach to disease and which explains not just disease but also good health; features which are not present in other orthodox medical explanatory frameworks.
1.2 Explanatory frameworks within medicine

The standard medical approach to explaining sickness is often represented both by medical people and by sociologists as a continuously developing coherent approach which, through scientific research, is able to explain the truth about the 'real', that is biological, determinants of disease (Temkin 1981).

This approach has been described as the 'medical model' or the 'biomedical model' (Atkinson 1988:180). The term 'medical model' is best understood as referring to two different models. First, it is the term used to describe the pre-eminent scientific model used by those involved with medical science for the explanation of disease. It is also the term given to a sociological 'ideal type' constructed to describe the medical approach to disease. This ideal type is based on the assumption that the medical orientation towards disease will be a direct reflection of dominant medical theory:

The medical model in the medical explanation of disease has a number of important features. Disease is regarded as the consequence of certain malfunctions of the human body conceptualised as a biochemical machine. Secondly, the medical model assumes that all human dysfunctions might eventually be traced to such specific causal mechanisms within the organism; eventually various forms of mental illness would be explicable directly in terms of biochemical changes. The medical model is reductionist in the sense that all disease and illness behaviours would be reduced causally to a number of specific biochemical mechanisms. Furthermore, the medical model is exclusionary in that alternative perspectives would be removed as invalid. Finally the medical model presupposes a clear mind/body distinction where ultimately the causal agent of illness would be located in the human body (Turner 1987:9).

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1"Explanation means different things to the different sciences. To the doctor, it means diagnosis, naming the disorder and identifying a proximal cause or symptoms which can be treated and perhaps relieved. To the clinical scientist, it may mean taking a life history of the patient - especially if the diagnosis is one of mental or psychiatric disorder. To the biologist, it may mean defining the molecular and cellular changes that occur when disease strikes. To the epidemiologist ... it may mean asking just what characterises those who contract a cancer in comparison to those who do not." (The Open University Press 1985:1)
As a scientific model of disease, the medical model is based on germ theory (the doctrine of specific aetiology). Germ theory has maintained considerable popularity with policy makers, those working in medicine and the lay public, since its inception in the late nineteenth century. The major reason for this is that germ theory (as with all scientific and other knowledges) is pervaded by the value systems of late nineteenth and twentieth century western societies (Lock 1988:3). Two of these values include 'naturalism' (that science confers legitimacy and status, that science is a universal framework because scientific knowledge is a reflection of an independent empirical reality) and individualism ("a complex of values and assumptions asserting the primacy of the individual and individual freedom" (Gordon 1988a:21). Germ theory reflects these values, reinforces them and reproduces them. It is synonymous with science.

Furthermore, the methods of disease prevention implied by germ theory do not call for personal change and economic upheaval. Diseases can be understood as individual instances and disease prevention as a medical responsibility. This has considerable appeal for policy makers and the lay population. While complex and tangled relationships between disease and the social environment are recognised in germ theory the real cause of disease is assumed to be tangible, individual and identifiable (Tesh 1990:39):

[Medicine's] main, defining characteristic ... is its reductionist and materialist models. Its theories of biological structure and function are based on explanations that reduce pathology to universal, elementary laws. Biomedicine is fundamentally a triumph of positivist science. It explains the phenomena of health and ill-health in terms of cellular or molecular events (Atkinson 1995:26).

As a descriptive construct or 'ideal type' within sociology, the medical model has served a number of important functions. It allows for generalisation, comparison and critique and has been an essential aspect of the sociological construction of medicine as
'other' (Atkinson 1995:24-25). Furthermore, the medical model implicitly supports and reflects two additional sociological assumptions about the medical approach. These are the disease/illness distinction and the lay/medical distinction. The medical/lay distinction is the assumption that medical knowledge is easily identified and distinct from 'lay' knowledges about ill-health. In the medical model, medical understandings are associated with surety and scientific logic, and thus implicitly contrasted with lay/folk understandings associated with cultural relativity: "vagueness, multiplicity of meanings, frequent changes and lack of sharp boundaries between ideas and experience" (Kleinman 1980:107). This dichotomy is generally expressed in terms of medical 'knowledge' and lay 'belief' (Hahn 1983).

In the disease/illness distinction the term disease is used to refer to a 'natural' world of biological processes while the term illness is used to describe 'social' responses to disease (Fabrega 1974:121; Dingwall 1976:26; Bond and Bond 1986:200):

... 'disease' refers to 'objective' abnormalities of the structure and function of body organs and systems, which can be grouped into named pathological entities such as diabetes and tuberculosis. By contrast 'illness' refers to the subjective response of the patient to being unwell: how he, and those around him, perceive the origin and significance of this event, how this event affects his relationships with others; and the steps he, they, take to remedy the situation. Unlike disease, illness has psychological, moral and social dimensions ... (Helman 1985a:293).

Thus the concern of medicine is clearly established as the biological cause, nature and treatment of disease while illness is established as the concern of non-medical people, including patients, families and social scientists. Like the medical model, the disease/illness distinction has been a very useful device.² In terms of clinical sociology

²In recent years the disease/illness distinction has been criticised by many authors including Hahn (1985) and Helman (1985, 1988). These criticisms have included failing to challenge the medical version of reality, that is that disease entities are distinct and absolute and secondly perpetuating the medical lay dichotomy which fails to recognise the essentially social nature of medicine and the influence of medical versions of reality on lay thinking about disease and health. Both of these issues will be addressed throughout this section of the chapter.
and medical practice, a clearly defined concept of 'illness' has focused much needed attention on the importance of the social, psychological and cultural aspects of disease (Atkinson 1995:23).

Furthermore, the concept of illness has also provided a standpoint for sociological criticism of the reductive nature of a purely biomechanical conception of ill-health (Dingwall 1976; Calnan 1987). In terms of the development of a theoretical sociology of health and illness, the disease/illness distinction has been a skilled act of boundary maintenance between medicine and sociology, creating a legitimate sphere for sociologists interested in working in the area of health and medicine. By making a theoretical distinction between disease and illness, where disease was conceptualised as biological fact and illness as the social response to disease (primarily that of the person affected by the disease), sociologists were bargaining for space within the primarily medical arena of health and sickness.

However, while the disease and illness distinction, the lay/medical distinction and the medical model describe a particular type of medical approach to disease which is instantly recognisable by medical and lay people, these descriptors are overly reductive and simplistic characterisations of the medical approach to explaining disease. As such they can only suggest some of the ways that doctors actually account for ill-health. Despite the dominance of germ theory, medicine is characterised by internal diversity rather than internal homogeneity (Strong 1979a, 1979b, 1984; Helman 1985a, 1985b; Lock 1985:115):

[It is] ... actually very hard to find this medical model in practice. Few practitioners and no textbooks of any repute subscribe to uni-directional causal models and invariably interventions are seen in medical practice as contingent and multi-factorial and ultimately based on assessments and probabilities. Disease taxonomies, aetiologies and therapeutics are used in medical practice as ideal-types, constantly subject to revision. ... medicine
tends to be much more holistic than medical sociology traditionally gives it credit for (Kelly and Field 1994:35).

Different medical specialities emphasise different explanations for disease and health. Within medicine there exists a range of models of disease additional to germ theory. Many of these are in some way able to account for genetics, the environment, the psyche and the social/cultural milieu. Particular variation can be seen between the models used by different types of doctors, for example, hospital doctors, private specialists, general practitioners and medical scientists involved in research (Helman 1985a:294). Within medicine there is more than one model of disease in play; thus medical explanations from one area of medicine cannot be taken as synonymous with medical explanations from a different area of medicine (Williams 2001:138; Strong 1979a:206).

While these different models remain aligned with the medical world view reflected in germ theory (they are all science based, they are individualist, they purport to be morally neutral and are frequently interpreted as though they were universally applicable), they also vary between each other and in relation to germ theory. The acceptance and application of environmental, genetic, psychological and lifestyle models within medicine provides pragmatic evidence that medicine is concerned not just with the biological (disease) but also with the social (illness).

Furthermore, in the medical model (and the associated disease/illness distinction), disease is a reified entity which is assumed to exist in nature and requires only to be identified and defined by medical scientists (Hahn 1983). This perspective has been criticised in social constructionist accounts of medical knowledge which argue convincingly that disease as well as illness is a social construct and that all medical understandings including understandings of disease are the product of medical
discourses which in turn reflect dominant modes of thinking (Wright and Treacher 1982a, 1982b; Turner 1987:11; Nicolson and McLaughlin 1987; Atkinson 1995).

In addition to a plurality of medically recognised explanatory frameworks for disease, and the issue that scientific knowledge is socially produced and thus inherently imbued with the values and beliefs of the originating culture and time period, the ways that doctors make sense of disease and health is also variable because medical knowledge and practice draws upon "a background of tacit understandings" that transcend the boundaries of medically accepted and recognised models of disease (Gordon 1988a:19).

Medical knowledge is not only a formalised abstract, theoretical knowledge but is also knowledge in practice. Therefore, medical knowledge about disease is not static. While it is widely acknowledged that formal medical knowledge will alter over time in response to medical research (and changes in social values), it is less widely recognised that at the level of everyday medical practice, medical knowledge is in a constant state of flux because it is knowledge in practice (Wright and Treacher 1982b:13).

At one level this relates to the issue of tacit knowledge formed through experience, the concept of clinical judgment. Physicians learn scientific principles about diagnosis and aetiology which they apply using their own clinical judgment for the purpose of patient care management (Gordon 1988b:259). Thus formal medical theory will be interpreted and applied in unique ways by the doctors practising medicine. Furthermore, as mentioned above, doctors from different medical disciplines (for example rheumatology, epidemiology, psychology or general practice) will at times utilise different medically accepted models of disease and interpret these in the manner currently considered legitimate within their field:
A relationship may exist between clinical medicine and theories of health and disease; if so, this relationship will likely prove to be complex and multidimensional. ... The practice of clinical medicine probably influences what counts as health and disease, and simultaneously theories of health and disease probably modify the nature and limits of clinical medicine. Theoretical constructs of various models of health and disease are tested ultimately in the realities of medical practice (Siegler 1981:627).

At a second and less widely acknowledged level, medical knowledge and practice is also subject to variability because it is constructed through processes of interaction. The medical model fails to account for the complex processes of interaction that take place during medical work. Helman argues that instead of relying on one model of disease, doctors draw upon a range of different explanatory models (1985:293). The term explanatory model is used to describe the understandings that all individuals have about a particular illness episode (Kleinman 1988:121):³

One problem with this disease/illness dichotomy is that the biomedical model, that is the medical perspective on ill-health, is often assumed to be a homogenous, internally consistent and rationally scientific body of knowledge. It is also assumed that the diseases which comprise this model are consistent, scientifically defined entities that are unchanged in whatever context they appear. This view of the unitary, and scientific nature of Biomedicine is held by most clinicians and appears to be shared by some anthropologists [and sociologists]. ... However, a closer examination of the [medical perspective on ill health] suggests that far from being homogenous, it is rather, a cluster of explanatory models which vary greatly (Helman 1985a:293-294).

³The concept of explanatory model is more usually associated with anthropological and sociological writing about lay people. This is because of the assumption that doctors will only use one model of disease, the 'medical model'. Furthermore, the term explanatory model is often taken to refer to a model that an individual constructs to account for their own illness. However, with the increasing acceptance within sociology and anthropology of arguments about the social construction of medical knowledge and practice it has become acceptable to claim that doctors also use explanatory models to make sense of disease either in themselves or in the context used here, in their patients (e.g. Helman 1985).
The explanatory model that a doctor constructs to explain a particular episode of ill-health experienced by a patient will be influenced by any of a range of medically accepted models of disease, their levels of medical experience, the identity, views and opinions expressed by that patient and other medical workers, their own life experiences (including observations of illness in themselves and others), their general beliefs about bodies, health and disease and the situational context (Good and Good 1980; Lock 1985):

Explanatory models are not fixed, but are revised and modified in the light of ideas expressed by others, the flow of events, and the perceptions of the individual. Neither are explanatory models necessarily comprehensive and rigorously coherent; internal contradictions and inconsistencies are common and some elements may be adhered to more strongly than others (Usherwood 1999:7).

The day-to-day routines of medical work involve considerable interaction between doctors and between doctors and other medical workers. In a study of haematologists at a large teaching hospital, Atkinson (1995) demonstrated that the construction of medical knowledge about disease (causation, diagnosis, treatment and outcomes) is ongoing and that doctors achieve their medical understandings of disease (thus their constructions of explanatory models) not solely on the basis of formalised written medical knowledge but also by talking with each other. This talk occurs in a range of contexts including recurrent cycles of meetings, conferences and informal conversations (1995:39).

In addition to interaction which occurs between medical people, there is a complex inter-relationship between medical and lay understandings of disease which occurs through interaction during the doctor/patient relationship. This operates at a number of different levels. Doctors are likely to use different descriptions of diagnosis or treatment when they are talking with their patient than they use when talking with other doctors. Helman suggests, therefore, that "one can differentiate between different
theoretical models used by physicians but also, ... between these more 'scientific' models and the observable clinical ones that they actually employ in their day-to-day practice" (Helman 1985a:294).

Over time, a complex interrelationship between doctors' and patients' explanatory models will develop. Patients will alter their explanatory models as they are influenced by the models used by their doctor. Equally, doctors will alter their explanatory model as they are influenced by the patients' model. "Each will have a varying amount of influence over the other as diagnosis and treatment take their course" (Helman 1985a:294).

As can be seen from this discussion of explanatory models and the ways that medical knowledge (including knowledge about disease) is culturally produced, the traditional sociological distinction between lay and medical knowledge is highly problematic. Medical understandings have been shown to be inherently imbued with 'non-scientific' or popular conceptions of health and illness (Gabbay 1982; Helman 1985a, 1985b; Gordon 1988a:20; Kirmayer 1988:57) and to be characterised by similar attributes to lay understandings; for example, being changeable, contingent and pluralistic (Good and Good 1980:177; Gaines and Hahn 1985:3).

In addition, studies of lay understandings of disease have demonstrated that these lay understandings share many similarities with academic theories of illness and disease in that they demonstrate the application of expertise and frequently include scientific medical knowledge4 (West 1979; Calnan 1987; Stacey 1988; Popay et al. 1998; Furnham 1998; Prior et al. 2000):

4Other authors have argued that lay understandings should be considered as valuable and important knowledges in their own right regardless of their similarities or differences when compared with scientific or medical understandings (Popay et al 1998, Nettleton 1995, Blaxter 1997). Some of these authors suggest that lay beliefs are important because they are of value to health care practice, may serve to increase recognition of patients' rights and because the majority of health care work is actually carried out by lay people (Herzlich and Pierret 1987:xiii, Stacey 1988). Others authors consider that medical beliefs should not be privileged over lay beliefs because they "question the notion the scientific medicine holds the primary vantage point from which health and disease can be understood.
... lay knowledge and scientific accounts overlap and inform each other. In Australian society, medical and popular discourses about health and illness are intermeshed. Biomedical understandings themselves are by no means homogeneous or unitary. Various medical idioms are widely used in discussions of health and illness, and biomedical explanations of bodily functions are accorded wide legitimacy. Likewise, members of the medical profession remain members of the wider society, sharing similar cultural norms. For example, general practitioners often share with their patients a broader view of health and illness than that which is strictly "biomedical" (Whittaker 1995:2).

In summary, medical explanatory frameworks for disease are in no way straightforward. The medical model and associated assumptions about the disease/illness distinction and the lay/medical distinction indicate some of the defining characteristics of the medical approach to disease: that it claims legitimacy and methods from science; that it is primarily focused on the biological; that it is a universalistic and individualist framework; and that it is constructed and presented in opposition to other (non-medical/non-scientific) approaches towards disease. Many decades of sociological and anthropological research into medicine have shown that medical explanatory frameworks for disease do contain these elements (Cartwright 1977; Davis and George 1990; Nettleton 1995). Furthermore, these are some of the characteristics by which medicine defines itself (Starr 1982; Willis 1983).

However, the medical model operates with the assumption that medicine is a unified, coherent, stable and homogeneous body of knowledge and practice which is clearly distinct from other knowledges about bodies, sickness, health and healing. This is a questionable assumption. Rather, medicine appears to be an institution marked by considerable internal diversity of opinion and practice; medical knowledge is to varying degrees shifting and contingent while the boundaries between medical and... such a position is [reflective of a] particular postmodern ethic that regards all forms of knowledge as situated, particular and provisional ... and to that extent equivalent" (Prior et al 2000:816).
non-medical knowledge are ambiguous. As such, the ways that doctors make sense of disease and health can only be partially described in the medical model and generalisations about any medical approach to disease are likely to conceal complexity and variation.

### 1.3 Other medical explanatory frameworks

As outlined above, the most widely recognised and probably the most widely used explanatory framework within medicine is germ theory. Germ theory has been the dominant theory of the body and disease within Western cultures and medicine since the nineteenth century. Germ theory locates the cause of each specific disease in a micro-organism, whether viral, bacterial, fungal or other:

... germ theory sets up a causal chain, with microevents in the human body as the immediate cause of disease, personal behaviour such as diet and exercise as intermediate causes, and environmental pollution as a tertiary cause. Sociopolitical realities such as poverty lie at the very end of the chain (Tesh 1990:39).

As also mentioned above, several additional models of disease have varying levels of acceptance within medicine. Unlike germ theory all of these alternative perspectives operate with the assumption that most diseases do not have a single cause; instead they are seen as having multi-causal pathways. The most widely accepted of these are immunity, genetic, environmental and lifestyle models of disease.

Like germ theory, understandings of immunity and genetics emphasise the role played in the development of disease by the body's own internal systems. Conceptions of immunity imply that bodies either win or lose the fight with disease from the inside (Martin 1994). A genetic understanding focuses on genetic mutations. These are argued to result in single gene disorders such as huntington's chorea, in predisposition to diseases such as alzheimers and ovarian cancer, or more controversially, in
behaviours deemed detrimental to health or as disorders in themselves such as alcoholism, depression or obesity (Hubbard and Wald 1993; Wilkie 1994; Willis 1997:174-175).

Both environmental and lifestyle theories of disease differ considerably from germ theory, and theories of immunity and genetics because they utilise explanations for disease which emphasise the social rather than the biological. Environmental understandings emphasise factors external to the human body such as poor food stuffs, environmental hormones, solar radiation, pollution, medicines, chemicals, substandard housing and sanitation, population density and the biological environment (Chavarria 1989:104; Humes-Hall 1990; Foster 1995:5). Environmental understandings can be seen as emphasising the social because environmental damage or contamination is frequently associated with industrial development, socio-economic inequality, working conditions and colonialisation. Environmental illness is frequently politicised through activism whose proponents argue that various examples of disease (for example the Love Canal and Woburn leukemia clusters) result from the actions of governments or large companies (Levine 1982; Gusfield 1981; Brown and Mikkelsen 1990; Brown 1992).

Models of disease which focus on lifestyle are based on the assumption that certain diseases are somehow the result of an 'unhealthy lifestyle'. This understanding of disease emphasises the inter-relationships between many variables in disease aetiology. Lifestyle understandings are explicitly social because they shift issues of socio-economic status, inequalities in living conditions, education levels, family

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5 Environmental understandings have a long history and were dominant in western cultures before the advent of germ theory. These understandings of a relationship between the environment and the body were closely associated with moral and religious understandings where disease was seen as a consequence of human irresponsibility. "Disease was part of the disequilibrium between body and the environment resulting from abuses of diet, poor hygiene, immorality and above all, filth" (Turner 1996:97). Contemporary understandings which emphasise environmental factors resulting from civilisation such as chemical pollution or the damaged ozone, are quite different from their eighteenth century counterparts.
structures, social groupings and personal behavioural factors to the forefront (Tesh 1990:40; Hughes 1994:61; Rutten 1995):

Lifestyle theorists reject the notion, central to classic germ theory, that a single disease has a single aetiology. Instead they emphasise the interrelatedness of many variables in disease causality, principally those under the control of the individual ... prevention, instead of requiring physicians' ministrations, demands personal behaviour change (Tesh 1990:41).

A lifestyle approach is often associated with the prevention of disease because unlike other models of disease causation, the factors considered to be determinants of disease in a lifestyle approach are commonly perceived to be modifiable. Thus, a lifestyle approach is often orientated towards the future and emphasises the maintenance and fostering of health.

It is this capacity to serve as an explanatory framework for health and not just the causes of disease which in conjunction with an emphasis on the social, makes a lifestyle approach distinctive when compared with other explanatory models used within contemporary medicine. Other medical explanatory models aim to explain the causes of disease in terms of biochemical processes. They are not explanations for health, nor are they social explanatory models.

1.4 Historical overview

Understanding disease and health in terms of lifestyle is not a new phenomenon within medicine. Relationships between the ways people live and the illnesses they develop have always been a focus for healers, western and non-western. Prior to the development of modern medicine it was common for physicians and healers to prescribe regimens of diet, activity, rest or penance as a way of treating disease (Black et al. 1984:9; Turner 1996:166, 1991:157; Porter 1997:69). Cartwright describes Hippocrates as achieving success when treating his patients with the following
regimen "a life of fresh air, controlled exercise, massage and hydrotherapy assisted by a liberal diet of suitable foods" (1977:5). In seventeenth and eighteenth century Europe it was popular among physicians to advocate disciplined eating habits, exercise and sobriety (Turner 1991a:160-161). In non-western cultures such as among the Hmong people, dietary and behavioural prescriptions are still invoked during life events such as pregnancy and childbirth (Julian and Easthope 1999:102).

Hughes (1994:62) characterises such assumptions about relationships between ways of living and health as 'rules of life'. She suggests that such rules have been and continue to be:

an essential aspect of every major medical or health belief system from ancient Egyptian, Chinese and Indian through to Greek and Islamic medicine and modern western medicine. They also perform important functions in non-literate medical systems such as those found in Aboriginal, Pacific and African societies (Hughes 1994:62).

Such rules of life are often based around widely held 'commonsense' ideas about disease and sickness, religious and moral beliefs, observation of disease and healing and personal theories of the body and health held by practitioners of the various types of medicine and healing prevalent in each particular culture and historical epoch.

Over the twentieth century there has been a range of different ways that medical people have understood disease and health in terms of lifestyle. Whilst many of these have been operating at the same time, for the sake of clarity they are described below in chronological order.

In the late nineteenth and early twentieth century, medical ideas about lifestyle and health were strongly informed by ascetic Christianity. A healthy lifestyle was perceived as one characterised by restraint, sexual abstinence and physical exercise.
Various organised attempts to encourage this type of lifestyle include the Temperance Movement, the Boy Scouts and the Girl Guides. As such they were characterised by strong moral dimensions:

Any medical tradition, whether empiricist or rationalist which provides a medical regimen of disciplined behaviour - diet, exercise, or sobriety - is likely to prove attractive to religious asceticism. Despite the secularity of medical professionalism, there may be important affinities between those forms of personal denial which are implicit in the medical regimen and an ascetic lifestyle (Turner 1996:86).

Medical ideas about lifestyle from this period were also closely linked with nineteenth century ideas about social problems associated with increasing urbanisation. A range of popular and academic theories arose at this time from philosophy and the developing fields of social science (political economy, sociology, psychology, geography), which attempted to explain social inequalities, social unrest and social patterns of mortality and morbidity. Such theories were frequently developed or interpreted in the light of inherent class and race bias to imply that poverty and sickness among the working classes, ethnic groupings and colonised peoples were the result of such peoples' style of living (Bulmer 1982).

Two different perspectives on this were taken. Public health reformers, sanitary engineers, some social theorists and governments with a collectivist ideology explained these differences in ways of living which led to patterns of disease and illness in terms of structural inequalities leading to a lack of nutritious food, poor living conditions and inadequate or outdated sanitary arrangements (White 1994).

The medical profession allied with various social interests and a political and economic climate which increasingly focused on the individual rather than the group adopted a lifestyle perspective which located the problem of differing ways of living in "the individual rather than the organisation of society" (White 1994:208). Working class or
ethnic cultural lifestyles were by definition seen as unhealthy while white middle class lifestyles were eulogised as being healthy (Woods 1978; Woodward 1984).

For example, in a pamphlet written in 1878 a Dr Cambell based in South Australia identified poor and working class mothers who wean their babies during the summer months as the cause of high infant mortality rates:

You may not have every comfort at your command that a rich man's baby has. It may be that your baby does not very regularly gets its daily bath, or is not waited upon with the attentive care that a special nurse would give it, or even does not sleep in the cosiest cot in the world. Deprived of all this it will survive but it will not survive if you depart entirely from the order of nature with its food [breastfeeding] (Cambell 1878).

By the mid-twentieth century when living standards had risen and incidences of death from infectious disease had begun to fall, medical and lay understandings shifted away from issues such as nutrition and living conditions towards a vision where "people were more apt to think of a healthy lifestyle in terms of the cleanliness of their own immediate environment, their own house and their bodies" (Martin 1994:24).

While describing common perspectives on the body and disease in mid-twentieth century United States Martin (1994) found that the major enemies to health were seen as germs attacking the surface of the body. Such threats could be controlled by minimising entry points for germs (such as wounds) and by removing germs through washing and disinfection before they could enter the body. In terms of understanding disease on the basis of lifestyle, this viewpoint clearly posits the responsibility for your own health, your family's health and the safety of those around you, to your own habits and practices pertaining to cleanliness.

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6 For this discussion she utilises popular health manuals, home health books, popular periodicals and a large scale study "conducted in 1955 under the auspices of the National Opinion Research Centre, ... based on 2,379 intensive personal interviews for which the original forms, with replies recorded in longhand, still survive" (Martin 1994:24)
Cleanliness of the body understood in terms of killing germs initially emerged in the eighteenth century with the scientific discovery of microbes and continued to increase in prevalence throughout the twentieth century (Vigarello 1988:204):

In the late eighteenth century with the scientific discovery of microbes, external signs of cleanliness were no longer considered sufficient. These theories were legitimised by science. Washing was seen to rid the body of microbes. Microbes were viewed as invisible monsters ... all the more dangerous because of their tininess ... This notion of cleanliness has predominated in the twentieth century as medicine and science have become ever more revered (Lupton 1994a:34).

Fear of germs was a feature of lay and medical explanations for disease throughout the early twentieth century. This fear reached a peak in the 1950s (Lupton 1994a:35). Images from this time such as advertisements for Lysol disinfectant are easily recognisable. Patton describes the fear of germs at this time as verging "on a mass psychosis. Germs are bad guys, foreign, unnegotiable, dangerous" (1986:51). Martin (1994) provides the following quote from an elementary school textbook published in 1950:

... you must be on guard at all times. Disease germs are always on hand to attack. Be clean in everything you do. Remember, you must keep your hair and scalp, your fingernails and toenails, and your clothing clean as well as your skin. Keep fighting to destroy disease germs. Form habits that will protect you from harm (Martin 1994:26-27).

Despite this emphasis on personal responsibility for cleanliness, the connection between a healthy (clean) lifestyle and getting sick was still relatively fatalistic. Many diseases were not associated with germs (e.g. cancer) and health was seen as a passive status. In the quote cited above, germs are represented as active attackers to which the body has no natural defences. Martin describes common viewpoints of the body at this
time as mechanistic. Bodies were machines which could wear out and break down. Some bodies seemed by their nature to be stronger than others (a strong constitution) but this is a passive strength because there is very little a person can do to increase or decrease resistance to disease (1994:30).

By the 1970s the mid-century understandings of a healthy lifestyle being a clean lifestyle and health being a passive status began to shift. There arose a different understanding about what constitutes a healthy lifestyle and the relationship between this, individual responsibility and disease. The concept of health had changed from:

something that is viewed as the result of luck or biological inheritance to something that is achieved through personal volition. In other words, health has changed dramatically from being a passive to an active status (White et al. 1995:159).

Notions of what constitutes a healthy lifestyle expanded considerably from mid-century notions about cleanliness to include a range of behaviours such as regular exercise, 'safe sex', quitting smoking, reducing alcohol, using unleaded petrol, rejecting pharmaceutical drugs in favour of herbal or alternative medicines, eating organic foods and participating in screening tests for blood pressure and cholesterol (Goldstein 1992; Foster 1995:4; White et al. 1995:159). In addition, decisions about what constitutes a healthy lifestyle were increasingly based on the results of epidemiological research into the determinants of chronic diseases, public health policies and guidelines and popular and scientific theories of risk.

This way of thinking has been termed the ideology of 'healthism' (Crawford 1978, 1980) or 'lifestylism' (Rodmell and Watt 1986). Lifestylism is characterised by a strong emphasis on individual responsibility for 'lifestyle choices'. "Whether it is

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7The considerable sociological critique of 'lifestylism' is addressed in chapter two of this thesis.
through exercise, diet, or stress management the avoidance of disease through personal effort has become a dominant cultural motif” (White et al. 1995:160).

Reasons for this shift are complex (Nettleton 1995:228). As already discussed in this chapter, medical understandings of lifestyle and associated medical perceptions about the relationship between the way people live their lives and their states of health and illness are formed within a broad socio-historical context. The next five sections of this chapter address the relationship between the contemporary medical understandings of lifestyle outlined above and some of these wider socio-historical factors: those social processes associated with late/high modernity\(^8\); demographic changes in western industrialised countries; local and international trends in government policy with regard to public health; a growth in the scope and influence of the fields of epidemiology and public health; and lay perceptions of lifestyle, health and disease.

1.5 Late/high modernity

Contemporary medical understandings of lifestyle, health and disease reflect and reproduce a range of social processes which characterise the advanced industrialised societies of the late twentieth century. The most important of these inter-related processes and changes in terms of their impact on medical understandings of lifestyle are the processes of rationality, ideologies of conservative individualism, the increasing commodification of health and health care and the 'risk society'.

The phrase 'processes of rationalisation' refers to the increasing rationalisation of social action claimed to be occurring in modern and late/high modern societies.

\(^8\)There is considerable debate among social theorists about whether the late twentieth century marked a shift from modernity to high/advanced or late modernity or whether in fact the changes occurring should be considered as a profound shift away from modernity towards a post-modern world (e.g. Lyotard, 1984, Harvey 1989, Giddens 1991; Crook et al., 1992). In the context of this thesis, this debate is unimportant. What is important is that these and other theorists have all identified that in the late twentieth century a range of social processes were apparent, and that these processes had and continue to have a profound impact on social structures, cultural institutions and discourses such as medicine. For the sake of clarity I have chosen to use the term late/high modernity. In so doing I am not suggesting that arguments about postmodernity are unconvincing.
"Rational here refers to action which is calculable and impersonal" (Crook et al. 1992:8). Rationalisation has a number of implications including the calculation social action in terms of costs and benefits, an inflation of the importance of knowledge as a basis for action (such as positivist science), impersonality of power and authority, and the extension of control over natural and social objects (Brubaker 1984; Armstrong 1988; Crook et al. 1992:9):

First there is the arena of thought and rational inspection which denied or excluded the force of the irrational, the magical and the superstitious. ... Secondly, there was the regulation of the emotions, sexuality and the affective life through the regulation and discipline of the human body. ... The human body was subject to a new regime of discipline or governmentality within which for instance, dietary practices became an essential element of ascetic control or government of the body (Turner 1996:10).

A lifestyle approach which stresses individual responsibility for health through a cost/benefit analysis of behaviours and actions considered to be lifestyle choices and the prevention of disease in the future sits easily within the rationalist and calculative mood of late/high modernity. Such an approach represents a desire for control over the body (Synott 1993; Featherstone et al. 1991) and health being understood in terms of rational choices and health care costs.

At the level of the organisation of health care this perspective leads easily to economic rationalist approaches\(^9\), and a preference for preventive programs which emphasise the role of the individual rather than the state and which are motivated not by altruism but by a desire to reduce health care costs in the future:

The premise behind this type of thinking is that people get sick or injured and die prematurely not because of their lacking access to resources such as good

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\(^9\)Economic rationalism is a term used to refer to a political philosophy based on 'small government' and market-orientated policies such as deregulation, privatisation, reduced government spending and lower taxation" (Germov 1997:240). In advanced capitalist societies economic rationalism is the perspective currently dominating health care and many other institutions (Willis 1997).
housing, education and health care but due to self inflicted hazards like substance abuse, poor eating habits and violence (Remennick 1998:27).

At the level of the individual, the rationality of late/high modernity contributes to a reconsideration of individual responsibility and individual identity. Under the conditions of late/high modernity the nature of individual experience is reconstituted. The individualist focus of modernity where "one of the goals in life is to free oneself from social and cultural determination" (Gordon 1988a:34) is highlighted as "the individual increasingly stands alone, looking for security in the face of uncertainty and an implosion of knowledge-systems" (Annandale 1998:19). As the visible aspect of the self, the body is the site of choices and options which individuals must make in a reflexive manner (Giddens 1991:8). "As the visible aspect of the self the body is not passive but needs to be monitored by individuals as they balance opportunities and risks, virtually forced to design their own bodies" (Annandale 1998:18).

Under these conditions health is viewed as an individual responsibility and as a project to be worked on (Bordo 1990; Giddens 1991; Gordon 1988a) From this perspective health is a goal to be achieved as part of the ongoing project of enhancing the self. It is seen as a sign of "competence, self control and self discipline" (Nettleton 1995:50). This mode of thinking can be easily recognised in lifestylism.

The implications of this perspective are illustrated in the results of research which investigates the ways that people conceptualise health. While conceptualisations of health are varied and changeable10 (thus difficult to generalise), studies suggest that health is increasingly understood as an individual responsibility to be achieved through bodily maintenance and vigilance (Crawford 1984; Calnan 1987; Blaxter 1990, 1993, 1995).

10 Stainton-Rogers (1991:9-10) argues that explanations for health are continually woven from moment to moment. Therefore, accounts of health will change over time and researchers should be aware of this when analysing interviews about health.
health for both men and women was allied closely to physical standards that conformed to 'ideals' of being in 'shape'. Health was also something that could be achieved by deliberate intentional action involving the body such as dieting, having enough sleep and physical exercise (Lupton 1995:43).

Related closely with the 'self as project' is the commodification and commercialisation of bodies and health (Bordo 1990; Annandale 1998:119). "Given the emphasis on selfhood in contemporary consumer culture the body is regarded as a changeable form of existence which can be shaped and which is malleable to individual needs and desires" (Turner 1996:5).

With the commodification of bodies, health becomes a commodity that individuals purchase, a possession (Gordon 1988a:36). Contemporary understandings of lifestyle are inextricably interlinked with the rise of consumer culture which is an inherent part of late/high modernity (Featherstone 1991:84; Nettleton 1995:49):

health has become an essential prerequisite to participation in the youth valorising, sexualised, death-denying society in contrast to earlier times where modification of lifestyle was part of an ascetic or religious regime. Within this logic, fitness and slimness become associated not only with energy, drive and vitality, but worthiness as a person; likewise the body beautiful comes to be taken as a sign of providence and prescience in health matters (Hughes 1994:62).

The commodification of health has contributed to the popularity and development of lifestylism through an emphasis on the purchasing of health both in literal and symbolic terms through health care, health related actions or health related goods and services which are seen to represent a healthy lifestyle and thus 'health': for example,
running shoes, exercise clothing, sports radios and sunglasses, exercise equipment or gym memberships (Glassner 1989).

In addition, the commodification of health has contributed to consumerism within medicine and health care generally. While there is little consensus within sociology about consumerism and medicine two issues which have relevance for contemporary medical and lay understandings of lifestyle and health are changes in the medical profession's monopoly over authoritative knowledge about health and illness and changing expectations about the role of medical care (Klein 1990).

Assertive patients who view themselves as consumers and knowledge about health and illness as a commodity to be purchased have become "less willing to unquestioningly trust the profession's claims to expertise and ethicality" (Irvine 1999:182). Other sources of health related information are seen as worth considering and health related advice becomes prevalent and profitable. This has contributed to the growth of alternative therapies and the self-help and fitness industries.

Furthermore, along with a consumerist orientation, expectations about what medicine should actually offer patients (consumers) has increased. The provision of complementary therapies and preventive 'lifestyle' advice is one aspect of the expanding medical package offered by doctors who are now competing with other 'service providers' such as pharmacists, naturopaths and physiotherapists.

Associated with rationality, individualism and commodification is a fourth process associated with late/high modernity, that of the 'risk society': a situation where perceptions of risk are heightened and the identification and management of risks becomes a major concern (Giddens 1991; Douglas 1992; Beck 1990). Sociological arguments about a risk society emphasise that late/modern societies are characterised by a 'politics of anxiety' where the body is perceived as being under constant threat.
from external risks such as the destruction of natural environments, chemical pollution and infections such as HIV/AIDS (Turner 1991b:24). This social climate which emphasises risks and the making of informed choices on the basis of knowledge is reflected in an approach to health which defines healthy or unhealthy lifestyles in terms of lifestyle risks (Beck 1990:99).

In late/high modernity where the body is 'reflexively mobilised' and issues of identity and health are made within a context of options and choices (Giddens 1991:8), risks to health become "monitored by individuals as they balance opportunities and risks ... under conditions of considerable uncertainty" (Annandale 1998:18). Understanding the determinants of health or disease in terms of lifestyle risks "advocates a rationalistic, individualistic, prospective life perspective where maximising control and minimising uncertainty is seen as a superior goal" (Forde 1998:1155).

1.6 Demographic change and government policies
In addition to the influence of various processes and assumptions associated with late/high modernity, medical ideas and practices are also constructed though a nexus of demographic change and government policies on public health.

In the mid to late twentieth century improved living conditions resulted in a decline in infectious diseases and an increase in chronic conditions with behavioural and social determinants (Hughes 1994). A growing elderly population in Western countries was predicted with resultant issues related to an over-burdened health service:

The ageing of the population is a significant political and social issue for at least two major reasons. First the characteristics and prevalence of modern forms of degenerative disease are obviously closely related to the ageing of contemporary populations. ... Secondly, the ageing of the population of industrialised societies has had a significant social impact on the economic performance of capitalism because of the dependent populations associated with ageing and retirement. Industrial societies will increasingly face a
situation where significant proportions of their population are retired, elderly or disabled (Turner 1996:5).

In response to this demographic change those in charge of health policy turned their focus to disease prevention as it became apparent that increasing investments in technological medicine resulted in diminishing returns. Policies and health education campaigns based on a lifestyle approach to disease were widely implemented by governments in countries such as Australia, Canada and the United Kingdom (Palmer and Short 1994:208).

For example, in 1981, Australia and other member states of the World Health Organisation adopted the WHO global strategy 'Health For All by the Year 2000'. Australia began compiling goals and targets for improving health and reducing inequality in health status. Over time this evolved into two programs, the first outlined in Goals and Targets for Australia's Health in the Year 2000 and Beyond (Nutbeam et al. 1993) and the second outlined in the report Better Health Outcomes for All Australians (DHSH 1994).

These policies made lifestyle issues such as food, nutrition, exercise, drug taking and sexual behaviours central to disease prevention (Duff 1999:78); for example through the development of dietary guidelines (NHMRC 1992, 1997) and implementation of health promotion campaigns such as the QUIT campaign to encourage people to stop smoking. Such policies prioritise "the self-seeking self-sustaining individual, the sovereign individual of liberal capitalism" (White 2000:288).

These policies were based on epidemiological research about lifestyle, disease and health and implemented through the public health system (Peterson and Lupton 1996:59; AIHW 1998:2). Epidemiology and public health are the two most significant 'legitimate' sources of information about lifestyle, disease and health. Thus
contemporary medical understandings of lifestyle cannot be understood without closer examination of these two fields.

1.7 Epidemiology

Epidemiology has its basis in nineteenth century efforts to systematically collate and analyse demographic information and to apply statistical methods to identify the distribution and determinants of epidemics of infectious disease (MacMahn and Pugh 1970:10; Susser 1973; Evans 1992; Pickstone 1992). As such, epidemiology clearly reflects the rationalist viewpoint through its reliance on the application of scientific methods of monitoring and measuring to the issue of population health (Peterson and Lupton 1996:27):

Epidemiology is the study of the distribution and the determinants of disease occurrence and outcome in humans. Epidemiological studies are usually observational and concentrated exclusively in humans. Epidemiology has always been one of the basic sciences in preventive and clinical medicine. Its first major impact was on the understanding of the aetiology and the natural history of infectious diseases and on the design and implementation of effective control measures for these diseases (Olsen and Trichopoulos 1992:v).

With the reduction in infectious diseases in the twentieth century increasing epidemiological attention was focused on identifying the determinants of chronic diseases associated with an aging population and modern living conditions, such as osteoporosis, cataracts, stroke, diabetes, cancer, heart disease and arthritis. These diseases almost certainly have multiple determinants such as diet, genetic, psychosocial, occupational, level of physical activity and infectious factors.

These multiple potential determinants may act alone or in combination. Also many of these diseases have long latent periods; they may sometimes result from cumulative exposure over many years and in other instances from a relatively short exposure occurring many years before diagnosis. For most of these diseases the relevant period of exposure is unknown. A third characteristic of these diseases is that they occur with a relatively low frequency.
despite a substantial cumulative lifetime risk. In addition, these conditions are not readily reversible ... (Willett 1990:4).

Epidemiologists generally work with a 'probabilistic' conception of causality (e.g. Susser 1973; Rothman 1998). "The essence of the probabilistic theory of causality is the idea that a cause raises the probability of its effect. A factor is a cause if its operation increases the frequency of the event" (Dowe 1999:69). In addition, unlike germ theory (which presupposes that each disease has a single and distinct cause) epidemiology works with a web of causality approach (Kriegler 1994:890). This is the idea that diseases are the result of complex interactions between a number of different factors. The following two excerpts from an epidemiology textbook illustrate this approach to the causes of disease:

One of the main aims of epidemiology is the study of the determinants of the occurrence of health-related events or conditions. Determinants may be biological, psycho-social, or health services related, and outcomes may be of qualitative or quantitative nature and refer to diseases, syndromes, symptoms, or functions, as well as natural history and evolution. Aetiological considerations are also fundamental to all stages of study design, analysis and interpretation. Therefore, teaching the concepts of causation is an essential part of the teaching of epidemiology. Causation should be viewed in practice as probabilistic and should usually focus on categories of groups, rather than individuals (Olsen and Trichopoulos 1992:33).

It is readily accepted by most people that the exposure causes may not be sufficient for disease incidence - not all individuals exposed to high levels of serum cholesterol actually develop a myocardial infarct, and less than a quarter of cigarette smokers develop lung cancer. However, most people are reluctant to accept the concept that exposure to causes may not be necessary either; they must be reminded that causes become necessary only when they are made part of outcome definitions. Thus most infectious, genetic, and occupational diseases, as well as accidents when classified by external cause, have necessary causes simply because they are defined accordingly; for these
diseases concepts such as the relative risk\textsuperscript{11} and the population attributable risk\textsuperscript{12} are useful only when used in conjunction with contributory causes. In contrast, cancers, cardiovascular diseases, auto immune disorders, and most psychoses, as well as accidents when classified by nature of the injury, are defined with manifestational criteria and may have causes which are neither necessary nor sufficient; for these disease the relative risk and other measures of effect are of vital importance in the study of their aetiology (Olsen and Trichopoulos 1992:33).

Contemporary epidemiological conceptions of lifestyle are derived from this 'web of causality' approach and a focus on chronic diseases of civilisation considered to have social and behavioural determinants. The key features of the epidemiological understanding of lifestyle are summarised below.

First, lifestyle is understood to refer to potentially modifiable 'social' factors as contrasted with biological factors which may or may not be modifiable. For example, Twisk et al. (1997:888) compare lifestyle and biological risk factors for coronary heart disease over a 14 year period.

Secondly, the conception of social used in epidemiology understands social determinants of disease in terms of distinct behaviours or actions which can be isolated from other behaviours or actions for the purpose of research; for example smoking or exercise rather than a general sense of a 'healthy' or 'unhealthy' lifestyle (e.g. Huang et al. 1996; Owen and Bauman 1992): Thirdly, in a related point, epidemiological understandings of lifestyle are closely linked with the concept of mathematical risk.

\textsuperscript{11}Relative Risk: "1. The ratio of the risk of disease among the exposed to the risk among the unexposed; this usage is synonymous with risk ratio. 2. Alternatively, the ratio of the cumulative incidence rate in the exposed to the cumulative incidence rate in the unexposed, i.e., the cumulative incidence ratio. 3. The term 'relative risk' has also been used synonymously with 'odds ratio' and, in some bio-statistical articles, has been used for the ratio of forces of morbidity. The use of the term 'relative risk' for several different quantities arises from the fact that for 'rare' diseases (e.g. most cancers) all the quantities approximate one another. For common occurrences (e.g. neonatal mortality in infants under 1500-g birth weight), the approximations do not hold " (Last 1988:113-114).

\textsuperscript{12}Population Attributable Risk: "this term is used by many epidemiologists in preference to the terms 'attributable fraction (population)' or 'etiologic fraction (population'. It is the incidence of a disease in a population that is associated with (attributable) exposure to the risk factor" (Last 1988:99-100).
Risk in this context refers to the probability of getting a particular disease. Lifestyle behaviours or attributes which are deemed to increase the statistical probability of a certain percentage of an overall population who participate in these behaviours developing a particular disease are called risk factors (as are genetic environmental or physical attributes also associated with developing certain diseases):

Risk Factor. An aspect of personal behaviour or lifestyle, an environmental exposure, or an inborn inherited characteristic, which on the basis of epidemiologic evidence is known to be associated with health-related condition(s) considered important to prevent. The term "risk factor" is rather loosely used with any of the following meanings:
1. An attribute or exposure that is associated with an increased probability of an specified outcome, such as the occurrence of a disease. Not necessarily a causal factor. A RISK MARKER
2. An attribute or exposure that increases the probability of occurrence of disease or other specified outcome. A DETERMINANT.
3. A determinant that can be modified by intervention, thereby reducing the probability of occurrence of disease or other specified outcomes. To avoid confusion it may be referred to as a modifiable risk factor (Last 1988:116).

Risk factors which are considered to be modifiable by individuals are commonly termed lifestyle choices by epidemiologists. For example, behaviours and attributes commonly accepted as modifiable risk factors for coronary heart disease include low levels of physical exercise, drug taking including cigarette smoking and drinking alcohol, high levels of fat, sugar and salt in the diet, high blood cholesterol levels and stress (e.g. Rothman 1998; Willett 1990:4; Namekata et al. 1997; Chang and Frenzel 1993). Other recognised risk factors for coronary heart disease which are not considered to be modifiable lifestyle factors include genetic predisposition to the disease and environmental factors13 (including exposure to toxins and microorganisms):

13 Note this particular understanding of modifiable. It seems to refer only to issues which can be altered by an individual. This is in contrast to a structural viewpoint which would definitely view working conditions or environmental pollutants as factors able to be modified.
This focus on proximate risk factors, potentially controllable at the individual level, resonates with the value and belief systems of Western culture that emphasise both the ability of the individual to control his or her personal fate and the importance of doing so ... Thus modern epidemiology and cultural values conspire to focus attention on proximate, individually-based risk factors and away from social conditions as causes of disease (Link and Phelan 1995:81).

It is important to recognise that despite epidemiological definitions of risk which suggest that risk can be easily quantified and understood, concepts of risk operate in many different ways in epidemiological understandings of lifestyle and disease. For example lifestyle behaviours and attributes may be identified as 'risk factors' and be used to identify those 'at risk' from disease. In the case of sexually transmitted disease or cigarette smoking, people identified as participating in 'risky' lifestyle practices may also be defined as a 'risk' to others (Lupton 1994b:137).

Fourthly, in the epidemiological approach to lifestyle, the term lifestyle is generally only considered to refer to those behaviours or actions which can be shown to impact (usually negatively) on physical health. For example, while theoretically any of the behaviours and actions in which people regularly engage could be considered under the title of lifestyle, most are only considered by epidemiologists when they become associated with the development of physical disease. This is a reflection of a widespread biomedical understanding of health which is mechanistic and biological as distinct from other understandings of health which focus on perceptions of wellbeing or capacity to participate fully in social life.

Finally, the epidemiological conception of lifestyle in relation to health and disease is focused on identifying lifestyle risks and the causes of disease. It does not focus on producing action or change among populations or by individuals (this is in contrast to the public health version of a lifestyle approach discussed next in this chapter).
Epidemiology is primarily a research discipline; action on epidemiological research is carried out through public health/health promotion.\footnote{I am referring here to conservative orthodox epidemiology. “During the last decade the frontiers of epidemiology have expanded to include clinical and evaluative epidemiology. Clinical epidemiology concentrates on disease outcome, whereas evaluative epidemiology involves health services research and monitoring, and integrates on a larger scale, economic and administrative considerations in the planning and evaluation of health processes, programs and systems” (Olsen and Trichopoulos 1992:v ).}

Epidemiology and public health have a long association (Holman 1992). The influence of epidemiological research about lifestyle risk factors on public health thinking became apparent in the early 1970s and marked a shift in public health thinking away from the classic late 19th century focus on social institutions to a micro-level focus on individuals, families and communities (Terris 1987:315).

\section*{1.8 Public health}

Unlike epidemiology which has a coherent and consistent approach to lifestyle, there is a range of different and not necessarily compatible conceptions of lifestyle found in contemporary public health. These different conceptions represent two distinct approaches within public health.\footnote{Some authors classify the risk factor lifestyle approach as an early phase of the new public health (e.g. O'Connor and Parker 1995:27). Other authors describe the new public health as an attempt to move beyond the limitations of a narrow risk factor lifestyle approach towards a far broader and more widely focused public health paradigm (e.g. Robertson 1998:156, also new public health policy statements such as the \textit{Declaration of Alma Ata} and the \textit{Ottawa Convention Document}). In my review of various public health texts it was evident that, in terms of conceptions of lifestyle, health and disease, these are two distinct approaches. For this reason, while they merge in practice, I am writing about them as analytically distinct public health approaches.}

The first of these is epidemiologically driven risk factor focused health promotion\footnote{Similarly to the footnoted point above, authors differ in their use of the term health promotion. Some authors such as Allen-Wright (1999) make an explicit distinction between the term health promotion, which they argue refers to the nurturing of an overall positive lifestyle and general fostering of self care among individuals, and disease prevention which is a term used to describe public health interventions which focus on specific actions or inaction. If I used this distinction I would be describing risk factor disease prevention not risk factor health promotion. However, I have selected the term risk factor health promotion because the types of literature which reflect this particular understanding of lifestyle are frequently self described as health promotion texts. In addition the term risk factor health promotion (or individually focused health promotion) is commonly used in the sociological literature to describe the type of public health approach to which I am referring (see Richmond 1997).} and the second is the 'new public health'. These two different public health approaches imply quite different directions for the
implementation of public health programs/interventions and offer quite different ways of understanding health and illness in terms of lifestyle.

Epidemiologically imbued risk factor health promotion is the most prominent public health discourse on lifestyle (Bruce 1991). This particular way of understanding the social causes of disease has been both popular and prominent because it is easily integrated into an individually focused health care system (Richmond 1997:157).

Because risk factor health promotion utilises epidemiological data about the causes of disease, it shares a similar conception of lifestyle to the epidemiological discourse summarised in section 1.8 i.e., lifestyle as behaviours and practices which are not considered in their social context but which instead are viewed as distinct and objective risk factors for various diseases (e.g. Russell and Buisson 1988; Badura and Kickbusch 1991; Pill 1991).

However, the lifestyle discourse found in risk factor health promotion is not identical to the epidemiological discourse of lifestyle. The first difference is related to conceptions and presentations of risk. The second is that public health is concerned with action aimed at preventing disease and improving health rather than understanding the causes of disease, or collecting general information about lifestyle factors in the population (as in epidemiology). Thus attention is focused on modifying lifestyles rather than the epidemiological focus on lifestyle factors as a cause of disease. Each of these points is addressed in more detail below.

In relation to conceptions and representations of risk there are several differences between risk factor health promotion and epidemiology. The first is that in epidemiology risk is understood in terms of population risk. In contrast to this, in risk factor health promotion, lifestyle risks are frequently presented as the property of individuals. Whilst public health practitioners sometimes work with population health,
when addressing lifestyle risks the most common methods involve individually focused health education campaigns (Nettleton 1995; Richmond 1997). Lifestyle factors commonly targeted in Australian risk factor health promotion are smoking, exercise, nutrition, alcohol consumption, needle sharing during injecting drug use, and sexual practices where certain practices are defined as lifestyle choices (e.g. Ross 1994) and sun exposure (e.g. Ross 1994; Krug 1995; Jonas et. al. 2000; Stamfer et al. 2000; Stanton et al. 2000). In lifestyle orientated health promotion campaigns and health education, lifestyle risks are personalised and individualised:

Lifestyle related risks have been the focus of health promoters and health educators, and include activities such as smoking, exercise and diet. Individuals identified as at high risk of a particular disease are encouraged to change aspects of their lives, monitoring their behaviour and engaging in a regime of self care. ... This "project of the self" is directed towards maximising one's health and minimising one's burden on society (Kavanagh and Broom 1998:438).

Risk factor health promotion subverts general epidemiological statements about population health risks into individually directed prescriptions for health. Rose (1992:12) describes this practice as a common irony in preventive medicine, because while widespread lifestyle changes will make a difference to community health they may make very little difference to the health of individuals:

The prevention paradox: a preventive measure that brings large benefits to the community offers little to each participating individual. This distressing paradox implies that a response to honest health education is unlikely to be motivated powerfully by the prospect of better health. Whether or not a middle aged smoker chooses to give up his cigarettes may affect his chances of being alive in twenty years time by less than ten percent. Similarly, a decision to lose some excess weight, to take regular exercise, or to use soft margarine in lieu of butter - each a prudent step to take - will make only a tiny difference to a particular person's health prospects (Rose 1992:12-13).
A second difference between the way that lifestyle is conceptualised in epidemiology and the way lifestyle is conceptualised in risk factor health promotion influenced by epidemiology, is that in epidemiology risks are understood in terms of levels of risk, in relation to other risks and in the context of general population health data, whilst in risk factor health promotion, lifestyle risks are frequently presented in all or nothing terms. As such epidemiological research is being misrepresented. Bloor et al. describe the process of interpreting statistical data in such a way as to make a convincing and legitimate sounding argument as 'ethnostatistics' (1991:131). This process is common in public health applications of epidemiological data about lifestyle risks where the differences between various levels of risks are rarely mentioned because to do so would make it harder to argue for the adoption of various 'healthy' practices, or to attract funding for 'serious' health issues (Peterson and Lupton 1996:31; Richmond 1997:162):

Some associations between risks and outcomes are strong and others are weak, yet the community is encouraged to think of risks in all-or-none terms. For example, there is a proven link between smoking and lung disease (though not all people who smoke get the disease). Yet the links between fat consumption and heart disease, or between exercise and heart disease, are not of the same order of risk, and it has been argued that it is dishonest and counterproductive to suggest otherwise (Richmond 1997:162).

Kavanagh and Broom (1998) posit a similar argument in their study of women who have recorded an abnormal pap smear result. These women had risk explained to them through public health information about cervical screening. They interpreted this information to mean that risk for cervical cancer appeared and disappeared according to pap smear results and treatment. That is, they considered there were two distinct states, at risk and not at risk (1998:440). Their conceptions of risk are in contrast to an epidemiological conception of risk where all women are considered at to be at some risk of developing cervical cancer, although their levels of risk might change according to circumstances (1998:440).
A third difference between epidemiological understandings of lifestyle and those found in epidemiologically driven risk factor health promotion is that distinctions between risk and cause are blurred or non existent in risk factor health promotion. In many health promotion texts, risk factors for the development of disease in populations are represented as the cause of disease in individuals. Hughes (1994:62) argues that thinking about the relationship between lifestyle and health is this way has several implications for contemporary conceptualisations of lifestyle and health.

First, it changes health from being an ideal state to a normative one. Ever expanding expectations about health have resulted in any state other than 'perfect health' being perceived as a problem. Secondly, 'perfect health' understood as being achieved through lifestyle modification has become "an essential prerequisite to participation in the youth-valorising, sexualised, death denying society in contrast to earlier times where modification of lifestyle was part of an aesthetic or religious routine" (1994:62). Thirdly, if lifestyle is understood to be the cause of disease then people afflicted with 'lifestyle diseases' can be held accountable for their illness. Fourthly, current lifestyle based explanations for disease stress prevention rather than treatment, so that "the focus now is as often on 'potential' illness as it is on real illness - on 'virtual health' and 'virtual disease'" (Hughes 1994:62).

Apart from differences in conceptions of risk, the second major difference between epidemiological constructions of lifestyle and the constructions of lifestyle found in epidemiologically imbued risk factor health promotion is that epidemiological texts reflect a focus on investigating lifestyle as a possible determinant of disease (and collecting information about lifestyle factors in the population) while in contrast, risk factor health promotion texts generally take epidemiological knowledge about the relationship between lifestyle and disease as a given and focus on the modification and
control of individuals' lifestyle behaviours and practices for the purpose of improving population health.\textsuperscript{17}

This focus often involves empirical research orientated towards measuring the knowledge, attitudes and practices of given populations with the aim or developing programs and interventions which will effectively produce the control and modification of lifestyle practices (e.g. Narayan and Venkat 1997).

This type of lifestyle focus also involves the development and implementation of health education programs which aim to educate individuals about lifestyle risks (Duff 1999:77; Donahue and McGuire 1995):

Such programs argue that people put their health at risk by smoking cigarettes, eating unhealthy food, drinking too much, and not exercising enough. In this discourse, the problem of illness is conceptualised in terms of individuals' non-compliance. Some people are said to have failed to give up full cream milk, for instance. Smokers are said to have 'failed to understand' that lung cancer and coronary heart disease are major risks of smoking (Richmond 1997:159).

Health education programs have only limited success when being assessed on the basis of measurable health outcomes\textsuperscript{18} (Beattie 1991:169; Mechanic 1994:472). Even when people do modify their behaviours, lifestyle changes are only maintained for short periods of time and are "often limited to that segment of the population that is highly motivated to change, and the people who arguably really need to change are often impervious to health messages" (Richmond 1997:159).

\textsuperscript{17} I am not arguing that public health is not a research discipline or that in practice this distinction is always apparent. Public health practitioners are frequently epidemiologists who do epidemiological research, and public health as a discipline has a significant research component. However, in relation to understandings of lifestyle epidemiological texts do display a greater focus on collecting information about lifestyle whilst public health texts concerned with risk factor health promotion display a greater focus on controlling and modifying lifestyle behaviours and practices.

\textsuperscript{18} It is in fact difficult to assess the success and failures of lifestyle focused education programs because health education health messages are only one of the many messages about behaviours and bodies moving around a community. Isolating the effect of one particular message from other social changes and processes is almost impossible (Byde 1995:312; Engleman and Forbes 1986:445).
As a result of arguments that the lifestyle approach is flawed, public health policy makers at all levels have made statements about expanding the medical definition of lifestyle to take into account the socially embedded nature of lifestyle behaviours. This is evident in the WHO definition of lifestyle as:

patterns of behaviour choices made from alternatives that are available to people according to their socio-economic circumstances and to the ease with which they are able to choose certain ones over others (Kickbusch 1986a:118).

A public health paradigm termed the 'new public health' became popular in the mid 1980s (Ashton and Seymour 1988:21; Bruce 1991; Armstrong 1993). The developers and supporters of the new public health claimed to have overcome the limitations of the lifestyle approach to disease prevention.19:

Known as the new public health, policy replaced behaviour as the centre of attention, and the lifestyle approach was replaced by the notion of enhancing life skills. It has regained a political base which it had in its sanitary phase at the turn of the century and its focus now includes the socioeconomic factors which impinge on people. It has rejoined its environmental base and the focus is on social systems in which people live (McPherson 1992:123).

In contrast to epidemiologically inspired risk factor health promotion the new public health has a much broader and more general conception of the social aspects of disease. In theory, the new public health operates with a biopsychosocial20 understanding of health which requires education and lifestyle modification to be part

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19 The 'new public health' has been critiqued extensively throughout the 1990s. Some authors claim that there is nothing very new about the 'new public health' (e.g. Holman 1992); others criticise the weaknesses in the new public health paradigm (e.g. Peterson and Lupton 1996). Nevertheless it is widely acknowledged that the ideas and practices subsumed in the title 'new public health' represent a quite different public health paradigm when compared with reductive epidemiological driven public health (O'Connor and Parker 1995)

20 See Knight (1998) for description and critique of the biopsychosocial model of disease when used in medicine.
of general public policy, the workplace and education, not restricted to promotional campaigns:21

What has emerged under the title of 'new public health' is an approach that brings together environmental change and personal preventive measures with appropriate therapeutic interventions. ... The 'new public health' is said to go beyond an understanding of human biology to recognise the importance of social aspects of health problems caused by lifestyle (O'Connor and Parker 1995:7).

Unlike traditional public health which emphasised hygiene, mainstream medical thinking (germ theory) which emphasises the importance of medical care for health, or risk factor health promotion which focuses on a reductive collection of lifestyle practices considered to be risk factors for disease, the new public health viewpoint emphasises that lifestyle, socioeconomic factors, the environment and health care systems all play an important role in the achievement and maintenance of health. The 'new public health' claims to be directed not only to health issues in a narrow sense, but also to broader social, political, and economic conditions that produce differences in health among different groups. For example, the five strategies for health promotion outlined in the Ottawa Charter framework are: building healthy public policy; creating supportive environments; developing personal skills; strengthening community action; and reorientating health services.

In this sense then, the new public health conception of lifestyle is not one of socially isolated practices and behaviours. Instead it aims to have a 'lifestyles' understanding rather than a 'lifestyle' understanding. The term lifestyle when utilised in new public health texts is not restricted to epidemiologically identified risk factors but is applied to a wider and more general conception of styles of living. Individuals' practices and

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21 I have said 'in theory' here because there is ample evidence to demonstrate that while the aims and objectives of the new public health are broad and encompassing, these are rarely achieved in practice (see Richmond 1997; Peterson and Lupton 1996). Nevertheless, because my analysis deals with texts, I was frequently dealing with the aims and objectives of NPH rather than the outcomes.
behaviours are recognised as occurring within a context of structural and cultural factors. Rather than a focus on 'top-down' education about lifestyle risks, the new public health emphasises community participation and empowerment.

Two features of this biopsychosocial public health approach to lifestyle which make it very different from an epidemiological or a risk factor health promotion understanding of lifestyle are the influences of sociology and wellness nursing.

Sociological arguments about health have been integral to public health ideas about lifestyle since the late 1960s (e.g. WHO 1985; Kickbusch 1986a, 1986b; Badura and Kickbusch 1991; Tannahill 1992; Waddell and Peterson 1994). Sociology emphasises the role of social structures and inequalities on health, and requires a reflexive awareness of the cultural, historical and ideological basis of all public health thinking including ideas about lifestyle (e.g. Bunton and Macdonald 1992; Bunton et al. 1995; Flick 1998).

A sociological approach to lifestyle (which will be addressed in depth in chapter two of this thesis) has two main features. The first is a focus on life chances. Health lifestyles are conceptualised as "choices made from options available to people according to their life chances ... [with priority assigned to] chance (structure) over choice" (Cockerham et al. 1997:321). The second is a recognition that lifestyles (including health related lifestyle choices) are an aspect of self identity and "promote a sense of stability and belonging for an individual by providing an anchor in a particular social constellation of style and activity" (Cockerham et al. 1997:321). Such an approach contrasts starkly with the epidemiological and risk factor health promotion conception of lifestyle as socially and contextually isolated behaviours and actions. In its recognition that health related lifestyles are only one of the many types of lifestyles that people engage in the sociological approach is better able to understand the importance of health choices for self identity.
Wellness nursing expands available ideas about lifestyle to include the emotions and alternative/holistic understandings of diet and the environment (e.g. Schafer 1979; Pilch 1981; Keleher 1994; Storer et al. 1997). Wellness nursing originated in the 1970s and is strongly related to the primary health care movement, feminist nursing, alternative medicine and feminist and postmodern medical ethics and psychology (Petosa 1984; Chambers Clark 1986). Textbooks about health promotion written for and by nurses reflect a strong interest in the emotional and psychosocial aspects of behaviours and behavioural change in a way that other public health texts do not (e.g. Faber and Rheinhardt 1982; Chin and Jacobs 1983). Wellness nursing also demonstrates an openness towards alternative/holistic therapies and these public health texts frequently advise that nurses apply a range of alternative/holistic healing modalities when attempting to modify or change a patient's lifestyle in order to improve health and prevent disease.  

For example in her textbook *Wellness Nursing*, Chambers-Clark recommends that nurses teach their clients how to say positive affirmations and to use 'positive imagery' to help them adopt and maintain 'healthy' lifestyle practices such as taking up exercise or in order to give up 'unhealthy' practices such as smoking (1986: 36-37).

Pender et al. (1990) in a study of the types of health promotion research being performed by the National Centre for Nursing Research (NCNR) identified six categories of behaviour which were considered by researchers to comprise a health promoting lifestyle. These were "exercise, healthy nutrition, stress management, building supportive relationships, personal development, and taking personal responsibility for managing health through the appropriate use of health resources"

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22 Note that despite a rhetoric of empowerment, the new public health continues the emphasis on control and modification of individual's lives. Lay people are represented as patients who need help from the nurses in the form of skill building, information and support in order for them to live healthier lifestyles.

23 The National Centre for Nursing Research is a US centre established in 1986 as "part of the National Institutes of Health, the research arm of the Public Health Service within the United States Department of Health and Human Services (Lunney 1993:249).
(Lunney 1993:250). A seventh category "... concerning the reduction of risk
behaviours such as smoking, alcohol use, and unsafe sex practices" did exist but was
considered much less important (1993:251). The majority of NCNR health promotion
projects running in this time period were concerned with the psychosocial aspects of
healthy lifestyles, such as building supportive relationships and managing stress,
rather than nutrition or exercise (Lunney 1993:251).

1.9 Lay understandings of lifestyle
As discussed in section 1.2 of this chapter, lay and medical accounts of disease
(including accounts of lifestyle) overlap and inform each other (Whittaker 1995:2). For
this reason, and for purposes of comparison, the key features of lay perspectives on
lifestyle in relation to health are outlined below.

Despite the ways that lay understandings have been shown to have many similarities
with academic and medical understandings of illness and disease (Popay et al. 1998;
Furnham 1998; Kerr et al. 1998), lay perspectives on health and disease are
characterised by a number of features which make them quite different from formalised
and medically legitimate understandings of lifestyle (Calnan 1987; Blaxter 1983, 1990,
1995; Davison et al. 1991; Frankel et. al. 1991; Whittaker 1995; Nettleton 1995:45;
Charles and Walters 1998).

Sociological research into lay understandings about lifestyle and disease has found that
lay understandings of disease causation tend to emphasise biological factors such as
germs or genetic susceptibility rather than lifestyle factors24 (Blaxter 1983; Calnan
1987). This finding is related to the "a clear distinction within lay logic between health
and disease ... the two are not mutually exclusive". In lay perspectives health and
disease are not seen as opposites, it is possible to be strong, fit and 'healthy' and have
a disease (Nettleton 1995:44). "Ideas about the causation of disease are therefore not

24 As discussed in section 1.6 in relation to medical understandings of disease, lay understandings are
not easily generalised because they are dynamic, contextual and fluid (Stainton-Rogers 1991:9-10).
the same as ideas about the maintenance of health" (Nettleton 1995:45). Thus, in lay understandings lifestyle factors tend to be seen as contributing to *health* rather than causing disease:

> Whilst people consider that diet, exercise, rest and relaxation might contribute to maintaining health, it does not follow that such activities will prevent the onset of illness or disease. Ideas about disease causation tend to emphasise biological rather than behavioural factors (Nettleton 1995:45).

Lay explanatory models often describe the causes of disease as being outside of an individual's control. Charles and Walters (1998) report this phenomenon in their study of age and gender in women's accounts of their health. They found that while the women interviewed frequently mentioned lifestyle and the need for 'healthy living', they attributed illness to a range of social, environmental and biophysical factors. The most common among these were ageing, financial situation and men (1988: 341).

Lay understandings about the causes of disease also make use of available scientific, medical and other types of information. Lay accounts of health which accumulate scientific and other data about the causes and distributions of illness in order to construct hypothesis about the causes and risks of illness have been termed 'lay epidemiology' or 'popular epidemiology' (e.g. Davison et al. 1991, 1992; Brown 1992; Whittaker 1995:2). The term originated in an analysis of local discourses on health from South Wales where the authors found that lay people used their own aetiological frameworks and medical frameworks when talking about the causes of disease and disease prevention. Thus lay epidemiology may compete with medical discourses about the causes of disease and preventive health (Davison et al. 1991, 1992; Frankel et al. 1991).

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25 Importantly, Charles and Walters (1998) found a distinct age difference here. Younger women had accepted the rhetoric of lifestyle while older women were far more likely to talk about good healthy practices and old fashioned practices as being the key to longevity and good health.
Davison et al. (1991) suggest that one reason for lay peoples' disinclination to accept the arguments about lifestyle and disease which they encounter in health promotion and epidemiology, is the seemingly contradictory evidence they see for themselves: friends who have smoked and not developed lung cancer; people with lifestyles characterised by lack of exercise and diets high in fats who do not develop coronary heart disease (e.g. Whittaker 1995:10; Emslie et al. 2001).

Lay understandings of risk in relation to developing or preventing disease are quite different from those described in epidemiology and public health. Unlike these conceptions of lifestyle and risk which are based (to varying degrees) around notions of mathematical risk, lay ideas about lifestyle and risk are tied into each individual's own explanatory models and the folk and commonsense knowledges of their family and community (Douglas 1992; Green 1997).

Popular understandings of risks collapse the distinctions between risk and causality (Whittaker 1995:3). As such, lay accounts of risk are causal accounts. However, lay accounts rarely describe the cause of disease in terms of only one cause/risk. Instead, lay accounts of risk in relation to developing diseases such as heart disease, cancer or stroke are complex aetiological narratives which commonly emphasise a range of possible causes/risks in addition to 'lifestyle factors'; for example, environmental risks/causes, inherited factors and chance/luck (Davison et al. 1991; Whittaker 1995).

In addition, lay understandings of lifestyle risk are personalised. In lay accounts risk is described as "the property of an individual, an embodied sign of future disease, and risk factors are reified properties which an individual has or does not have" (Whittaker 1995:9). This is in contrast to the epidemiological understanding of risk, where populations are the units of analysis and statements about risk cannot be translated into an simple calculations of "any individual person's likelihood of contracting any particular disease" (Whittaker 1995:9).
1.10 Conclusion

This chapter began with a discussion of explanatory frameworks within medicine which argued that at any one time, several different explanatory frameworks are operating within medicine and thus being used by doctors to make sense of health and illness. These frameworks vary for a number of reasons. They are based on different medically accepted, scientific models of disease; for example genetic and environmental models. Furthermore, medical explanatory frameworks are not an objective representation of the natural world; rather, as with other scientific knowledges, they are socially produced and thus imbued with the values and beliefs of their originating culture and time period (Gordon 1988a). Adding complexity to doctors' understandings of disease and health is the issue of medical practice. Doctors interpret formalised medical explanatory models within the context of their clinical and life experiences (Siegler 1981:627). Medical knowledge is also constructed through interaction between doctors, between other medical people and between doctors and their patients (Helman 1985a:294; Atkinson 1995). Thus doctors make sense of health and disease in a complex fashion which transcends the traditional sociological characterisations of medical knowledge (i.e. the medical model, the disease illness distinction and the medical/lay dichotomy).

This complexity is a feature of contemporary medical understandings of lifestyle. To demonstrate this complexity I provided a brief historical overview of lifestyle as a medical explanatory framework within western medicine, outlined contemporary medical understandings of lifestyle and compared these with other medical explanatory frameworks, such as genetic or environmental explanations.

Contemporary medical understandings of lifestyle appear to be markedly different from other medical explanatory frameworks currently in vogue. This is because a lifestyle approach assumes a multi-causal aetiology, addresses the social determinants
of disease and provides an explanatory framework for health not just biological disorder (disease). While lifestyle models of disease are a longstanding feature of medical thought, contemporary medical understandings of lifestyle are different from earlier medical understandings of lifestyle because they reflect the cultural, demographic and structural situation of late advanced capitalist societies. Contemporary lifestyle focused explanatory frameworks are characterised by an emphasis on individual responsibility for health and rely on the calculation and management of risks.

Contemporary medical understandings of lifestyle reflect and reproduce wider social understandings of lifestyle, bodies and health (Fitzgerald 1994; Hughes 1994; Bunton and Burrows 1995). To demonstrate this, contemporary medical and lay understandings of lifestyle were located within their social and cultural context. This context included: epidemiology, public health and preventive health paradigms; the ideology of "healthism/lifestylism" and associated shifts in conceptions of health (Crawford 1978, 1980; Rodmell and Watt 1986; White et al. 1995); social processes associated with late/high modernity such as rationality, ideologies of individualism, the increasing commodification of bodies, health and health care and the 'risk society' (Giddens 1991:8; Beck 1990:99; Turner 1996:10; Willis 1997; Annandale 1998:119); also the nexus between demographic changes associated with aging western populations and government policies on public health.

In addition, while medical understandings of lifestyle include considerable socio-cultural values within their nosology there are significant differences between the ways that lifestyle is used to make sense of health and illness within formal medical knowledges from epidemiology and public health and the ways that lay people have been shown to understand lifestyle. (Blaxter 1990, 1997; Davison et al. 1991, 1992; Pierret 1993; Whittaker 1995).

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The next chapter (chapter two) discusses the strengths, limitations and implications of contemporary medical understandings of lifestyle drawing on the sociological critique of lifestyle as a medical explanatory framework.
Chapter Two
Sociological Writing About Lifestyle as a Medical Explanatory Framework

2.0 Introduction

This chapter outlines the sociological critique of lifestyle as a medical explanatory framework. The ways that health and disease are increasingly being explained in terms of lifestyle has received considerable sociological attention. Sociologists from a range of different theoretical persuasions have argued that the increasing popularity and application within medicine of a social model of health and disease represents an important shift within medical thought and practice away from the inherent reductionism of germ theory towards a social and thus an expanded medicine (Williams and Boulton 1995; Armstrong 1993, 1995; Williams 1995). However, sociologists have been divided in whether they perceive this shift as being a desirable or a worrying change.

From the 1970s until the mid-1980s much sociological attention was positive (e.g. Kickbusch 1986b; Russell and Buisson 1988; Badura and Kickbusch 1991). Medical attempts to explain health and disease using a social model were seen by sociologists as commendable, and as recognition of longstanding sociological arguments about the social patterning of health and disease (Mant 1989). In contrast, throughout the mid-1980s and 1990s, a body of sociological writing emerged which was highly critical of medical understandings of lifestyle, particularly as represented by epidemiology and public health.

This sociological criticism is a reflection of fundamental differences between sociological and epidemiological understandings of what constitutes a social explanation for disease (Abel 1991; Cockerham 1995). Medical understandings of lifestyle were queried on a number of levels including: problematising the
epidemiological basis of medical claims about lifestyle health and disease; questioning the usefulness of lifestyle focused disease prevention programs in terms of measurable health outcomes; criticising the sociocultural assumptions underpinning medical understandings of lifestyle, and highlighting the negative implications of these. (e.g. Hughes 1994; Dean et al. 1995; Richmond 1997).

This chapter provides an overview of sociological writing about lifestyle and identifies three areas of under-development within the sociological critique of lifestyle as a medical explanatory framework. These areas of weakness are as follows. First, the sociological critique describes a stable and unified 'medicine'. Secondly, the sociological critique has neglected how doctors construct and apply ideas about lifestyle. Thirdly, sociologists writing about medical understandings of lifestyle have only addressed the relationship between lay and medical knowledges about lifestyle from the perspective of lay understandings. The inter-relationship between medical and lay understandings of lifestyle, from the perspective of medicine, has only been approached by sociologists, from a very limited perspective (e.g. Lupton 1994a, 1994b; Peterson and Lupton 1996). These areas of underdevelopment are discussed in detail and presented as a rationale for this thesis, leading into the next chapter (chapter three) which describes how this thesis addresses these weaknesses through empirical research into medical understandings of lifestyle.

2.1 Is lifestyle an effective way of explaining health and disease?

Until the early 1990s the sociological writing about medical understandings of lifestyle was principally concerned with assessing the strengths and weaknesses of medical conceptions of lifestyle as an orientating framework for research and disease prevention programs (e.g. Russell and Buisson 1988; Badura and Kickbusch 1991; Pill 1991; Dines and Cribb 1993).
Such writers expressed enthusiasm about the development of a socially focused model of disease which emphasises the ways that disease and health are socially patterned, viewing it as a reflection of the increasing legitimacy and recognition of sociological arguments about health and disease being shaped by cultural location. Sociological arguments about social location and health focus on how life chances shaped by an individual's social location impact on their health for example through social opportunities, material advantage/disadvantage, living conditions, working conditions and access to education and social support. As evidence, sociologists point to the differential health outcomes of different social groups for example, men and women, indigenous Australians and non-indigenous Australians, rural/urban dwellers, the unemployed and students (Davis and George 1990; Saggers and Grey 1991; Wilkinson 1996).

Since the 1960s sociologists have been arguing that the key to improved health is not an increase in medical care but structural changes such as improvements in standards of living, a reduction in inequalities and increased levels of education (McKeown 1965; Davis and George 1990; Blaxter 1990; White 1999). Epidemiological research into the behavioural and social basis of many diseases seemed to provide medically accepted scientific evidence to support long-standing sociological arguments about patterns of morbidity and mortality reflecting patterns of social inequality (Puska et al. 1985; Russell and Buisson 1988; Ornish et al. 1990; Badura and Kickbusch 1991; Pill 1991; Dines and Cribb 1993).

A lifestyle approach to health and disease prevention was also greeted with a widespread optimism as an indication that the limitations of a medical system focused on acute care were being recognised and that a new biopsychosocial approach to health and disease was being developed which would overcome the doctor-focused perspective of the mainstream medical approach to disease and have greater potential in reducing inequalities in morbidity and mortality (Engel 1981; Monaem 1989:289):
Past emphasis on crisis care is shifting to the concept of constant care, and primary health care, operating at the level of the family and the local community and concerned with the establishment of ongoing healthy lifestyles. [This] has the potential to involve the general population in the control of their own health futures (Byde 1989:309).

In contrast to this approach, a body of writing which expresses concern about many aspects of medical understandings of lifestyle in the context of a wider critique of contemporary public health practices and ideologies also become prominent within sociology (e.g. Crawford 1978, 1980; Castel 1991; Armstrong 1993, 1995; Fitzgerald 1994; Duff 1999). This writing has been largely focused on how lifestyle is understood in epidemiological research into social determinants or 'risk factors' for disease and in epidemiologically driven public health. As the popularity and influence of epidemiology and public health focused on lifestyle modification grew throughout the 1980s and early 1990s so to did this body of sociological literature. By the mid-1990s sociological writing which is critical of a lifestyle approach had become the new sociological orthodoxy on this subject.

At its basis this critique reflects a fundamental difference between sociological and epidemiological understandings of lifestyle and health. Mainstream sociological perspectives on causes of disease emphasise the socially embedded nature of the behaviours and attributes considered in an epidemiological approach to be 'lifestyle risks'. For example, both of the following sociological definitions of 'lifestyle' give emphasis to structural and cultural factors associated with behaviours and actions related to health. Cockerham (1995:90) defines health lifestyles as "patterns of voluntary behaviour based on choices from options that are available according to their [an individual's] life situations". Abel describes health lifestyles as "patterns of health related behaviour, values and attitudes adapted by groups of individuals in response to their social, cultural and economic situation" (1991:900). Thus from this sociological
perspective lifestyle factors and lifestyles are constrained by material constraints in addition to cultural and symbolic values.26

In addition, when discussing the social, cultural and economic situation within which patterns of health are formed, sociological writers have emphasised that the social causes of ill-health are closely related to social inequalities associated with a capitalist economic system (Epstein 1978, 1990; Navarro 1976, 1986; McKee 1988). These writers have criticised the state for failing to acknowledge or take responsibility for situations within which health related behaviour choices are made, for example the constraints imposed by unhealthy working conditions or the regulation and advertising of commodities such as tobacco or alcohol (Germov 1997b:22). The medical profession has also been criticised for promulgating the commodification of health care and producing/reproducing a perspective where the causes of ill-health are physically located within an individual, thus masking the diffuse and complex relationships between social factors such as socioeconomic inequality and poor health (McKee 1988:776).

The epidemiological approach, on the other hand, views social factors such as socioeconomic inequality, living conditions and employment as 'fundamental causes' of disease which are too distant and non-specific to be usefully investigated in medical research (Remennick 1998:26). Instead epidemiologists search for more proximate causes of disease such as lack of exercise, smoking, diet or occupational and environmental hazards.27 These proximate causes of disease are often considered in isolation and not within a political, structural or cultural context.

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26 This sociological position on lifestyle is frequently attributed to Weber who considered that while choice is "the major factor in the operationalization of a lifestyle" that "the actualization of choices is influenced by life chances" (Cockerham et al. 1997:325). Life chances are the chances that people have because of their position in life. This includes structural factors such as education, employment, income and property as well as rights, norms and social relationships (1997:325). "Hence, lifestyles are not random behaviours unrelated to structure but are typically deliberate choices influenced by life chances" (1997:325).

27 This statement refers to the epidemiological mainstream. Criticism of this type of epidemiology is emerging from within epidemiology (Karasek and Theorell 1990). Syme (1996) and Shy (1997) both of whom are epidemiologists, argue that epidemiology ought to address the social context of
Thus while a sociologist might argue that the fundamental causes of disease lie in answers to questions such as 'Why do these people work in dangerous jobs?', 'Why do these people live in houses exposed to environmental toxins?' or 'Why are increasing numbers of young women starting to smoke cigarettes?', the epidemiologist would argue that 'workplace exposure to asbestos causes cancer and lung disease', 'that the childhood leukemia cluster in Cumbria is caused by radiation exposure from nearby nuclear power plants' and that 'increasing numbers of lung cancer cases in women are the result of more women smoking cigarettes' (Gardner et.al. 1990; Link and Phelan 1995; Remennick 1998).

In addition to having a structural focus and a different approach to the causes of disease than epidemiology or epidemiologically driven public health, the type of lifestyle approach advocated by social scientists is also a reflexive and critical one which situates contemporary ideas about lifestyle, health and disease within a wider ideological and socio-historical framework (e.g. Bunton and Macdonald 1992; Dines and Cribb 1993). The theoretical perspectives which have resulted in a reflexive stance within sociology include Foucauldian writings and other writers using a Foucauldian perspective (e.g. Armstrong 1982, 1983, 1995; Nettleton 1992; Bunton 1997), postmodernism (e.g. Fox 1992, 1993, 1999) medical anthropology (e.g. Lock 1985, 1986; Gordon 1988a; Martin 1990) and feminist writing (e.g. Ehrenreich and English 1974; Harding 1991; Bransen 1992). None of these perspectives which advocate a critical self awareness have been influential in the fields of epidemiology or applied public health to any extent (nor in any of the sciences). Thus it is unusual for proponents of either medical field to deliberately consider their own arguments about lifestyle and disease as only some of many possible ways to approach such issues.
Thus, from a sociological perspective the epidemiological approach to lifestyle is reductive because such a conception of lifestyle carries connotations of easily made choices and 'styles' of life which might be easily abandoned for another 'style' of life if desired. This perspective ignores the difficulties imposed by material constrains and the cultural and symbolic values of many of the behaviours dismissed so easily under the banner of lifestyle choices.

In addition to criticising the medical perspective on lifestyle, sociologists have also queried the epidemiological basis of many medical claims about lifestyle and disease. These queries have criticised flawed epidemiological methodologies (Kaplan 1988; Germov and Williams 1999; Richmond 1997:163).

The risk factor approach to lifestyle commonly used in epidemiology has also been criticised on two grounds. First, for failing to make explicit the different orders of risk which are identified between various lifestyle risk factors and specified outcomes (e.g. Kaplan 1988; Germov and Williams 1999; Richmond 1997:163). Secondly, for pursuing uni-dimensional explanations (e.g. Le Fanu 1986:118; Hughes 1994; Skolbekken 1995:302).

Epidemiological explanations have also been criticised for representing disease and lifestyle in a universalistic fashion which masks the value driven nature of scientific research and variation within populations. Epidemiological research into lifestyle reflects the white/male-centred bias of medical research in general. Epidemiological research into lifestyle and disease is generally focused on adults and more often than not, white adult men rather than adult women or people from different racial or ethnic backgrounds (Saggers and Grey 1991:51; Foster 1995:176). The epidemiological

28 These different perspectives are often viewed as being incompatible, which is more a reflection of the boundary and disciplinary differences between medicine/science and sociology than a reflection of insurmountable differences between epidemiology and sociology. Remennick (1998) and Link and Phelan (1995) argue that the two explanatory frameworks could be easily integrated. Such an integration has been achieved by Wilkinson (1996) as portrayed in his book *Unhealthy Societies: The Afflictions of Inequality*. 
focus on white men is also a reflection of the connection between lifestyle research and the diseases of middle-aged men. Although men and women are both affected by 'lifestyle diseases' such as cardiovascular disease, lung cancer and adult onset diabetes, popular and medical constructions of these diseases have often represented them as diseases which are a major problem for middle-aged men (e.g. Waldron 1983; Verbrugge 1985; Sabo and Gordon 1995).

Epidemiological research fails to encompass the variations which occur within populations because it has relied too heavily on specific lifestyle behaviours which have been statistically associated with morbidity or mortality in population health data (Dean et al. 1995; Popay et al. 1998:619). Such global statistical correlations hide serious contradictions such as ethnic and gender variations. For example, Asian immigrants to Britain have high coronary heart disease rates despite having lower cholesterol, lower blood pressure readings and lower rates of tobacco consumption than non-immigrant Britons (McKeigue and Marmot 1988). Similarly, women (unlike men) with high blood cholesterol are not statistically associated with higher mortality rates from cardiovascular disease in particular or with mortality in general (Jacobs et al. 1992; Hulley et al. 1992).

Lifestyle focused preventive programs have also been criticised. These programs (as outlined in chapter one) tend to represent risk in all or nothing terms and rarely indicate that epidemiological data on the relationship between lifestyle factors and health/disease are at times inconclusive, and at other times contradictory (Becker 1993; Lupton 1994b; Lupton and Chapman 1995; Skolbekken 1995; Hughes 1996). The impact of lifestyle changes on mortality and the development of various diseases remains obscure. A generally 'healthy' lifestyle does seem to result in improved levels of health and wellbeing. For example, members of the Seventh Day Adventist Church

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29 Some epidemiological studies have addressed this problem. For example Marmot et al. (1978) and Marmot et al. (1991). These studies have paid closer attention to variations within and across populations and the social contexts of individual risks.
who practice regular exercise, eat a vegetarian diet and neither smoke nor drink, have lower rates of certain diseases than the general population. The health outcomes of lifestyle changes at the level of isolated behaviours and practices are unknown.

While some studies suggest that changes in lifestyle behaviours such as refraining from smoking or drinking alcohol, eating a nutritious diet and partaking in exercise are associated with a decrease in mortality from certain disease, for example cardiovascular disease and lung cancer (Puska 1985)30, many other studies show contradictory results. For example, an epidemiological study of middle-aged men found that in comparison with a control group, the mortality rates were higher for those men who had been randomly selected to participate in cholesterol lowering and exercise programs (Strandberg et. al. 1991). A nationally representative prospective study of 3617 American adults reached the conclusion that while reducing health risk behaviours such as smoking and drinking would improve the health of Americans, the differences in mortality between people of low socioeconomic status and those of high socioeconomic status are due to a wide array of factors including education and income. "These differences would persist even with improved health behaviours among the disadvantaged" (Lantz et al. 1998:1703).

The ability of health promotion programs to produce modifications of people's lifestyles has also been questioned. Critics argue that such programs have only a limited capacity to produce lifestyle changes because they rely almost entirely on health education about lifestyle risks rather than addressing cultural or structural issues which underlie lifestyle behaviours and practices (Byde 1989; Mechanic 1994:471-472; Beattie 1991:169-170). Such critics claim that the failure of such programs is well documented and well recognised but that the programs remain popular because they

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30 While the reductions in morbidity achieved in this project are statistically significant they should be considered in the context of widespread reductions in cardiovascular disease that occurred in the control group for this study and in many other countries around the world without intervention (Davis and George 1993:391).
make governments look authoritative and active, while at the same time avoiding confrontations that might prove politically costly (Richmond 1997:156):

[Lifestyle focused health promotion] has the support of the medical profession because it expands medical turf and provides work for epidemiologists, allied health professionals, psychologists, and educationalists to the extent that the area has become overcrowded. ... [it] meshes well with psychological models of behaviour and is widely supported by media and marketing experts who circulate its attendant slogans. Drug companies also do well out of individualist health promotion (Richmond 1997:160).

This over-view of sociological criticism of a lifestyle approach as found in epidemiology and risk factor health promotion demonstrates that such an approach appears to be fundamentally flawed. The relationship between individual lifestyle behaviours and morbidity is uncertain. The usefulness of lifestyle change as a means of reducing morbidity and mortality is questionable. Furthermore, health promotion aiming to produce modification of peoples' lifestyles through education campaigns has a low success rate in terms of producing long-term behavioural changes.

As discussed in chapter one, within public health these criticisms have resulted in a reconceptualisation of health promotion to include a wider focus on the environment (psychological, social and physical) as seen in the 'new public health'. However, these criticisms have not changed the way that epidemiological research is conducted nor apparently the ways that such research is interpreted by those within public health:

Despite murmurings at the international level in support of changing environments, most health promotion activity in Western countries such as Australia has continued to be narrowly focused around educating people to change their lifestyles (Richmond 1997:158).
Furthermore, the expansion of a lifestyle approach to include the environment may not alleviate the problems associated with a reductive lifestyle approach and may add a range of new potentially negative implications by increasing the scope of public health (Peterson and Lupton 1996:ix). These issues will be addressed through the following section.

2.2 Sociological critique of assumptions underlying the medical approach to lifestyle

In addition to questioning the efficacy of medical conceptions of lifestyle as a way of usefully understanding the reasons why some people get sick and others stay well, or as an orientating framework for disease prevention, sociologists critical of such a lifestyle approach (e.g. Crawford 1978, 1980; Lupton 1993; Hughes 1994) have also addressed the assumptions underlying such an approach and raised questions about the implications of these assumptions.

Contemporary medical understandings of lifestyle are described by these authors as moralistic and discriminatory; as serving to extend medicalisation, medical surveillance and medical control; as a reflection of and a perpetuation of the increasing commodification of bodies and health; and as a continuation of the medical tradition of dealing with issues of sickness and health in a modernist, science based manner (e.g. Crawford 1978, 1980; Fitzgerald 1994; Bunton and Burrows 1995; Armstrong 1995; Peterson and Lupton 1996). Each of these arguments is outlined below.

2.2.1 Discriminatory and moralistic

The importance of morality to lifestyle and disease is apparent when it is recognised that the underlying premise of such an approach is that 'good' behaviour will keep people healthy and that 'bad' behaviour will make them sick (Levenstein 1994; Fitzgerald 1994; Miller and Mchoul 1998; Williams 1998; Vertinsky 1998):
Contained within what has come to be called the ideology of 'healthism' is a system of beliefs that defines health promoting activities, such as involvement in some form of physical fitness program as a moral obligation. Whether it is through exercise, diet, or stress management, the avoidance of disease through personal effort has become a dominant cultural motif. Consequently, self-control, personal resolve, and the deferment of gratification, all connected to traditionally bourgeois notions of 'clean living' are associated with personal redemption through the demonstration of 'moral character'. Crucially, the ideology of healthism also tends to place responsibility for body vigilance solely on the individual, and deflects attention away from the social and cultural conditions which shape and constrain health (White et al. 1995:160).

Sociological writing about the inherent morality of a lifestyle approach has focused on the ways that a lifestyle approach is morally problematic for any person experiencing illness because lifestyle behaviours and practices are something that a person does. Disease or poor health is conceptualised in terms of individuals' non-compliance with the rules of a 'healthy' lifestyle' (Sontag 1989; Richardson 1991:159; Epstein 1995):

... when risk is believed to be internally imposed because of lack of willpower, moral weakness or laziness on the part of the individual the reciprocal relationship of sin and risk is reversed. Those who are deemed to be "at risk" become sinners, not the sinned against, because of their apparent voluntary courting of risk (Lupton 1995:90).

An explanatory perspective which explains disease in terms of lifestyle is particularly problematic for those people who develop a disease or condition which is widely held to be the direct result of something they did or did not do in their daily living, for example lung cancer, HIV/AIDS or Hep C (Horton and Aggleton 1989).

This explicit morality is in contrast to the construction of disease categories in other medical approaches (such as germ theory, or genetic models of disease). While these are recognised as also having implicit moral bases, such models appear on the surface
to be value-free. Hughes (1994:61) points out that labelling a disease as being the outcome of "a particular lifestyle means that substantial sociocultural values covering a range of beliefs on how we should live have already been incorporated into its nosology":

The term 'lifestyle'... has now become a central concept in western health policy, epidemiology and health education, but has in the process taken on a much narrower set of meanings which minimise the importance of context. Illness has come to be viewed in social terms more as a form of punishment that is often self inflicted (Williams and Boulton 1988:233).

This morality can lead to discrimination in several different ways. Currently healthy people might be discriminated against because they are seen to have an 'unhealthy' lifestyle which places them at higher risk of becoming unwell in the future (Nettleton 1995; Bunton and Burrows 1996). For example, smokers and overweight people are frequently asked to pay higher insurance premiums. People who are diagnosed with a 'lifestyle disease' and who then continue to have an 'unhealthy' lifestyle may be refused certain medical treatments, for example organ transplants or drug trials.

In addition, lifestyle risks are not equally distributed across the community. To act as though they are or that exposure to lifestyle risks is the result of individual choice, as is the case in risk factor health promotion, is discriminatory. Certain groups in Australia, in particular the socioeconomically disadvantaged and Aboriginal Australians, have higher rates of lifestyle risks for a number of diseases, in particular cardiovascular disease, stroke, and diabetes (Australian Institute of Health and Welfare 1998). Morbidity and mortality rates are also higher among the disadvantaged. Because lifestyle risks are seen as individual responsibilities, the members of such groups risk being blamed for their poor health and of being seen as dangerous to others (Davis and George 1992:394; Nettleton 1995:161; Peterson and Lupton 1996:174).
The complexities of this issue can be seen in the example of women's exercise. Willis (1991:65) has shown that contemporary exercise ideology which represents physical exercise for women as socially acceptable is "a recent victory in women's struggle for equality for men". However, he and other authors such as Vertinsky (1998) and Love et al. (1997) have also argued that the current focus on enhancing women's health through exercise ignores inequities in women's health which range from socioeconomic inequality, the continued medicalisation of the female body, the emphasis on women's physical appearance, stereotypes of women related to aging, menstruation and menopause and issues of diversity and race. Vertinsky (1998:85) contends that the low rates of female participation in exercise should not be seen as a reflection of poor self-discipline or lack of knowledge about the health benefits of exercise, instead, they should be understood as the manifestation of a lack of opportunities to either participate in exercise or to enjoy exercise as a result of social, political, economic and cultural gender inequality:

Just as we are beginning to understand that health gains can be achieved by reducing social inequality rather than providing more medical care, it is also clear that involvement in healthy exercise is closely intertwined with the social, economic and health status of women, disempowering stereotypes of the female body and the issue of control over women's bodies. Exercise participation is still heavily dependent upon the financial resources and cultural capital of class, and is structured by gender, ethnicity and race (Vertinsky 1998:85).

The discrimination which flows from a lifestyle approach can be either overt, as mentioned above in relation to increased insurance premiums for smokers, or covert, in the sense that well-intended health promotion programs inadvertently help to "reproduce structures of inequality in relation to dominance" (White et al. 1995:161). Peterson and Lupton (1996:174) when writing about the way that lifestyle is used in epidemiology and public health argue that understanding disease or health in terms of
people's lifestyle is an inherently moral enterprise entailing prescriptions about daily living and the management of bodies.

Peterson and Lupton (1996) and Hughes (1994, 1996) are concerned about the flawed nature of medical understandings of lifestyle because they consider that lifestyle explanations for disease are becoming increasingly pervasive. Hughes (1994:61) describes lifestyle models as the predominant explanatory model within medicine and among the lay population.

Peterson and Lupton (1996) stress the widespread influence of lifestyle models of disease promoted in the 'new public health'. They are particularly concerned about the supposed dominance of lifestyle models of disease underpinning the 'new public health' because they consider the 'new public health' to be an inherently controlling enterprise concerned with correcting and 'making up' specific types of individuals (1996:174):

The new public health has been warmly embraced by people of diverse backgrounds and political persuasions. It has been represented as the antidote to all kinds of problems linked to modern life. ... The uncritical acceptance of the basic tenets of the new public health is disturbing in light of the increased potential for experts to intervene in private lives and for established rights to be undermined. We suggest that this reticence is in itself indicative of the power of the discourse of the new public health (Peterson and Lupton 1996:x).

Lifestyle models do seem to be among the most widely used explanatory frameworks within the field of public health (Bunton and Burrows 1995; Richardson 1991). Whether they have in fact pervaded other medical spheres is harder to ascertain due to a lack of empirical research into this issue.
2.2.2 Medicalisation and surveillance

The term medicalisation has come to refer to the complex process by which medicine is judged to be the appropriate social institution to deal with issues of disease and sickness. An increasingly large number of social issues come to be defined as illnesses or disorders and thus as medical problems. These issues now defined as medical problems come under medical governance, are described in medical language, understood in terms of a medical framework and managed through medical intervention (Fox 1977; Conrad and Schneider 1980; Conrad 1992:209). Examples of these include life stages such as adolescence or old age, life events such as childbirth or pregnancy, behaviours and practices such as alcoholism, masturbation and homosexuality (Freidson 1970; Chessler 1972; Zola 1972; Fox 1989; Lowenberg and Davis 1994).

Conrad and Schneider (1980) consider that medicalisation can occur on a number of levels. First, at the conceptual level when medical vocabulary is used to define a problem, for example 'postnatal depression'. Secondly, at the institutional level when an institution achieves medical legitimacy, for example physiotherapy or dietetics. Thirdly, at the level of the doctor/patient relationship when the doctor defines problems as being medical through the process of diagnosis and treatment.

Medicalisation is generally perceived by medical sociologists as a negative process (Broom and Woodward 1996:358). Some writers have expressed concern about the increasing power of the medical profession throughout the twentieth century and the problems associated with medicine taking over from religion or the family as a major agent of social control (e.g. Friedson 1970; Zola 1972; Conrad and Schneider 1980; Martin 1987). Other authors have argued that medicalisation should be viewed non-judgmentally as a process which can be helpful in some contexts and destructive in others (Lowenberg and Davis 1994; Broom and Woodward 1996):
Debate about whether medicalisation is good or bad rest upon implicit definitions of health and illness, and on the particular health problem, as well as upon assessment of the effectiveness of medicine and its physical, psychological and social effects (Broom and Woodward 1996:358).

Understanding disease and health in terms of lifestyle has the potential to increase medicalisation is two ways. First, the preventive focus on currently healthy people who might become unwell in the future increases the sphere of medical concern from states of illness to include health (Fitzgerald 1994; Hughes 1994). Contemporary medical notions of lifestyle risk, where all people are required to consider their risk of disease even when they are currently healthy, puts bodies into a state of transition where health is transformed into a state of 'virtual disease' (Hughes 1994:57):

> With the change in emphasis from treatment to prevention has come the widespread applications of risk factors as a measure of health or illness, and the focus is now as often on 'potential' illness as it is on real illness - on 'virtual health' and 'virtual disease' ... (Hughes 1994:62).

Secondly, if medicine is utilising an approach towards disease which focuses on the social rather than only the biological, the self-limitation imposed by the biological reductionism of germ theory (the medical model) is removed and the sphere of possible medical influence is further increased. Lowenberg and Davis term this process, whereby the range of factors considered to be of importance to medicine is increased, an expansion of the pathogenic sphere (1992:579).

Medical sociologists who adopt a Foucauldian perspective to write about 'healthism', epidemiology or lifestyle focused health promotion (e.g. Lupton 1994b; Turner 1996; Armstrong 1995; Bunton et al. 1995; Lupton and Chapman 1995) have focused on the body "as a target of disciplinary practices" (Turner 1996:21). From this perspective the surveillance is achieved through the exercise of discipline over the body and
populations. Medicine is viewed as a major institution of disciplinary power over the body (Turner 1987:10; Lupton 1994a:23).

These authors contend that the popularity of lifestyle discourses reflects a displacement of the traditional medical site of surveillance, the clinic, by the discursive space of epidemiology and related health promotion and health education. A shift "symbolised through a strategic shift to the psycho-social dimensions of disease and the spatio-temporal calculus of risk, crystallised in the new emphasis on 'lifestyles' " (Williams 2001:148). In this argument the disciplinary powers of medicine have been increased by medical adoption of a lifestyle approach (Armstrong 1983:39-40). An emphasis on monitoring population risk factors and the capacity of technological advances to achieve sophisticated "systematic pre-detection" is seen to legitimate new modes of surveillance Bunton and Burrows 1995:209).

Lupton describes disease prevention measures which focus on lifestyle as evidence of the "growing penetration of the clinical gaze into the everyday lives of citizens, including their emotional states, the nature of their interpersonal relationships, the management of stress and other 'lifestyle' choices" (1997:107). Furthermore, because a lifestyle approach to disease prevention places emphasis on self-control, self-discipline and self-monitoring of lifestyle risks, medical surveillance is carried out by individuals as they assess their own bodies, states of health or sickness and ways of living in terms of medical/public health advice about lifestyle (Glassner 1989):

In being aware of the public gaze, the individual unconsciously him-or-herself exerts disciplinary power, both over others and over the self through self regulation. In this process, power relations are rendered invisible, and are dispersed, being voluntarily perpetuated by subjects themselves as well as upon others (Lupton 1994a:32).

31 Note that Armstrong does not use the term lifestyle approach but instead refers to the development of 'social medicine' (1983:38)
2.2.3 Commodification of bodies and health

Advanced capitalist societies have been described as having consumer culture (Bourdieu 1984; Featherstone 1987, 1991). In a consumer culture looking good, feeling good and being healthy become merged as the appearance of the body is seen to reflect the inner self. The emphasis on bodily maintenance and bodily surveillance found in lifestyle focused health promotion and health education is argued to reflect and reproduce the commodification and commercialisation of bodies and health (Featherstone 1987, 1991). In this situation "there is a commercialisation of health in that people are constructed as health consumers who may consume healthy lifestyles" (Nettleton 1995:49).

The notion that health can be purchased through the consumption of a healthy lifestyle can be clearly seen in the success of the beauty and fitness industry (Featherstone 1991:184-186; Williams 1998). The appearance of jogging, going to the gym, practising yoga and wearing clothes with sports brand labels have all been associated with a healthy lifestyle. The purchasing of such healthful signs is seen as responsible and valuable. In a 'lifestylist' society the body is regarded as a consumer commodity. To be perceived by others as being in 'good' health is necessary for the successful marketing of the body as a commodity. A 'fit' body is seen as a sign of "competence, self control, and self discipline" (Nettleton 1995:51).

The major reason why sociologists view the commodification and commercialisation of health and bodies as problematic is that a lifestyle approach implies that not having a 'healthy' lifestyle is a form of weakness or irresponsibility. This ignores that the consumption of a 'healthy' lifestyle, like all forms of consumption, "is constrained by the social and material contexts in which people live out their lives" (Nettleton 1995:51). Annandale (1998:119) describes consumption as a new axis of inequality. She argues that the lifestyles and health practices associated with a lifestyle approach to health are not practically accessible to those at the bottom of the ladder. "For these
people, maintaining health and gaining access to health care is an intractable problem" (1998:121).

2.2.4 Modernity and 'science'

The argument presented by authors such as Peterson and Lupton (1996) and Hughes (1994) that medical ways of understanding health and illness in terms of lifestyle are a continuation of the medical tradition which deals with such issues in a modernist, science based manner might at first seem rather strange. Medicine is after all widely accepted as dealing with issues of sickness and health in a modernist and science based manner (Freund and McGuire 1991). This critique can be understood, however, if two background issues are considered.

First, within medicine explaining disease in terms of lifestyle has been represented as a successful attempt to overcome the reductive nature of traditional medical understandings of disease in favour of a complex biopsychosocial understanding (Usherwood 1999:82; Launer and Lindsey 1997). Critics such as Hughes (1994) or Peterson and Lupton (1996) argue that an over-reliance on conceptions of risk in epidemiological and public health understandings of lifestyle serves to negate this aim by transforming complex socially and culturally embedded behaviours and practices into quantified risk factors for disease. Such an approach fails to recognise of the complexity of the social patterning of illness. Further, the production of risk factors serves to "sanitise, trivialise and abstract illness and disease into information in a database. The expectation is generated that merely altering a few wrong numbers will enable people to become healthy" (Hughes 1994:65).

Quantification and abstraction also serve to erase the lived realities of illness and disability. Hughes (1994:65-66) argues that reducing illness or health to simplistic measurements contributes to a generalised insensitivity towards those who are ill or even those who are seen to be placing themselves 'at risk' of disease in the future.
This abstraction and distancing makes the moralistic judgments and discrimination associated with a lifestyle approach, particularly likely.

Thus this argument posits that while lifestyle models might seem to be a reflection of a different type of medical explanation for disease, the way that lifestyle arguments are constructed in epidemiology and public health means that they are simply 'more of the same'. That is, lifestyle models are little or no different than more traditional medical explanatory models and carry the same burden of weaknesses.

The second issue underpinning this criticism is more complex. Throughout the second half of the twentieth century, writers from many fields but in particular philosophy and the sociology of science have argued successfully that scientific knowledge should not be viewed as an accurate representation of a natural truth but instead as socially constructed knowledge which reflects historically and culturally specific ideas and assumptions (Kuhn 1970; Hesse 1963; Arney and Bergen 1984; Harding 1991; Webster 1991:9; Atkinson 1995:79). From this perspective, all scientific facts are "products of the scientific communities from which they emerge ... our presumed stable realities are in fact realised within variable discursive contexts" (Nettleton 1995:21).

One result of this debate is that medical knowledge and practice have been shown to involve considerable sociocultural values (Wright and Treacher 1982a, 1982b; Gordon 1988a):

What is being proposed is not that medicine is unscientific because it is permeated by social forces: but in contrast, that both medicine and science are inherently social enterprises (Wright and Treacher 1982b:7).

Writers have used these arguments to suggest that the modernist and scientific approach is not what it has been represented to be, that is, stable, objective and
impartial. This critique has frequently been focused on the institution of medicine and the medical management of sickness and health (e.g. Zola 1972; Navarro 1976, 1986; Illich 1979; Kirmayer 1988). In this context, medical claims that lifestyle arguments are valid and useful because they are supported by scientific research and modern methods of population measurement and surveillance are not seen as convincing or desirable (Brandt 1991):

The legitimacy of medicine was subjected to a newfound relativism. Medicine came under attack from both the left and the right; in the crossfire emerged a new set of questions about its role, values, impact, and authority. The recognition that medicine could harm, even when trying to help, that it was not always effective (and that effectiveness was hard to define and measure) led to fundamental ambivalence about the notion of medical progress. Medicine, for more than a generation an unambivalent 'good': had with relative suddenness become a focus for debate and ambiguity, if not scepticism and hostility (Brandt 1991:206-207).

In addition, the critique of science reveals a contradiction within medical use of lifestyle models. As discussed in section 2.2.1 lifestyle arguments rely heavily on cultural knowledges about right and wrong, clean and dirty, healthy and unhealthy. However, the use of statistics, risk factor jargon and the weighty scientific legitimacy of epidemiological research present lifestyle arguments as being ahistorical, objective and rational. Peterson and Lupton in particular express a deep distrust of a lifestyle approach precisely because it is widely represented as a value-free modern scientific solution to the long established problems of poor health and inequalities in health, when closer analysis shows it to be "at its core a moral enterprise, in that it involves prescriptions about how we should live our lives" (1996:xii).
2.3 Summarising sociological arguments about medical understandings of lifestyle

Sociology has considerable investment as a discipline in emphasising the importance of 'social factors' to health. If social factors are considered to be a medically legitimate way of understanding health and disease then sociological theorising and research about these issues increases in value, is likely to attract increased funding and the overall prestige of sociology is lifted through association (Strong 1984:340; Brandt 1991).

Furthermore, sociologists have contributed considerably to the development of epidemiological and public health explanations for disease and health which emphasise the role of lifestyle as a determinant. Classical sociology was among the first academic disciplines to demonstrate that health and disease are socially patterned and socially determined (Abel 1991; Cockerham et al. 1997). Since the 1970s sociological research and theorising about chronic illness, sexual behaviour, drug use, exercise and leisure, education and health and later, into HIV/AIDS have been used as a basis for many preventive health, health education and health promotion programs.

However, throughout the 1980s and 1990s medical sociologists became increasingly dissatisfied with the way that their research findings and theories about social factors and health were being interpreted and translated into epidemiological and health promotion lifestyle models. A widely stated sociological criticism is that medical scientists have produced a notion of lifestyle which is overly focused on individual behaviours and attributes and thus culturally and socially divorced (e.g. Fitzgerald 1994; Bunton et al. 1995). This reductive conception of lifestyle has reduced the ability of epidemiological and public health models of lifestyle health and disease to adequately account for the social patterning or determining of health and disease. It has also resulted in a medical approach to lifestyle which is a poor orientating framework for disease prevention, as can be seen in the poor outcomes of lifestyle focused health
promotion and health education (Bunton and Macdonald 1992; Charles and Walters 1994; Richmond 1997).

In addition, contemporary medical understandings of lifestyle, health and disease have attracted sociological interest and critique because these ideas about lifestyle have a range of important implications both for those who are being understood and those who are striving to understand. As a medical explanatory framework, lifestyle is heavily laden with cultural baggage.

The most frequently described of these cultural burdens are that lifestyle understandings are moralistic and discriminatory, that they increase the potential for medicalisation, medical surveillance and medical control, that they reflect, reinforce and reproduce contemporary concerns with the management and containment of risks, that they are associated with commodifying and commercialising of the body and health and that they are modernist and science based.

This critique has been widely accepted within the sociological literature. It sits easily in the canon of medical sociology/sociology of health and illness which has always had as a basis the critique (either implicit or explicit) of the institution of medicine, medical knowledge and practice (Strong 1984; Turner 1987; Brandt 1991; Pescosolido and Kronfeld 1995; Grbich 1999). Writers criticising a lifestyle approach as found in epidemiology or sections of public health have generally been better at suggesting that a lifestyle approach is a flawed explanatory framework than they have been at suggesting an alternative medical framework for explaining the social determinants of health and disease:

Their is the politics of critique; within their hermeneutics of suspicion, anything smelling of prescription is dangerous. The political point seems not so much what we should do - that question represents the old medical and
Despite this absence of clear directives about how current medical ideas about lifestyle could be changed for the better, there is an implicit claim underlying the critical sociological writings outlined in this chapter that sociologists is far better suited to explain and address the social determinants of health and disease than are those writing within medicine. The constant comparison made by the sociologists reviewed in this chapter, between medical understandings of lifestyle and sociological understandings where differences between the two are described as problems can be viewed as a disciplinary claim by sociologists. The underlying assumption seems to be that for medicine to fully explain the social, it needs to become more like sociology. As Strong (1979a) and Williams (2001) argue, medical sociology has a "vested interest in the diminution of the medical empire as currently constituted" (Williams 2001:135).

However, criticism of contemporary medical understandings of lifestyle is criticism of the social model of health and illness which social scientists themselves encouraged medicine to adopt in place of the biological reductionism of the medical model. The irony is that when medicine did adopt a social model of health and illness (lifestyle) this did not make medicine more sociological. Instead sociological arguments about the social determinants of health and illness became less sociological and more medical.

2.4 Areas of weakness in the sociological critique

Despite the considerable insights already achieved by sociologists writing about medicine and lifestyle, sociological knowledge about the ways that health and illness are being understood in terms of lifestyle remains limited. This limitation is an issue which requires to be addressed for two reasons. First, because of the importance of the issues addressed in the sociological critique of medical understandings of lifestyle. Secondly, because medical understandings of lifestyle are closely inter-twined with
important theoretical issues within the sociological fields of sociology of medicine/sociology of health and illness.

Inequality in health is a serious concern in countries like Australia where patterns of health and illness based on race, income and education are clearly marked (Davis and George 1990 :70; Germov 1997b:20). If, as argued in the sociological critique, medical attempts to account for these types of patterns in terms of lifestyle are doomed to fail whilst sentencing those people affected by ill-health to a situation where they hold themselves to blame and are blamed by others, then sociologists share with many others a responsibility not to ignore such problems.

Furthermore, the sociological critique of lifestyle as a medical explanatory framework either raises or links in with many of the major theoretical debates within sociology of health and illness/medical sociology. These include the debates outlined in chapter one regarding sociological characterisations of medicine, and also sociological debates about the assumptions underlying scientific and medical thought, the commodification and marketing of health, the role of government and medicine in the prevention of disease, risk, citizenship, and the relationship between lay and medical understandings of disease (e.g. Gaines and Hahn 1985; Lupton 1994a; Williams 2001). As such, medical understandings of lifestyle are theoretically important.

There are three areas of under-development in the sociological writing about medical understandings of lifestyle described earlier this chapter. The first of these is that the sociological critique tends to describe a unified and stable 'medicine'. This is problematic in light of the clear evidence outlined in chapter one that medicine contains considerable institutional diversity of opinion and practice. It is problematic because the heterogeneity/homogeneity of medical knowledge and practice is an ongoing debate within sociology and medical anthropology. Medical anthropologists in particular have produced convincing evidence which indicates that while medicine is characterised by
"a more of less coherent and self-consistent set of values and premises" (Gaines and Hahn 1985:10), the interpretation and application of these values and premises varies considerably between different medical fields, between different medical doctors and from one clinical episode to the next (Helman 1985a:293; Atkinson 1995).

The second of these problems is related to the first. Sociological writers criticising the ways that lifestyle is used within medicine as an explanatory framework have barely addressed the issue of how doctors construct and apply ideas about lifestyle. The third area of weakness is that the relationship between lay and medical knowledges about lifestyle has only been addressed from the perspective of lay understandings. Medical understandings of lifestyle have been seen as a stable entity which lay understandings either reflect, oppose or reproduce. Despite frequent sociological claims that medical understandings of lifestyle are in some way 'flawed' due to the inclusion of moralistic cultural values, none of the writers reviewed in this chapter have conducted or included in their discussions, research which explores how lay understandings of lifestyle inter-relate with medical understandings. Each of these three issues is complex and is addressed in more detail below.

2.4.1 Glossing over institutional diversity within medicine

Medical understandings of lifestyle have only been discussed in terms of epidemiology or public health. Both of these fields deal with issues of disease and health in populations not in individuals. Thus epidemiological models are unlikely to be suitable for clinical application on individual patients. Furthermore, within this narrowness of scope, sociologists have tended to take it for granted that the representations of a lifestyle approach they see in widely publicised health promotion campaigns or government policy documents are a reflection of a unified medical approach to lifestyle in relation to health and disease. They have rarely used empirical data from the fields of epidemiology or public health as a basis for their critique. In this sense even epidemiological and public health ideas about lifestyle have been taken for granted.
The differences between epidemiological and public health conceptions of lifestyle are rarely recognised. It is far more usual for these distinct fields to be conflated in sociological accounts (e.g. Hughes 1994; Lupton 1993; Bunton and Burrows 1995).

As such many sociologists seem to be assuming that the way lifestyle is conceptualised in epidemiology and public health is straightforward, coherent and predictable. They are also assuming that this understanding is representative of a generalised medical approach to lifestyle. As demonstrated in chapter one of this thesis, a review of epidemiological and public health literature reveals that conceptions of lifestyle vary between and within these fields.

While approaching medicine as a unified collective is integral to a critical sociological perspective which by its nature necessitates a concrete and stable object, it is also problematic in the context of sociological and anthropological debate about medical knowledge which raises the strong possibility that medical knowledge is not homogeneous or unified, but instead, should be understood as heterogeneous, contextual and fragmented (Helman 1979, 1981a, 1981b, 1985, 1987; Gordon 1988a; Gaines and Hahn 1985; Fox 1993; Atkinson 1995).

It is also problematic in the context of a long recognised medical differentiation between and within the fields of epidemiology, public health and mainstream medicine. Epidemiologists and medical doctors are trained differently. Epidemiologists are not necessarily trained medical doctors; they are equally likely to be specialists in the fields of population health, statistics, scientific research and demography. Many medical schools offer little or no epidemiology in their undergraduate courses. Most medical doctors are in a similar position with regard to interpreting complex epidemiological models as any well educated scientist. Public health is a para-medical discipline which although primarily biomedical in outlook is historically and practically distinct from mainstream medicine. Within the fields of epidemiology and public
health, lifestyle arguments are only some of the many different models of disease and health in use.

Furthermore, focusing on the fields of epidemiology and public health and criticising an abstract unified medicine has resulted in the understandings of individual doctors being taken as given. In the same way that the traditional sociological distinction between disease and illness left doctors' understandings unexplored by sociologists because they were assumed to be stable and objective, conflating medical understandings of lifestyle with representations of epidemiological or public health understandings serves to erase the possibility that medical understandings of lifestyle might be complex because they are assumed to be self evident. As argued by Strong (1979a:206) and Williams (2001:138), the various disciplines which make up medicine are not unified in their theories, their science or their methods. Thus sociologists should not take evidence from one part of medicine and use it to argue about the nature of medicine as a whole.

Focusing on epidemiology and public health has also resulted in lifestyle models being seen only as preventive models. If as Hughes (1994) and Peterson and Lupton (1996) consider, a lifestyle approach is becoming the predominant explanatory framework within medicine, then it seems probable that lifestyle understandings would not be limited in their application to preventive contexts. As established in chapter one, doctors are not only concerned with disease, but must also account for health and illness. In addition to disease prevention, medical practice involves data gathering, relationship generation, investigation, diagnosis, treatment of acute disorders and management of chronic ones (Gammon 1990:1).

Studies of disease prevention in medical practice indicate that prevention is only a small component of the work done by some doctors (e.g. hospital doctors or specialists) and that despite preventive rhetoric, general practitioners spend less time
on preventive activities than might be expected (Armstrong 1979:6-7, 1982; Helman 1981a, 1981b; Siegler 1981; Roland 1986; Williams and Boulton 1988). Thus, while lifestyle arguments might have originated in the context of the prevention of disease, as with other medical models of disease they are not bound to their original context and may well transcend it.

This issue, of how lifestyle understandings of health and disease are actually constructed, interpreted and applied by medical doctors, is an important one. How understandings of lifestyle are used by doctors (as an explanatory framework) to deal with 'real' illnesses is not addressed empirically in the sociological critique. The clinical application of a lifestyle perspective has been inferred, and only rarely investigated by sociologists. The almost total neglect within the sociological critique of empirical research investigating the ways that medical doctors construct, interpret and apply ideas about lifestyle to make sense of health and disease is a reflection of an ongoing sociological neglect of doctors as subjects for research (Hahn and Gaines 1985; Atkinson 1995:ix).32

Research into doctors has tended to focus on doctor/patient interaction, rather than the social construction of medical knowledge by doctors. In addition, research into doctors' explanatory models has focused mainly on general practitioners or medical students33 (e.g. Atkinson 1981, 1984, 1988; Broadhead 1983; Calnan 1984).

In writing about the many problems of a lifestyle approach many authors seem to have forgotten that medical attempts to make sense of the social aspects of ill-health will eventually be used to deal with the sickness or health of real bodies. Unlike sociology which deals with such issues at the second hand, doctors, nurses and public health

32 This lack of research on doctors is largely a reflection of widespread sociological acceptance of 'the medical model' and the disease/illness distinction and the related assumptions that medical knowledge is stable and homogeneous.
33 Two exceptions to this trend are Nick Fox's (1992) study of surgeons and anaesthetists and Paul Atkinson's (1995) study of haematology.
workers use their medical constructions of lifestyle (however flawed these may be from a sociological perspective) to deal with real bodies, real illness and real deaths:

For all that health is stylised in discursive politics, the health of bodies is real. How easily this baby of health can be thrown out in the bathwater of critique ... mortality rates represent real bodies who could have lived longer and with luck died more gentle deaths (Frank 1997:108).

Lifestyle focused health promotion, despite its many faults has been embraced by many social groups (for example women, the elderly and some ethnic communities) because they welcome the potential of community-based disease prevention to reduce inequalities of health and death (Taylor and Ford 1980; Foster 1995:129; Williams and Calnan 1996). For example, Oakley (1989:330) found that whilst large scale public health attempts to encourage women to stop smoking when pregnant are unsuccessful, small-scale community-based programs which offer women social and infrastructure support do result in a reduction in smoking and improved self esteem and social conditions for the women involved. Doctors may well consider that explaining disease and health in terms of lifestyle has benefits for them and their patients. While these may not outweigh the problematic nature of lifestyle explanations, they may serve to add a layer of complexity to medical understandings of lifestyle which has not been recognised in the sociological critique.

Studies of general practitioners aiming to identify which health issues are considered to be important do reflect a strong concern among practitioners with lifestyle issues (Combes 1998; General Practice Strategy Review Group 1998; Hawe et al. 1990). A survey of 86 general practitioners in Southern Tasmania found that lifestyle issues such as smoking, alcohol, weight and nutrition were considered to be the second most important health issue (23.2% of total) facing the community after mental health and psychosocial problems (25.6% of total). The related areas of unemployment (19.8 %),
cardiovascular health (15.1%) and preventive medicine (14.0%) were also considered by doctors to be important issues (STGDP 1999:22).

2.4.2 Research on doctors

While these studies have not been addressed by writers critiquing medical understandings of lifestyle, there are several studies which investigate doctors' understandings of lifestyle. However, in addition to being few in number, these studies are limited in scope because they maintain the focus on preventive health found in other sociological writing about lifestyle.

These studies have mainly investigated doctor/patient conversation about prevention. They have all focused on general practitioners. The various authors have for the purpose of specific articles focused on those aspects of the conversation which deal with lifestyle. Those focusing on either doctors' actual conversation about prevention during a consultation or their views on discussing prevention consultation about prevention include Coulter (1987) Boulton and Williams (1983, 1986), Tapper-Jones (1986), Tuckett et al. (1985), Williams et al. (1989) and Calnan and Williams (1995). Others such as Stott and Pill (1990) have focused on patients' opinions about prevention and health promotion during the consultation.

These authors produced mixed findings about the frequency with which doctors talked about lifestyle during a consultation. Boulton and Williams (1983) and Tuckett et al. (1985) found that prevention is not a dominant feature of doctor/patient consultations. However, others such as Tapper-Jones (1986), Stott and Pill (1990) and Johanson et al. (1994) argue that including discussion of prevention in the consultation is a growing trend and a reflection of the widespread acceptance of health promotion and health education throughout the community. Johanson et al. (1994) found that talking about lifestyle matters took up one-third of the total consultation time spent in doctor/patient dialogue. However, in this one-third the authors included time spent by
the doctors in listening and supporting patients while they spoke about a broad range
of issues including family, work and relationships. The majority of the time classified
by the authors as lifestyle discussion was spent talking in this way, rather than in
counselling patients to modify their lifestyles in specific ways to prevent specific

Johanson et al. (1998), in a study of 42 audio-recorded consultations (between general
practitioners and their patients in Sweden), made several interesting claims. First, they
found that when physicians talked about lifestyle to their patients they included a broad
range of topics, far broader than those usually addressed in health education
campaigns. Doctors asked about structural issues such as housing and work,
relationship issues relating to family, work and romantic relationships, issues related
to environmental toxins and advice related to individual measures such as alcohol,
smoking, diet and exercise (1998:105). Johanson et al. also found that while doctors
talked about lifestyle and prevention a great deal, they carefully avoided "making
explicit medical inferences about specific issues concerning the individual's lifestyle"
(1988:103). The authors suggest that by not sharing their detailed knowledge about
relationships between lifestyle issues and health, the doctors are depriving patients of
valuable opportunities to improve their own health (1998:110). In contrast, the doctors
they interviewed claimed that they avoided making specific associations between their
patients' lifestyles and their illnesses for fear of their patients' negative reactions to
such advice (1998:104).

Johanson et al. (1998) also found that doctors use discussion about lifestyle quite
differently than their patients during the conversation. Physicians use lifestyle
information in a relatively systematic way as a resource in clinical reasoning. Talking
to their patients about lifestyle issues helps doctors to decide which medical issues
might be pertinent for each particular patient. Patients on the other hand use lifestyle
advice to define their identity or to elicit certain medical treatments:
... physicians introduce and close lifestyle issues more frequently than patients. Moreover patients and physicians exploit lifestyle issues for different purposes. The patients talk about lifestyle primarily to articulate themselves as individuals, while physicians use lifestyle topics primarily as a resource to contextualise medical knowledge and in so doing they also construe prototypical patients (Johanson et al. 1998:104).

A study by Williams and Boulton (1988) offers a different perspective from the other studies done in this area because rather than focusing on doctor/patient consultations these authors analysed 34 interviews with General Practitioners in South-East England. In a structured interview doctors were asked about the concepts and the meanings the considered the term prevention to cover, "the kinds of opportunities that arose to practice prevention in their clinical work; how they saw their role in relation to other health professionals including physicians and what they regarded as the principal aims and objectives of preventive activity" (Williams and Boulton 1988:236).

This study comes closest to one which explores the construction of medical knowledge about lifestyle by doctors. However, it is still limited because, as with other studies of how doctors talk about lifestyle, these interviews were not specifically focused on doctors' constructions of lifestyle but on disease prevention in general practice. Doctors' understandings of lifestyle were addressed only as an aspect of their wider views on disease prevention.

The authors classified the doctors into four different groups on the basis of their attitudes towards prevention. "These groups differed on the basis of moral considerations, as well as their perceptions of medical knowledge and patients" (1988:236). These four categories are: (a) traditional clinical orientation, 32% of sample; (b) lifestyle and screening orientation, 27% of sample; (c) counselling orientation, 27% of sample; and (d) anticipatory care orientation, 15% of sample.
Doctors classified by the authors as having a traditional clinical orientation towards
disease prevention did not consider that prevention was a top priority in their work.
They were doubtful about the usefulness of social intervention into disease and
considered that medical evidence to support prevention was uncertain. The authors
deemed that these doctors' ideas about disease prevention were reductive because their
explanations about preventive health measures were "conceptualised solely in terms of
compliance in order to exercise firmer control over the management of disease and
patient" (1988:237). Health promotion was considered by these doctors to be 'boring'
and less interesting than other aspects of medicine and doctoring.

Doctors in this group said that they while they would address preventive issues such
as smoking cessation and weight loss when they considered these relevant to a
particular patient's current condition, they would not routinely introduce such issues
into the consultation. While doctors in this group did carry out limited health screening
exercises (for example routine blood pressure measurements), "few were willing to get
personally involved in more systematically organised forms of health promotion"
(1988:237). This was considered by the doctors to be the job of the practice's health
visitor or nurse.

Williams and Boulton suggest that these doctors who take a traditional view of their
role as doctor and disease prevention are reflecting a view of disease "as an
autonomous biological process which is only marginally influenced by social and
cultural factors" (1988:246). This perception of disease causation relegates disease to a
natural domain where neither the doctor nor the patient has control over the occurrence
of disease.

In contrast, doctors classified as having a lifestyle and screening orientation to
preventive health considered that the causes of many modern diseases are to be found
in the social realm. These doctors saw "[disease] prevention mainly as a form of
intervention on lifestyle and risk factors ... they had a clear idea of its aims, as promoting behaviour change in individual patients and encouraging greater self-care" (Williams and Boulton 1988:239). This group of doctors placed considerable emphasis on patient education, the importance of personal motivation in behaviour change and their own personal commitment to prevention. This included taking a 'moral stand' in the community and revealing their own habits to influence their patients.

Williams and Boulton describe this group of doctors as reflecting a consumerist model of health care (1988:246). Disease prevention was viewed as another service for their practice to offer. Along with "the rhetoric of prevention" these doctors had also taken on board policies of the Department of Health and Security and the Royal College of General Practitioners which emphasise rational organisation and teamwork as well as the suitability of general practice as a setting for preventive health measures (1988:246). These ideas were also conducive to perceptions of general practice as a small business and patients as clients who were purchasing a service.

Williams and Boulton consider that these doctors had a relatively simplistic view on methods of health promotion and their own role as doctors in this process. This is despite their commitment to disease prevention and an awareness of complex disease causation involving social elements. These doctors were only interested in the preventive issues which they defined as important and rarely considered other ways of improving the health of their patients (1988:240):

Unhealthy behaviour was deemed cultural in origin, but in a way that conceives of culture as 'personal baggage' inherited through family practices or acquired through peer group interactions. Thus encouraging greater personal responsibility for health was a key element of their thinking and reflected a view that much contemporary disease is largely self induced (Williams and Boulton 1988:247).
The third grouping of doctors, the counselling orientation, viewed prevention and health education as entailing "being responsive to the patient's presenting and ongoing problems, and being sensitive to the context in which they arose" (Williams and Boulton 1988:240). These doctors placed considerable emphasis on their patients' feelings about their health and their bodies. Their preventive work involved explaining preventive issues to their patients and helping them to deal with any existing health problems.

These doctors expressed scepticism about the usefulness of disease prevention at an individual level. This scepticism was given by the doctors as one of the major reasons why they did not spend much of their time carrying out screening and other such preventive activities, leaving the limited amount of such measures carried out in their practices to other members of their primary health care teams (e.g. health visitors and nurses) (1988:242).

Doctors classified into this group also expressed concern about the implications for their patients of preventive methods which stress long term risk, choosing instead to be responsive to the immediate concerns of their patients (1988:241). In this they were aware of and sympathetic to many of the criticisms of preventive health put forward by social scientists (1988:247). For example, a Dr. Sinclair wished to avoid projecting an authoritative view of how people should live their lives. He stated that "I would be very wary of giving "advice" - of thinking that I knew what the 'correct' advice is - because I'm not sure what the correct advice is".

Other doctors were also worried that health education and health promotion conveyed hidden messages which were not altogether desirable. By seeking to increase awareness of health and healthy living, some believed they could also create anxiety, dependence, and a restricted life (Williams and Boulton 1988:241). Associated with these concerns, several members of this group of doctors said that health promotion
and education was "essentially intrusive and moralistic" (1988:242). They believed this to be "at odds with the GP's role as morally neutral and technically specific" (1988:242).

The final grouping of doctors was classified by the authors as having an anticipatory care orientation. Williams and Boulton considered that these doctors were characterised by their endeavour to take a broad and institutional role in disease prevention. Nevertheless, these doctors are also characterised by an approach to disease prevention which emphasises individual responsibility for health:

They saw prevention and health education as relevant to all aspects of presenting and continuing problems, and also as a new service they could offer in identifying risks and discussing the effects of individual lifestyles. They related this to recent developments in approaches to teaching trainee GPs ... and the way they thought general practice should develop. For them, the main aim was one of improving patients' health knowledge and understanding ... (Williams and Boulton 1988:243).

Doctors in this group viewed patients' ideas about health and their access to medical information about health as being very important. They considered that patients' increased knowledge about their own health was a gain whether or not this resulted in any measurable behavioural changes. These doctors had a great deal of faith in the usefulness and validity of medical knowledge and its superiority to other types of knowledge about disease and health:

They had few reservations about the evidence for linking health behaviour with major disease and expressed confidence in the growing ability of medical science to predict and influence the course of disease (Williams and Boulton 1988:247).

Anticipatory care doctors stressed the importance of organisational level developments to facilitate systematic disease prevention measures (1988: 243-244). Because of this,
Williams and Boulton consider that this group of doctors may simply hold a more sophisticated version of the 'lifestylist's' approach (1988:247).

In their discussion of research findings, Williams and Boulton (1988) suggest that the lack of conclusive research about the causes of major diseases has left the field of preventive health open to many different interpretations and that their research illustrates this diversity. While they make several qualifications about the widespread generalisability of their research, they suggest that the different orientations towards disease prevention which they identified (with the implications of these for assumptions about disease etiology), "illustrate that general practitioners' concepts of prevention and their views of their role in carrying it out are far from a simple replication of the current medical model" (Williams and Boulton 1988:245). Instead, doctors are influenced by the range of different views of disease causation and disease prevention expressed by interest groups in wider society (1988:246):

Just as lay people's perceptions of prevention do not wholly conform to dominant societal models and often show active dissent from them, so do practitioners draw upon a range of knowledge, personal and professional values, and clinical experience.... The presence of several dissenting voices from the currently dominant risk factor and surveillance approach provides encouraging evidence for those fearful of an uncritical adoption by general practitioners of a highly organic reductionist view of prevention (Williams and Boulton 1988:249).

In addition, Williams and Boulton (1988) found considerable variation between individual clinicians. They concluded that while the models of disease held by individual medical practitioners may initially appear to be the same, they may in fact be linked to "quite different contexts of personal significance leading to differences in the interpretations placed upon them" (Williams and Boulton 1988:235). Individual medical practitioners interpret theoretical models of disease in terms of their own personal meaning systems and life histories (1988:235).
These findings lead to the next important issue related to medical understandings of lifestyle which has been neglected in the sociological critique. How do medical understandings of lifestyle relate to non-medical (lay) understandings of lifestyle?

2.4.3 Inter-relationship between medical and lay understandings of lifestyle

In the sociological literature it has been usual for writers to consider lay and medical understandings to be quite distinct. Patients have been described as having folk illnesses and explanatory models while doctors deal with disease entities and medical facts (Prior et al. 2000:815-816). However, empirical research has blurred this distinction by demonstrating that doctors also construct their own explanatory models to make sense of situations and that these models utilise folk, commonsense and personal knowledges in addition to specialised scientific medical knowledges (e.g. Helman 1981a, 1981b, 1988; Gaines and Hahn 1985).

This flexible way of thinking about medical and lay knowledge has not been reflected in the sociological writing about lifestyle where lay and medical understandings of lifestyle have been treated as entirely distinct and separate knowledges34 (e.g. Blaxter 1990; Pierret 1993; Backett and Davison 1995). Lay understandings of lifestyle have been represented as being folk or commonsense understandings of health and illness (Pill 1991; Popay et al. 1998), or as being developed in conjunction with, in reaction to, or in opposition to medical understandings (e.g. Blaxter 1997; Smith 1998). Medical understandings have generally been treated as being stable, easily identifiable as 'medical' and as a point of reference to which lay understandings can be compared (e.g. Davison et al. 1991, 1992; Frankel et al. 1991).

34The exception to this pattern is when authors such as Hughes (1994) or Lupton (1993, 1994a) highlight the sociocultural assumptions underlying medical knowledge about lifestyle. However, when such authors make this claim they tend to frame it as a criticism because they are arguing that medical understandings of lifestyle are fundamentally moralistic.
The sociological distinction between lay and medical knowledge perpetuated in sociological writing about lifestyle has excluded doctors from the processes of lay knowledge construction about lifestyle. This is a naive perspective to take in light of long standing anthropological arguments about the interplay between lay and medical knowledges (Good and Good 1980; Helman 1985a, 1985b; Good 1994; Atkinson 1995). Doctors are not isolated entities; they are community members and as such are not excluded from lay processes of knowledge construction.

This exclusion of doctors from processes of lay knowing is one of the weaker aspects of the sociological concept of lay/popular epidemiology (Davison et al. 1991, 1992; Brown 1992; Whittaker 1995). The argument that lay people practise their own form of epidemiology whereby they "gather scientific data and other information, and also direct and marshal the knowledge of experts in order to understand the epidemiology of disease" (Brown 1992:269), was first discussed in this thesis in chapter one in the section on lay perceptions of lifestyle. The concept of lay epidemiology has been very useful because it elevates lay attempts to make sense of the determinants of disease and thus overcomes the tendency to treat such lay knowledges as being less valuable than medical and/or scientific attempts. It has the additional benefit of highlighting the political nature of lay understandings of disease, in particular the ways in which these understanding may be transformed into various forms of lay resistance to the medical paradigm (e.g. Davison et al. 1991; Frankel et al. 1991; Whittaker 1995) or political activism related to issues such as contaminated food stuffs or water, radiation exposure or asbestos exposure (Brown 1992:269).

However, it is also problematic in relation to the interpretation and application of epidemiological models of disease. These are highly specialised and esoteric. As

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35 Freund and McGuire argue that although medical practice is based on scientific knowledge most doctors are not medical scientists. The only "portion of medical knowledge relevant to doctors is that which relates to conditions they are most likely to encounter in clinical practice" (1991:205). Thus doctors rely heavily on "recipe knowledge" or "knowledge limited to pragmatic competence in routine performance" (Berger and Luckmann 1967:42).
noted earlier, without epidemiological training most doctors are unlikely to have the statistical knowledge to fully understand epidemiological models of risk and lifestyle. Willis (1998:178) describes the way that in speciality fields, doctors often rely on academically trained and orientated specialists to interpret studies:

... in the speciality fields, the social relations of the increasingly sophisticated medical technologies such as randomised control trials, increasingly concentrates power in the hands of academic, salaried specialists backed up by technicians of one sort or the other (including biostatisticians) and away from specialists [and general practitioners] engaged in private practice who rely on the academically orientated specialists and technicians to interpret the meanings of the studies involved (Willis 1988:175).

In this situation it is possible that many doctors should not be considered as scientific experts in the field of epidemiology and population health. Instead, they are in a similar situation to well educated non-medical people who utilise understandings of lifestyle and interpretations of epidemiological models of risk in particular which they have acquired from other sources. These sources, such as health promotion material, practitioner education in disease prevention and the popular press are not strictly 'medical' knowledges.

The assumption that medical understandings of lifestyle are predictable and distinct from lay understandings of lifestyle is also ironic in the light of continued sociological comments that medical understandings of lifestyle are moralistic and discriminatory precisely because they reflect and reproduce so many sociocultural notions (Crawford 1978, 1980; Hughes 1994; Vertinsky 1998; Williams 1998). If doctors' understandings of lifestyle are not assumed to be restricted to epidemiological and public health understandings but might also include lay notions of lifestyle, then medical understandings of lifestyle are likely to be far more complex and multi-faceted than has previously been supposed in the sociological literature. They may also be quite different from sociological characterisations of medical understandings of
lifestyle. For example, Lupton (1993), Hughes (1994) and Peterson (1996) have all pointed to the moralistic nature of medical understandings of lifestyle. Studies of lay understandings of lifestyle show that lay people reject the aspects of public health lifestyle explanations which imply that individuals are responsible for their illness. Instead they accept the argument that a 'healthy' lifestyle results in good health and explain poor health in terms of bad luck, chance or individual susceptibility (Davison et al. 1991, 1992). If doctors integrate lay conceptions of lifestyle when they construct their own understandings this may include a reluctance to explain disease in terms of lifestyle in a moralistic fashion.

Lifestyle focused explanatory frameworks have been shown to include considerable sociocultural assumptions into their nosology (Foster and Anderson 1978; Hughes 1994; Peterson and Lupton 1996). They are very open to the inclusion of folk and commonsense knowledges because they refer to everyday practices and behaviours, utilise everyday language and terms and have been highly popularised through health promotion campaigns. Because of this, they are a perfect site within medical knowledge to explore the relationship between lay and medical knowledge. Writers such as Hughes (1994) and Peterson and Lupton (1996) have recognised this, however they have perceived this feature of lifestyle explanatory models as a weakness and a problem\(^{36}\) because it results in a moralistic and discriminatory model of disease being used when there are other models of disease available which are less influenced by sociocultural values. In this thesis I take a different approach which is inspired by sociologists who write about the construction of medical knowledge (e.g. Atkinson 1981; 1988; Gabbay 1982; Koenig 1988; Kaufert 1988). From this perspective, exploring medical understandings of lifestyle is an exciting opportunity to learn more

\(^{36}\) I consider that the approach taken by Hughes (1994) and Peterson and Lupton (1996) (and others who write in a similar fashion) has produced very valuable and sociologically important research. However, any sociological issue benefits from exploration from a multitude of different perspectives. Any sociological perspective acts as a filter, focusing the gaze on certain aspects of a problem and masking others. If only one perception is ever used then it can act not as a filter but as blinkers. When research from different perspectives is available, sociological understanding of the issue is increased.
about the processes whereby medical doctors accomplish the construction and utilisation of a dynamic and changeable 'knowledge in practice'.

2.5 Conclusion

Sociologists writing about the way that lifestyle is conceived and applied within medicine have argued (either implicitly or explicitly), that medical understandings of lifestyle are less useful, less sophisticated and less 'truthful' than sociological understandings of lifestyle. Such writers have drawn attention to problems with epidemiological research and with health promotion programs designed to produce lifestyle change for the purpose of disease prevention. They have also drawn attention to the assumptions underlying medical understandings of lifestyle and described the negative implications of these. For example, they have argued that the way medicine explains disease and health in terms of lifestyle is reductive, universalistic, individualistic, moralistic, discriminatory, commodifies bodies and health, and through an emphasis on statistical risk is a modernist science based approach which fails to comprehend the complex social, cultural and emotional components of health and illness.

This sociological critique of lifestyle as a medical explanatory framework has drawn attention to many of the limitations inherent to lifestyle focused explanatory frameworks. However, it is also underdeveloped and narrow in focus. Unlike the sociological characterisation, lifestyle as understood in medicine is not a clear and unitary concept. It has varied over time, between lay and medical perspectives and within medicine it also appears to vary between and within epidemiology and public health (as shown in chapter one). Sociological writing on lifestyle has failed to account for these issues. Furthermore, individual doctors will vary in how they construct their understandings of lifestyle and the inter-relationship between lay and medical understandings of lifestyle adds further complexity to any sociological claims about the nature of medical understandings of lifestyle.
In this thesis I address the three main weaknesses in sociological writing about how lifestyle is understood in medicine. These weaknesses are: a neglect of medical fields outside of epidemiology and public health (and a conflation of epidemiology and public health); a neglect of the ways that doctors are understanding and applying conceptions of lifestyle; an overly narrow focus whereby the way that medical understandings of lifestyle are used by lay people has been explored but the ways that medical people might be using lay understandings of lifestyle has been neglected.

Addressing these weaknesses is a sociologically important task. In addition to the integral value of research which contributes to sociological knowledge about health and illness, medical understandings of lifestyle also relate to wider theoretical concerns within sociology. These include debates about the nature of medical knowledge about disease, the relationship between formal medical knowledge and medical practice, the inter-relationship between lay and expert knowledges, the commodification and marketing of health, the role of government and medicine in the prevention of disease and the maintenance and fostering of health, and the increasing societal importance of risk. The next chapter (chapter three) describes the methodology and methods used to address the weaknesses through empirical research.
Chapter Three
Methodology and Research Methods

3.0 Introduction

The preceding chapter established that medical explanatory models which emphasise lifestyle are of sociological importance (Abel 1991; Dean et al. 1995; Armstrong 1995; Forde 1998). However, sociological knowledge about lifestyle as a medical explanatory framework remains partial and under-developed because it lacks empirical evidence related to the ways that lifestyle is understood in medical fields other than epidemiology and public health, to how doctors construct, interpret and apply ideas about lifestyle to make sense of health, illness and disease and to how medical understandings of lifestyle utilise lay understandings of lifestyle.

To address these three areas of under-development this thesis investigates medical understandings of lifestyle empirically using a qualitative 'multimethod' study (Morgan 1997). The methods used were a thematic textual review of medical and lay texts, twenty in-depth interviews with doctors, observation of fifty-two doctor/patient consultations with a single general practitioner and the participant observation of eight doctor/patient consultations. These data were analysed using an iterative process which utilised coding for the purpose of theory generation (Miles and Huberman 1994).

The use of multiple methods of data and a complex iterative analysis are the defining characteristics and strengths of this research. The use of methods 'triangulation'37 "overcomes some of the limitations of each method and permits a comparison" of findings (Rice and Ezzy 1999:89). Furthermore, each method provides a different perspective on the phenomenon being studied and thus facilitates a complex and descriptively 'rich' interpretation (Morgan 1997:3).

37Triangulation is a term used to refer to the combination of methods. This project utilises data source triangulation, methods triangulation and theory triangulation (Denzin 1970:298; Flick 1992).
In this research the thematic analysis provided formalised written medical and lay accounts of lifestyle. These had the advantage of being stable and of being written across a thirty-year time period, thus providing an overview of medical and lay understanding from the 1970s (early epidemiological research into lifestyle basis of cardiovascular disease) to the late 1990s. The interviews provided information about the subjective meanings of lifestyle for doctors and their interpretations of these (Denzin and Lincoln 1994; Rice and Ezzy 1999). They also allowed for comparisons to be made between individual doctors and different types of doctors. The observation of doctor/patient consultations allowed me to explore the ways that a single doctor applied his understandings of lifestyle when talking with his patients. The participant observation of doctor/patient consultations allowed me to include in the analysis, the experience of how it feels as a patient when doctors talk about lifestyle during a consultation.

This collection of research data and the analysis of these data was guided by the following research questions:

**How is lifestyle being conceptualised in different medical fields?**

**How are individual doctors understanding lifestyle?**

**How are lay and medical conceptions of lifestyle inter-relating in medical understandings of lifestyle?**

Within the parameters of these research questions, particular attention was focused on the ways that:
• Ideas about lifestyle are being constructed and applied in medical fields other than epidemiology or public health;
• Doctors might be using similar ideas about lifestyle to lay people or constructing their understandings of lifestyle through similar processes to lay people;
• The constructions' of individual doctors from different areas of medicine might differ or be similar;
• Doctors are applying their understandings of lifestyle in doctor/patient consultations;
• Doctors understandings of lifestyle as found in interviews or doctor/patient consultations might be similar or different to medical and lay ideas about lifestyle identified in medical and lay texts;
• Doctors use ideas about lifestyle to explain issues other than those generally associated with a lifestyle approach (ie disease prevention and lifestyle 'risk' factors associated with chronic diseases associated with aging and Western civilisation);
• A lifestyle approach has strengths and the limitations for doctors.

3.1 Methodological framework
The methodology for this project draws upon the interpretive traditions within qualitative research (grounded theory, phenomenology and postmodern ethnography) within a constructionist paradigm (e.g. Holstein and Gubrium 1997; Pollner 1987; Atkinson 1981, 1988; Rawlings 1981; Loseke 1986). Because the aim of this research was to explore medical understandings of lifestyle using empirical data that is rich in detail and embedded in context, an interpretive qualitative inquiry was the most suitable methodological framework. Such data can best be acquired through qualitative methods and explored using interpretive methods of qualitative analysis.38

38 Quantitative and qualitative research projects are not necessarily in opposition since qualitative research may well open up space for further quantitative research and vice versa. In the case of this research project a quantitative analogue might well focus on a comparison between doctors' use of concepts relating to lifestyle and the study of lifestyle determinants in epidemiology. Such a project would primarily attempt to locate and diagnose inaccuracy in doctors accounts when compared with currently accepted epidemiological 'facts' about lifestyle.
From controversial beginnings constructionism is now a widely used paradigm among sociologists investigating medicine, health and illness (e.g. Casper and Berg 1995; Launer 1996, 1999; Emslie et al. 2001; Rutowski et al. 2001). As a methodological paradigm, constructionism has limitations (Bury 1986, 1987; Turner 1998:109). These limitations range in scope according to how constructionism is defined. Some critics claim that taken to its logical conclusion the relativism of constructionism leads to a complete breakdown of the sociological project as the documentation of the social world empirically can only be viewed as a "realist fantasy" (Manning 1998:159). Others point to a tendency for constructionist writers to produce detailed accounts of the empirical world which neglect wider sociological issues such as class, gender and power (Burr 1998:25).

Despite such criticisms, social constructionism has been a fruitful methodological paradigm within medical sociology/sociology of health and illness (Nettleton 1995:21; Nicolson and McLaughlin 1987; Guba 1990). A constructionist approach expands the realm of sociological investigation to include what might previously have been considered 'natural' and thus outside of the realm of sociological concern. Because a constructionist approach "does not assume the objective existence of what medicine categorizes as disease" (Freund and McGuire 1991:204), medical knowledges about disease (including explanatory frameworks such as that provided by a lifestyle approach) are viewed as the result of human activity. Thus "bound by the assumptions implicit in language and a culture's rules for producing knowledge" (Freund and McGuire 1991:204):

39 A constructionist approach to knowledge also recognises that sociological ideas are also influenced by "social processes and historical developments" (Freund and McGuire 1991:204). This disciplinary reflexivity also requires an awareness that the sociological gaze focused on medicine is not a neutral gaze (Atkinson 1995:21).

40 Wright and Trescher (1982:14) remind the reader that when medical knowledge is understood as a social product this does not imply that it is somehow "unreal or spurious; still less that the activities of doctors are bogus or that disease is imaginary. Illnesses really do exist, but as sufferings which have no necessary, transhistorical, universal shape".
... biomedical knowledge and practices are eminently and irreducibly social and cultural. ... [medicine] evolves through social choices rather than natural inevitability (Gordon 1988a:20).

This research is concerned not with how ideas about lifestyle should be used by doctors but rather with describing and interpreting the ways that medical doctors are constructing accounts of disease, health, and illness which utilise ideas about lifestyle. A constructionist perspective with a particular focus on the interpretation of human action and thought (Schutz and Luckman 1974:3) is ideal for this because such an approach allows doctors' understandings of lifestyle to be viewed as social constructions, formed within a particular social setting (Denzin and Lincoln 1995:27). This is in contrast to a positivist approach where scientific medical knowledge about lifestyle would be seen as a reflection of an objective reality.

Social constructionism is a widely used paradigm among writers who research the construction of medical knowledge by doctors and the ways that doctors explain and account for the order of their everyday lives (e.g. Kuhn 1970; Fleck 1979; Atkinson 1981, 1988, 1995; Prior 1985; Arksey 1994). Such research investigates how, if medical "facts" are not stable realities, ideas about them are created (Nettleton 1995:21). This research project takes such an approach to medical understandings of lifestyle. These understandings are assumed to be created through language and practice, that is, through discourse (Wright and Treacher 1982b:7; Prior 1989:3): 41

Medical knowledge appears from this standpoint, not as a hypostatised object, but as a product of the social practice in which it is rooted and from which it sustains itself. Knowledge is always knowledge-in-use. That is not to say, of course, that medical knowledge is really just generalised practice, nor yet a reflection of it. Formality and abstractness are the hall-marks of real knowledge in our epoch and are stamped on all its forms; it is that abstractness which endows the knowledge with prestige and autonomy.

41 Discourse involves words and ideas, but also "social relationships and institutions" (Wright and Treacher 1982:7).
Medicine is no exception, and is shaped to a considerable extent by its own internal technical forces. But instead of taking the autonomy of medical knowledge either as a given or as unreal ... knowledge such as, for example, the reified category of disease entity needs to be placed in parentheses whilst an attempt is made to reveal the real, concrete human processes out of which it has been crystallised (Wright and Treacher 1982b:13).

Furthermore, because constructionism allows for many socially constructed realities, the differing accounts of lifestyle, health and disease, constructed by doctors, or identified in medical or lay texts can be seen as knowledges about lifestyle which are interesting and important in their own right whether or not they correspond with accepted medical 'facts' about lifestyle and disease.

A constructionist perspective is also ideally suited for this thesis because such an approach emphasises "the work that goes into the social production of medical knowledge" (Atkinson 1995:ix). For doctors, the process of explaining health and disease involves work; it doesn't 'just happen'. This work includes the day to day routines of clinical practice (meetings, consultations, peer interaction, hospital rounds), actively 'keeping up' with medical research and policies through journals, newsletters, the internet and practitioner training sessions.

As a constructionist paradigm has been chosen because of its usefulness for this particular project I am approaching social constructionism as a procedural constructionist, rather that as a committed reflexive social constructionist (Manning 1998:167). By this I mean that I am committed to a social constructionist paradigm because of its ability to highlight how interpretation is itself part of any activity being highlighted (Manning 1998:159). While I accept as valuable the reflexive constructionist warning that I need to be sensitive to the assumptions upon which my interpretive analysis is founded, I am not engaged in uncompromising relativism, nor
is my thesis marked by the self-conscious literary presentation methods which characterise some social constructionist writings:

We do not subscribe to the vulgar and extreme version of constructivism that implies there is nothing reverential about research because there is no reality independent of our constructions of it. Our knowledge is the outcome, we believe of transactions with the social world, shaped by our methods of inquiry and transactions with the data we produce, shaped in turn by our ideas and our analytic procedures (Coffey and Atkinson 1996:15).

The constructionist approach to investigating medical knowledge and practice outlined by Wright and Treacher (1982b:9-11) serves as a clear description of the constructionist stance taken in this thesis. The summary of approach is outlined below:

- Constructionism has developed in opposition to the traditional sociological approach to medicine which accepts medical knowledge as a given fact rather than as a subjective and situated version of reality (Wright and Treacher 1982b:9).
- Constructionism takes as problematic any issues to do with medicine which have previously been considered uninteresting and self-evident, for example the structure and content of medical knowledge (including medical understanding of disease). This includes inquiring into the ways that "certain areas of human life come - or cease to be regarded as 'medical' in particular historical circumstances" and investigating the means by which "the established boundary between medical and non-medical is maintained" (1982b:9).
- From a constructionist perspective a researcher refuses to "regard medicine and technical medical knowledge as pre-given entities, separate from all other human activities" (1982:10). "No longer is there to be any question of restricting the use of social factors to explaining the occasions when internal factors seem insufficient. In [this] approach everything in medicine, however seemingly technical or recondite, is regarded as social" (1982b:10).
3.1.1 Grounded theory

While constructionism is the orientating paradigm for this research, I have also drawn heavily on the methodological tradition provided by grounded theory. Grounded theory is an approach which originated in 1967 with Glaser and Strauss. Since that time, grounded theory has been adapted and refined by many other researchers (e.g. Charmaz 1983; 1990; Corbin and Strauss 1990; Glaser 1978; Martin and Turner 1986; Dey 1999). While there is ongoing debate about what actually is meant by 'grounded theory', I have summarised my own interpretation of the key tenets of grounded theory based closely on Dey (1999) and Strauss and Corbin (1994,1998). This is outlined below:

- Generating or discovering theory derived from data acquired through fieldwork interviews, observations and documents. "Theories are interpretations made from given perspectives as adopted or researched by researchers" (Strauss and Corbin 1994:171). Theory "consists of plausible relationships proposed among concepts and sets of concepts ... [it] is conceptually dense - that is, it deals with many conceptual relationships" (Strauss and Corbin 1994:278)

- Setting aside (at least initially) theoretical ideas such as those acquired by reading other research and sociological theory to allow a substantive theory to emerge from the data. Thus "theories are always traceable to that data that gave rise to them ... in which the analyst is also a crucially significant interactant" (Strauss and Corbin 1994:278-279).

- Focusing on individuals and the way they interact in relation to the phenomena under study. In grounded theory the voices of research participants should be central (Dey 1993:1). This implies a focus on the micro level such as the stories,

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42 While I am aware of the acrimony between Glaser and Strauss and the considerable debate among 'grounded theorists' about how grounded theory should be described and performed I have followed a 'middle path' in this thesis choosing to make use of the attractive aspect of grounded theory from a number of different writers without aligning myself with any particular school of thought.
narratives and other strategies that participants have used to achieve meaning. However, many researchers have broken away from a "primary focus on micro phenomena" to also address "historical matters of macro structure as a means of enriching research" (Layder 1993:68).

- Systematic data analysis which begins with the initial collection of data and involves identifying categories and connecting them. The process of 'coding' is a key feature of grounded theory. This process involves 'open coding,' 'axial coding' and 'selective coding' (Dey 1999:259). Also associated with the analysis is the presentation of information about the process of analysis in the written report of the research. The 'transparency' achieved allows for comparison and verification. "Those who use grounded theory accept responsibility for their interpretive roles. They do not believe it sufficient merely to report or give voice to the viewpoints of the people, groups or organisations being studied. Researchers assume the further responsibility of interpreting what is observed, heard or read" (Strauss and Corbin 1994:160).

- Reporting the resulting theory in a narrative framework as a set of propositions. This framework usually involves the use of excerpts from the interview transcripts (or other types of data) presented in an embedded manner with the researchers' interpretations (Dey 1999:2).

Thus it can be seen that a grounded theory approach is primarily an interpretive approach where that interpretation includes "the perspectives and voices of the people [being studied]" (Strauss and Corbin 1994:160).

A constructionist paradigm and grounded theory are not necessarily compatible approaches. Authors such as Charmaz (1990:1164) and Keddy et al. (1996:450) have highlighted the inconsistency in grounded theory whereby claims are made of being
phenomenological (subjectivist) whilst the methods associated with grounded theory (namely systematic analysis, comparison and verifiability) are closely aligned with the positivist methods of quantitative research. Denzin and Lincoln (199:xviii) suggest that grounded theory is entrenched within the "modernist, postpositivist tradition" because it provides researchers with a set of 'rules' which are closely aligned with 'good science':

Glaser and Strauss in an effort to make themselves clear to quantitative methodologists, use the language of positivism: variables, hypotheses, properties, theoretical sampling, theoretical ordering and so on. It is often this discourse that causes frustration for the qualitative researcher (Keddy et al. 1996:450).

In consideration of this issue and in response to my experience of the processes of 'doing' analysis during the project where I found the rigid system of 'coding' outlined in grounded theory prescriptive and inhibiting, I have selected several features of grounded theory which were compatible with my research aims and abandoned the rest of the grounded theory approach. The sum of these features has produced a conventional constructionist interpretive approach to interview, observation and textual data which while imbued by grounded theory is also closely aligned with other interpretive approaches outlined by researchers such as Gubrium and Holstein (1997) and Denzin and Lincoln (1998).

3.1.2 Features of this methodology

The first of these features is the intent to develop theory from the data (Layder 1993:20). This does not imply that I am not interested in comparing my analysis with the sociological literature. After theory generation has been truly grounded in the data I elaborate on this level of grounded understanding by considering it in relation to various sociological positions. Grounded theory is an iterative approach which encourages the examination of other theories to illuminate data:
... theory may be generated initially from the data, or, if existing theories seem appropriate to the areas of investigation, then these may be elaborated and modified as incoming data are meticulously played against them (Strauss and Corbin 1994:273).

The second feature of the methodology is my utilisation of the types of research methods associated with grounded theory (these methods are also associated with many other qualitative traditions), namely in-depth interviewing, observation and textual analysis. All of these methods allow a researcher to "examine how human beings construct and give meaning to their actions" (Denzin and Lincoln 1994:xvii). That is, I have chosen to pursue my interpretive role through sociological methods marked by a "detailed empirical accounting of the social world" (Manning 1998:159).

The third feature of this methodology is a recognition that data will not be easily interpreted but instead "multiple perspectives must be sought during the research inquiry" (Strauss and Corbin 1994:80). "Troublesome uncertainties, anomalies, irregularities and inconsistencies" are accepted as inevitable during fieldwork, analysis and writing up (Gubrium and Holstein 1997:13). In a grounded theory approach these are to be expected and are not hidden or masked.

The fourth feature is my explicit acknowledgment of the role of the researcher in the research process. This includes the interaction between researcher, data, analysis and theory. It also refers to the place of the researcher (myself) in the written presentation of the research. I have written in first person during sections of this thesis, particularly in the methods chapter and the chapter presenting interview material. Acknowledging the place of the researcher and the subjective experiences of the researcher are also important themes in other constructionist paradigms which have been influential for this thesis. These include feminist and postmodern traditions of social inquiry (e.g. Foster 1994; Alcoff 1991; du Bois 1983). Authors writing from these theoretical
positions assume that "our accounts of the world can only be constructions, made up from the language, meanings and ideas historically available to us ... the old distant voice of the objective observer/writer is seen as fiction, and as a mechanism of power" (Jones 1992:18):

The significance of process in qualitative analysis is also exemplified in interactive methods through which data is often produced. Data collection can itself be conceived as an interactive process through which the researcher struggles to elicit meaningful interpretations of social action (Dey 1999:37).

The fifth feature is the utilisation of a form of analysis based loosely around 'coding'. Unlike 'pure' grounded theory, I have not followed the step-by-step processes of open coding, axial coding and selective coding (e.g. Dey 1999; Strauss and Corbin 1990). I have avoided the application of pre-established rules, choosing, instead, to be guided by a willingness to adapt and change my methods and procedures of analysis (Rubin and Rubin 1995:44; Seidman 1998:107-110; Dey 1993:58).

Finally, I have adopted the usual forms of presentation associated with grounded theory. I have presented my research findings in a narrative format which relies heavily on extensive excerpts from interview transcripts and commentary from fieldwork diaries organised in terms of the theory which developed through the analysis. The inclusion of extensive sequences of data in the research serves to improve the interpretive rigour of the research by "providing the reader with a clearer sense of the evidence on which the analysis is based" (Rice and Ezzy 1999:37). The use of extensive sections from the transcripts is also a deliberate strategy because it allows for the preservation of the form of the talk and the interaction between me and the doctor being interviewed (Atkinson 1995:viii).
3.2 Data collection methods

In this research project I used four different formal methods to gather data relating to medical understandings of lifestyle. The four formal methods used were in-depth interviews, observation of doctor/patient consultations, participant observation of doctor/patient consultations and a thematic review of medical and lay texts. Each of these methods were approved by the University of Tasmania's ethics committee and the research was carried out with great respect for confidentiality and privacy.

The use of several different types of qualitative data in the same research project is a widely used practice within qualitative research (Mason 1996:149). Given my desire to gain an in-depth understanding of how lifestyle is being understood within medicine the use of several different methods of data collection serves to add complexity and richness to my interpretations (Jackson 1989; Clough 1992; Denzin and Lincoln 1994:1-7). Combining different types of qualitative data also has the advantage of allowing comparison between different types of data. Triangulation "allows the researcher to develop a complex picture on the phenomenon being studied, which might otherwise be unavailable if only one method were utilised" (Rice and Ezzy 1999:38). Interpretive rigour can also be enhanced through "triangulation of data sources, methods, researcher and theories" (Rice and Ezzy 1999:35).

3.2.1 Interviews

This is a thesis primarily concerned with the meanings given to the term lifestyle by doctors and how they use their ideas about lifestyle to make sense of disease, health and illness. As such, I am interested in their "subjective understanding" (Schutz 1967). In-depth interviewing is widely accepted as one of the most useful research methods for acquiring this type of information (Seidman 1998:5):

At the root of in-depth interviewing is an interest in understanding the experiences of other people and the meaning they make of that experience. ...
Interviewing allows us to put behaviour in context and provides access to understanding (Seidman 1998:3-4).

Twenty medical doctors from a range of different medical fields were interviewed during this research. See Figure 3.0.

Figure 3.0 Interview subjects and their general characteristics

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Age</th>
<th>Sex</th>
<th>Type of Doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr A</td>
<td>45</td>
<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr B</td>
<td>46</td>
<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr C</td>
<td>42</td>
<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr D</td>
<td>35</td>
<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr E</td>
<td>67</td>
<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr F</td>
<td>24</td>
<td>F</td>
<td>Resident</td>
</tr>
<tr>
<td>Dr G</td>
<td>26</td>
<td>F</td>
<td>Resident</td>
</tr>
<tr>
<td>Dr H</td>
<td>46</td>
<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr I</td>
<td>49</td>
<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr J</td>
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<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr K</td>
<td>47</td>
<td>F</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr L</td>
<td>38</td>
<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr M</td>
<td>57</td>
<td>M</td>
<td>Obstetrician/Gynae</td>
</tr>
<tr>
<td>Dr N</td>
<td>41</td>
<td>M</td>
<td>Epidemiologist</td>
</tr>
<tr>
<td>Dr O</td>
<td>42</td>
<td>F</td>
<td>Oncologist</td>
</tr>
<tr>
<td>Dr P</td>
<td>57</td>
<td>M</td>
<td>Oncologist</td>
</tr>
<tr>
<td>Dr R</td>
<td>43</td>
<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr S</td>
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<td>M</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>Dr T</td>
<td>40</td>
<td>F</td>
<td>Dermatologist</td>
</tr>
<tr>
<td>Dr U</td>
<td>57</td>
<td>M</td>
<td>Haematologist</td>
</tr>
</tbody>
</table>

As this is not a hypothesis testing project the issue was not:

... whether the researcher can generalize the finding of an interview study to a broader population. Instead the researcher's task is to present the experiences of the people he or she interviews in compelling enough detail and in sufficient depth that those who read the study can connect to that experience, learn how it is constituted, and deepen their understanding of the issues (Seidman 1998:44).

Therefore, I do not claim that the twenty doctors interviewed are a representative sample of doctors. I did, however, make a particular effort to interview specialists or other hospital based doctors so that my research project did not involve only general practitioners. As described in chapter two, the limited research which has been done
investigating how doctors understand lifestyle, has focused entirely on general practitioners (e.g. Williams and Boulton 1988; Williams and Calnan 1994).

Doctors were recruited in a number of different ways. Initially I sent letters to sixty doctors selected from the local telephone book (South Eastern Tasmania). Within this sixty I chose a selection of different types of doctors from different areas within the region. Only three of these doctors replied and agreed to be interviewed. After interviewing these three I arranged interviews with two doctors who were family friends. After these five interviews had been conducted I began a snowball/opportunistic sampling technique where I asked doctors I had already interviewed to suggest other doctors who might be interested in the project (Rice and Ezzy 1999:45). I also spread the word among friends and family and requested interviews with doctors whom I met socially. Snowball sampling is a suitable sampling technique to use when "the people being studied are well networked and difficult to approach directly" (Rice and Ezzy 1999:45).

When using snowball sampling the characteristics of the original sample will shape the characteristics of the snowballed sample. Individuals tend to suggest people like themselves to interview (Rice and Ezzy 1999:45). This was the case with the doctors. The majority of my interviews were held with doctors aged between forty and fifty five who have lived and worked in Tasmania for at least fifteen years. I found that specialists suggested other specialists in their field, usually ones that they worked with. Likewise general practitioners suggested other general practitioners (see Figure 4.1).

Doctors were difficult to recruit for research. I spent nearly two and half years trying to recruit and interview my target of twenty doctors. After twenty interviews I considered recruiting more doctors; however, my data were beginning to indicate

---

43 Doctors were often reluctant to suggest the names of other doctors, saying that all the doctors they know were very busy people who wouldn't have any spare time.
saturation in that similar themes were continuing to occur in the interviews (Seidman 1998:48). I also stopped at twenty interviews for the pragmatic reason that it was very difficult recruiting doctors and the time available for research was running out.

I followed the principles for in-depth interviewing as described by Lofland and Lofland (1984), Minichiello et al. (1990), Seidman (1998) and Rice and Ezzy (1999). The interviews were run in such a way as to be close as possible to a 'good conversation' (Mishler 1986; Clough 1992). The major difference from a normal conversation was that I actively tried to speak less whilst encouraging the doctors to speak more. I did, however, avoid the passive and distanced stance adopted by some interviewers. Instead, I responded to questions asked of me, shared some of my own experiences and opinions and was a co-participant in the discourse (Mishler 1986:82):

Where the standardised approach attempts to strip the interview of all but the most neutral, impersonal stimuli, the consciously active interviewer intentionally, concertedly provokes responses by indicating - even suggesting - narrative positions, resources, orientations, and precedents for the respondent (Holstein and Gubrium 1995:38).

I arrived at each interview with two copies of an interview guide (one copy for each of us), two copies of an ethics and consent form (one copy for each of us to sign and keep, see Appendix C), a tape recorder and a two page summary of the research aims and objectives (see appendix C for copies of these ethics forms). The first few minutes together were spent getting cups of tea or coffee, reading and signing the consent forms, discussing the research aims and objectives and looking over the interview guide with the doctor. I began reading through the interview guide with the doctor in the first interview when I realised that the doctor was worried that I was trying to assess how well they talked about lifestyle. By showing them the research aims and objectives and types of questions I had planned to ask them, they relaxed as they realised that none of the questions, nor the research project in its entirety, were
evaluating their skills or abilities as a doctor. As the interviews progressed I
discovered an additional benefit to this technique. Having an opportunity to talk about
the interview guide and the research aims and objectives helped the doctors to put
themselves in a reflexive frame of mind. Most medical work involves decision making
and advice giving. It does not involve relatively abstract deliberations on the nature and
content of medical knowledge. Talking about lifestyle as a concept which was not
necessarily fixed or stable was a new way of thinking for the doctors and many of
them were uncomfortable or unused to talking about their medical knowledge in this
way.

Because I intended to run the interviews as a good conversation, having looked over
the guide and having asked the first two or three questions on the guide, I usually to
put it to one side and asked questions in a more naturalistic fashion (Lofland and
Lofland 1984). Thus I asked questions either in response to the doctor's conversation,
to elucidate a statement made by the doctor or to offer an alternative point of view
which might be either interesting or challenging for the doctor. I only returned to the
interview guide when conversation halted or if a doctor indicated a desire to follow the
guide closely.

I wrote a new interview guide for each interview. In this research project I integrated
analysis and data collection so that each stage informed the other. In this way after I
had conducted a few interviews, they were studied and analysed. New or additional
interview questions were then framed as a result of the analysis and integrated into the
next interview guides (Miles and Huberman 1984; Lincoln and Guba 1985). In
addition, during each interview I asked specific questions which were relevant to the
type of medical work practised by the doctor I was interviewing at the time. For
example, if I was interviewing an oncologist, in addition to the usual interview
questions I would ask questions specifically relating to the causes and risks for cancer,
cancer treatment and management and their views on lifestyle based cancer prevention
strategies. The interview guide provided below as Figure 3.0 is a copy of the interview guide I used for the first three interviews with general practitioners. This was the guide that I built upon as the interviews progressed but which remained at the core of each unique guide.

Figure 3.0 Preliminary Interview Guide

Background? length of time as a doctor, areas of interest? training?

What did you expect to be talking about when I asked you for an interview?
- define lifestyle?
- relationship with?
- any case studies, examples?

Can a person's lifestyle be used to explain the cause of disease in the same way as bacteria or the environmental agents are used to explain the cause of disease?
- how, why, examples from your medical practice?
- what diseases?
- risk?

Is lifestyle an important concept?
- how, why, examples from your medical practice?
- changes over time?
- any particular areas of medicine where it is particularly important/unimportant?

Where has your knowledge about lifestyle come from?
- any examples?
- in what context?
- how does what you learnt/ didn't learn in medical training relate to your clinical experience?
- views on the relationship between lifestyle and disease/health been informed by health promotion?

Health promotion?
- yes/no/sometimes
- what does this entail?
- posters, brochures, leaflets? do they use them? how? why? when?
- your opinion on the accuracy/quality/usefulness of the lifestyle information in health promotion materials?
- examples?

Is it important to have a 'healthy lifestyle'?
- yes/no?
- examples of a 'healthy' lifestyle?
- changes over time?
- health promotion had an impact on your own behaviours/practices?

The interviews varied in the length of time they lasted and in their location (see Appendix A for details of each interview). The majority of interviews were conducted in each of the doctors' consulting room during their lunch break, or before/after their work for the day. Most of the interviews ran for a little over sixty minutes. All of the
interviews were tape recorded using a small and relatively unobtrusive tape recorder which was placed between myself and doctor. As the interviews were often held in consulting rooms many of the doctors sat behind their desk and I sat next to the desk at an angle with the tape recorder on the desk between us.

The interview tapes were transcribed in full whenever possible. Some interviews did not tape well and sections of tape could not be heard. These interviews were transcribed to the extent which was possible given problems with the tape recording. I typed all of the transcripts myself considering this an important aspect of data analysis. This process allowed me to run through the interviews again, to start identifying themes within the interviews and thus plan additional questions for future interviews. It also sensitised me to certain events during the interviews and statements made by the doctors which I had not noticed while the interview was actually in progress (Rice and Ezzy 1999:64).

The in-depth interviews were the most important empirical material for the research. They provided me with rich and varied data focused on doctors' own meaning contexts (Schutz 1967:113). They were exciting to work with as data and contained more interesting examples than are discussed within the confines of this thesis.

Many of the doctors told me that they enjoyed the interviews. These doctors commented that it was nice to be able to talk about medical ideas without having to do something or worrying about being seen as incompetent because they were unsure about the answers to questions.

However, the actual process of interviewing doctors was not always an enjoyable or an easy one. Apart from the problems I experienced trying to recruit doctors to be interviewed (described above) I also found that scheduling an interview with a doctor is difficult. They are busy people and well accustomed to bracketing off their personal
lives from their professional lives. As a researcher I fell into the category of professional life. This meant that I had to fit the interview into their work days. Doctors are accustomed to breaking their day into small segments. When I requested one to two hours of their time I was often met with stunned silence. When the interviews were arranged they frequently had to fit within a pre-established time frame such as a lunch break. Luckily most doctors are protected by a gatekeeper (receptionist or nurse). Once the doctor had arranged not to be disturbed we were usually left alone for the allotted time. The same, however, cannot be said for interruptions from telephone calls or pager beepings.

The other difficulty I experienced with the interviews was related to hierarchy and the usual rhetoric of the consultation. Doctors are accustomed to being in charge of situations, especially when they are at work. They frequently took charge of the interviews and tried to hurry them along, behaving as though I were a patient who needed to quickly learn about lifestyle. Several doctors were uncomfortable or frustrated when I asked abstract or ambiguous questions. They indicated this by asking me questions about my own health or about the status or usefulness of such 'vague' research. When I was interviewing specialists they frequently 'pulled rank' by asking me about how long my research had taken and when I expected to graduate. I found this tactic disconcerting but dealt with it by either laughing and making a joke or by answering quickly and then returning to the interview guide for focus. Seidman (1998:59) and Hertz and Imber (1995) discuss similar difficulties associated with interviewing other types of social elites.

3.2.2 Observation

To gain an understanding of the way that doctors construct understandings of lifestyle and apply these during medical practice I observed 52 doctor/patient consultations over a period of four days. The purpose of these observations was to explore how a single
doctor talked with his patients about lifestyle and to investigate how he applied his understandings of lifestyle during medical practice.

All of these consultations were with the same General Practitioner (Dr I). He was selected for this aspect of the research for several reasons. The first was pragmatic; he agreed to allow me to observe in his consultation room and he had an already established system of running observations and obtaining verbal consent from patients to be observed because he frequently has undergraduate medical students observing in his practice. He also had two sections in his consulting room. A section where he sat next to his desk and talked with patients and did basic clinical examinations (such as blood pressure readings, examining children's ears), and a second section through a doorway where he had an examination couch. He took patients in there to be examined if they had to remove any clothing or lie down to be examined. When Dr I went into this room with a patient he would leave the door between the two rooms open. This allowed me to hear their conversation but not to see (or be seen) by the patient. This worked very well as I was not observing patients when they were undressed or in a vulnerable position, only when they were dressed and sitting next to the doctor.

I also considered that Dr I's consultations would offer information-rich examples. He was a doctor with a particular interest in sociological research and I knew that he would be willing to work with me during and after the observation had been completed. Furthermore, his practice was in a suburb of low socio-economic standing. Many of his patients were elderly, unemployed or on a pension. This was a medical environment which was lacking in my research data at the stage I initiated the observations.

The observations were run as follows. I left a pile of information sheets about the observation with the medical receptionist and several on tables in the waiting room (see Appendix C). Dr I informed the receptionist of my presence and asked her to tell each
patient that he had a student observing that day and to draw their attention to the information sheet if they were interested. At this stage the patients were asked by the receptionist if they were happy for me to be in the room; if not they were to inform her and she would tell the doctor. (None of the patients asked the receptionist to do this). When the patient came into the room I was introduced to them by the doctor as "This is Emily, a sociology student from the university. Did Gail tell you about her?" After the patient responded in the affirmative I was ignored completely from that point onwards by the doctor. The patient usually said hello to me and after responding I would lower my eyes to the page. At this point the doctor would ask the patient the following question "What brings you here today?", and I would sit quietly in my seat behind the door taking notes unobtrusively.

I designed an observation schedule to use during each observed consultation (see Appendix B). The schedule was designed to allow quick and unobtrusive note taking and to record considerable detail. In addition to a format which allowed for notes taken during the consultation the schedule also had a page of observational prompts which I developed after drawing on the analysis of my interview data and my review of medical and lay texts. After each patient left the consulting room I ran through this list of prompts and was able to quickly note if any of the themes which had arisen during the textual or interview data had also arisen during the observed consultation. While I was doing this, Dr I. was making notes in the patient's file and reading over the file for the patient yet to come into the room for the next consultation. We would then talk.

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44 I obtained ethical consent through the university which required me to have each patient sign a consent form. Dr I. was unwilling for this method to be used. He explained that he regularly had medical students sitting in as observers and they did not ask patients to sign forms. He said that signing forms would worry his patients. We reached a compromise whereby I left copies of the information sheet on tables in the waiting room and with the receptionist who was asked to draw them to the attention of each patient. However, patients were not asked to sign a consent form. In practice this method worked very well. The patients seemed comfortable and relaxed by my presence, it was simply more of what they were familiar with.

45 On one occasion the Dr I. told me during our lunch break that he had a patient coming after lunch whom he didn't want me to observe. I sat in the tea room during that consultation.

46 Pseudonym used to protect privacy and confidentiality.
briefly about the consultation if Dr I. considered that it had been an interesting case and then he would open the door and invite the next patient into the room.

The observation was a very rich period during the data collection as in addition to listening and watching the doctor speak with patients, he spoke with me in between each consultation. I also lunched and took tea breaks in the doctors' lounge with the other doctors working at the practice. For several days they assumed that I was a post graduate medical student rather than a post graduate sociology student because, as I later found out, Dr I. had told them he had a post graduate student sitting in for a couple of days without explaining that I was a sociologists not a doctor. Because of this they included me in collegial conversation.

Observation (and the participant observation described below) attuned me to medical language and familiarised me with medical routines. As a research method, observation was also vital to my aim of trying not to rely on sociological constructions of medicine but instead to try and look with fresh eyes on the ways that doctors are constructing the lifestyle approach. This ethnographic work also helped my interpretation of interview data. Whilst my interviews and textual analysis constitute the bulk of research material used in the results chapters of this thesis, my observations forced me to recognise that doctors deal with real people with real illnesses, every day. In contrast to the image frequently found in medical sociological writing about the medical profession, doctors are people whose practices and language change when they are happy, sad, tired or stressed. Doctors also respond to patients' interpretations and offer different explanations and descriptions of illnesses and treatments according to these. Doctors also express pleasure and relief when they can help a patient and sadness and regret when the opposite occurs.

47 When they did find out that I was a sociologist they started asking me a lot of questions about politics and telling me that the work of doctors is under appreciated, and that they are poorly paid members of society!
3.2.3 Participant observation

I conducted participant observations during eight consultations. Six of these were consultations between myself and a general practitioner. One of them was a consultation between myself and a dermatologist and the last was between myself and gynaecologist. See Figure 3.2.

Figure 3.2 Characteristics of participant observed consultations

<table>
<thead>
<tr>
<th>Doctor</th>
<th>Date/Type of Consultation</th>
<th>Reason</th>
<th>Attending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr C</td>
<td>June 1998/GP</td>
<td>viral infection</td>
<td></td>
</tr>
<tr>
<td>Dr C</td>
<td>Sep 1998/GP</td>
<td>wisdom tooth</td>
<td></td>
</tr>
<tr>
<td>Dr C</td>
<td>Jan 1999/GP</td>
<td>tetanus vaccination</td>
<td></td>
</tr>
<tr>
<td>Dr R</td>
<td>Dec 1999/GP</td>
<td>arthritis</td>
<td></td>
</tr>
<tr>
<td>Dr R</td>
<td>Feb 1999/GP</td>
<td>arthritis</td>
<td></td>
</tr>
<tr>
<td>Dr R</td>
<td>Nov 1999/GP</td>
<td>arthritis</td>
<td></td>
</tr>
<tr>
<td>Dr T</td>
<td>June 1998/Dermatologist</td>
<td>acne</td>
<td></td>
</tr>
<tr>
<td>Dr M</td>
<td>May 2000/gynaecologist</td>
<td>review consultation</td>
<td></td>
</tr>
</tbody>
</table>

I chose to include participant observation in the methods used to collect data for the thesis for two reasons. First, I was committed to making use of as many different types of data as possible to add to the richness and density of my interpretations (Jackson 1989; Clough 1992; Denzin and Lincoln 1994). Secondly, only through participant observation could I include in my analysis the experience of how it feels for a patient when a doctor talks about lifestyle in certain ways (Blumer 1969:vi; Lofland and Lofland 1984:24).

All of these participant observed consultations were with doctors whom I had previously interviewed for the thesis and with whom I had an ongoing relationship of sufficient length of time that I felt comfortable asking if I could record details about our consultations as part of the research project.
I had kept each of my own general practitioners informed about the project. At the end of each of my interview with each of them I asked them if they would permit me to record details about our normal consultations for the research project and they agreed at that time. I then reminded them about my research project when I arrived to see them for each consultation and again received verbal agreement that they were happy for me to record details about our consultations and use these in the thesis. With the two specialists, I had interviewed both of them before I was referred to see them by my general practitioners. I had also met them both socially through a family friend who is also a doctor (this doctor had arranged the interviews). When I went to see them as a patient they both asked me how the research was coming along. I then asked them if they would mind if I took some notes after the consultation and used these in my analysis. They both agreed and the consultation moved on.

Unlike the observation of consultations described in section 3.2.2, when I was engaged in a consultation with my own doctors I did not take any notes during the consultation. Instead I took field notes in the car after the consultation had finished. I was able to recreate from memory large sections of our conversation, record details about mood and tone and my own responses to the doctor. These written notes were used for the analysis of the participant observation.

3.2.4 Informal discussion with friends and family
In addition to the formal data collection methods detailed above, I also engaged in the straightforward process of talking to friends, family and university colleagues about their trips to the doctor and their perceptions about how lifestyle was used within medicine as an explanatory framework (Davies 1993:xiii-xiv). Ideas arising from this opportunistic sampling were noted in my field work diaries and provided rich background detail which informed my analysis of the formally obtained data outlined above (Rice and Ezzy 1999:45).
This type of informal data collection occurs frequently in qualitative research projects. For example, Smith (1998:416), in a research project which involved formally interviewing and observing twenty five entry-level workers at a software company found that during the process of conducting these interviews she met, observed and informally spoke with twenty one additional workers who were not included in the original sample.

As a method this is flawed by poor memories and time lapses between people's appointments and talking with me. Nevertheless, these discussions have given me valuable additional insights into the types of things that doctors talk about with their patients. Most of the time my friends and family had no special interest in my research and so were not doing anything unusual in the consultation that might be designed to get a discussion about lifestyle up and going. Because these conversations informed those around me about the research project they were also an important aspect of the snowball/opportunistic sampling methods used to recruit doctors for interviews (see above).

3.3 Analysis of interviews and observations

Data collection and analysis were performed concurrently throughout this research project. The interview, observation data and participant observation data were analysed using an iterative coding technique:

Analysis often proceeds in tandem with data collection rather than commencing on its completion. The resulting analysis is contingent in character, since it in turn stimulates and is modified by the collection and investigation of further data. The researcher meanwhile becomes a participant in his or her own research project, for their own interpretations and actions become a legitimate object of subsequent analysis. Information on the researcher's own behaviour and thinking in the form of field notes, memos, a
diary or whatever, can become a vital source of data for the analysis (Dey 1993:37).

As I followed the same process when analysing all of the different types of data (e.g. transcripts, observation schedules, field notes) I will only explain in detail the analysis of the interview transcripts in this section. These details should be extrapolated to include the other types of qualitative data.

As previously described the interviews were tape recorded. I began my analysis while transcribing these tapes. The transcripts were then printed out as hard copies. These copies were read and interesting passages were marked and annotated (coded). There were certain aspects of the interview transcripts which I recognised and responded to as "meaningful chunks of data" (Mostyn 1985:144). My sensitivity to these particular "chunks of data" was the result of my reading in the area, my research questions, my participation in the interviews, and the insights arising from my ongoing analysis of other types of research data. Furthermore as Seidman (1998) states:

Given the world in which we live ... [t]here are certain aspects of individual experience and social structure to which I respond when they appear. I am alert to conflict, both between people and within a person. I respond to hopes expressed and whether they are fulfilled or not. I am alert to language that indicates beginnings, middles, and ends of processes. I am sensitive to frustrations and resolutions ... I am sensitive to the way issues of class, ethnicity, and gender play out in individual lives and the way hierarchy and power affect people. I do not, however, come to a transcript looking for these. When they are there, those and others passages of interest speak to me, and I bracket them (Seidman 1998:101).

Memos, notes, questions, comparisons and summaries which referred to each transcript were made. These were compared with each other in addition to direct comparisons which were made between the coded and annotated transcripts. The list of codes arising from this process included the following:
As interviews progressed and analysis of transcripts continued I grouped these codes into identifiable themes. That is I transformed coded data into meaningful data (Coffey and Atkinson 1996:47). It is usual at this stage in qualitative analysis to take coded examples from the transcripts and organise these categories of data into separate files for each theme. The themes were constructed around the organising framework of how doctors were talking about lifestyle. These themes were:

- biopsychosocial, individual in their social context, alternative health/holism,
- risk/risk factor, control, cause/causation, diagnosis and management,
- differences between doctors, patients, health promotion, uncertainty,
- commonsense, medical education, clinical experience

Within these themes I grouped many of the codes outlined above. For example within the theme 'Uncertainty' were sections of transcripts which included the codes: vulnerability, cause/causation, patients wanting to know why, doctors' feelings, aging, denial, fate, luck, action, control, risk and risk factor. In many cases codes
were grouped within more than one theme. Many codes were obviously important features within several different themes.

In addition to organising sections of coded transcripts into the different categories I decided to also continue working with the complete transcripts. It was apparent that when doctors talked about lifestyle they were layering different understandings of lifestyle over each other and that interpretation of these was largely contingent on my capacity to recognise their conversational context. Working with complete transcripts also made it easy to quickly scan the transcripts looking for the themes or evidence which suggested a different interpretation (Daley 1993:33).

When I was satisfied that I had identified the major themes within the data I started working with the themes (and their groupings of different codes) on a whiteboard looking for links, interactions and relationships between the different categories (themes). Miles and Huberman (1994) argue that displaying data in using diagrams and maps of codes and themes is a vital aspect of interpretation. The themes can be moved around in relation to each other, spliced and rearranged. "[I]ncidents, individuals or chunks of data that do not fit" could also be displayed visually thus ensuring that these were not ignored or forgotten (Coffey and Atkinson 1996:47).

While I had been coding and analysing the interview data I had also been using the same processes to analyse the participant observation and observation data. Visually mapping the themes using a whiteboard made it easier to start identifying relationships between the different types of data (interview, observation, participant observation). Through a process of compare and contrast the themes from each type of data were compared with each other and relationships between these themes were identified. This process led to the collapse of some themes into other themes, and the development of new themes. In this way I integrated the different types of data (Coffey and Atkinson 1996:47; Cicourel 1974:124-125).
Initially I tried mapping the interrelationships between the different themes using the arboreal metaphor commonly used in grounded theory (Richards and Richards 1990, 1994). However this metaphor was an inappropriate organising device because it posits a starting point and hierarchical relationships between the themes. The interrelationships between the themes were not hierarchical and there was not an obvious base or endpoint. Such a metaphor also tends to force a mapping of very tidy relationships. I had several themes which were not connected with other themes in a straightforward fashion. I wanted a visual device which could acknowledge this complexity rather than masking it.

Through consultation with other qualitative researchers I discovered a more appropriate visual analogy in the rhizome (Deleuze and Guattari 1983:47). Rhizomes are underground stems which bear roots and shoots which form unpredictable and non-hierarchical formations for example, clover and orchids. For Deleuze, the rhizome is a figure through which connections between the different facets of the social can be mapped since "[rhizomes] ... ceaselessly establish connections between semiotic chains, organisations of power and circumstance" (Boundas 1993:30). Thinking about medical understandings of lifestyle using the analogy of a rhizome to consider the inter-relationships between different themes and different types of data, allowed me to visually map the complex relationships between different themes and to accept "a multiplicity of complex conceptual structures, many of them superimposed upon or knotted into one another" (Geertz 1993:10).

Through this process of visual mapping and iteration between different types of data I developed a list of nine different ways that doctors were talking about lifestyle during interviews, observed consultations and participant observed consultations. Thus interpretation had reached the stage of generalising and theorising from the data: These

48 Harraway (1994:69) suggests using the analogy of the cats cradle string game. Such an analogy adds agency and action to a rhizome like structure (Easthope 1997:49)
different ways that doctors were talking about lifestyle are outlined below in Figure 3.3.

**Figure 3.3 Initial results after visual mapping and integration of different types of data**: Nine different ways that doctors were talking about lifestyle

- Lifestyle as a risk factor
- Lifestyle as a cause
- Lifestyle as a diagnostic indicator
- Lifestyle as a management and treatment tool
- Lifestyle as an uncertainty
- Lifestyle as everyday life
- Lifestyle as a way to stay healthy
- Lifestyle as salvation
- Doctors' own lifestyle

At this stage in the analysis I recognised the need for an overarching framework. I went back to the original transcripts, the observation schedules and fieldwork notes to identify the distinct conversational contexts in which doctors used these different understandings of lifestyle. I grouped these contexts using the categories of disease (biological disorder), illness (the social aspects of being unwell) and health (states of positive wellbeing). I then organised the themes under these general categories of disease, illness and health⁴⁹. See Figure 3.4.

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⁴⁹ By differentiating between disease and illness I am using the familiar sociological distinction between disease and illness which I outlined in chapter one (e.g. Dingwall 1976; Bond and Bond 1986). In so doing, I am not supporting the usual assumption that doctors are only concerned with disease whilst illness is of concern to non-medical people. In this project I recognise that doctors are concerned with disease, illness and health. Thus I am using these distinctions as an organising device and not as a sign of support for the disease/illness distinction as traditionally understood within sociology.
When talking about lifestyle in relation to disease the themes were:

**Lifestyle as a determinant of disease**

**Lifestyle as a risk factor for disease**

These two general themes incorporated the earlier categories of lifestyle as a risk factor, lifestyle as a cause, lifestyle as an uncertainty and doctors' own lifestyle.

When talking about lifestyle in relation to illness the themes were:

**Lifestyle as a feature of a patient's social history**

**Lifestyle as an issue affecting illness management and treatment**

These themes incorporated the earlier themes of lifestyle as a diagnostic indicator, lifestyle as a management and treatment tool and lifestyle as everyday life.

When talking about lifestyle in relation to health the themes were:

**Lifestyle as a commonsense prescription for good health**

**Lifestyle as a magical formula for health**

These themes include the earlier themes of lifestyle as salvation, doctors' own lifestyle, lifestyle as a way to stay healthy, lifestyle as everyday life, lifestyle as a risk factor and lifestyle as a cause.

The act of writing the thesis completed the analysis. The ongoing iterative process of comparing empirical results from different types of data with the sociological literature lifted the analysis to a higher level of generality and abstraction. In addition, the external structure imposed by the traditional format of an academic thesis entailed further abstraction as it forced decisions to be made about which aspects of the results were central to the research questions and which would thus be presented in the thesis.

### 3.4 Textual data: medical and lay texts

In addition to interview, observation and participant observation data the other significant source of empirical data used in this thesis was a thematic review of medical and lay texts. This thematic review identified a number of different conceptions of lifestyle within medical and lay texts from the 1970s, 1980s and 1990s. This is the thirty-year period in which the contemporary medical understandings of lifestyle described in chapter one of this thesis have been operating (Armstrong 1979,
The primary reason for this review was to set up a typology of different medical conceptions of lifestyle which I could use when discussing the different conceptions of lifestyle enrolled by doctors during interviews and observations. Such a terminology grounded in a textual review allows for shared understanding between me as the writer of this thesis and the readers of this thesis. Thus when (in chapter five) I refer to, for example, a risk factor health promotion conception of lifestyle, such a conception has been defined and demonstrated in the chapter presenting the results of the thematic textual review (chapter four).

A textual review is an unobtrusive method of qualitative research (Rice and Ezzy 1999:96). "Unobtrusive methods can be used to supplement other interactive methods of data collection such as those of ethnography and in-depth interviews (1999:97). The use of textbooks, journals, newspapers and magazines as sources of data is becoming increasingly popular in sociology (Koutroulis 1990; Lupton 1994c, 1995; Plummer 1995). As with the other types of data used in this research, the textual review does not claim to be representative of medical texts in general, or even of the specific types of medical texts selected for review:

Sampling in qualitative research is not concerned with ensuring that the findings can be statistically generalised to the whole population. Rather, ... sampling is purposive. The aim is to describe the processes [and the nature] involved in a phenomenon rather than its distribution (Rice and Ezzy 1999:42).

I chose to include an interpretive thematic analysis of texts in the research for a number of reasons. First, texts include formalised and legitimated interpretations of lifestyle. Thus the constructions of lifestyle found in texts represent a 'factual' medical or lay understanding. In addition, texts provide a stable form of data. Once a text is published it remains the same; thus reviewing texts from different decades serves as a
window into medical understandings of lifestyle over time. Furthermore, because texts are written and published for a specialised readership they also offer a window into different medical fields. The decision to review medical texts from different medical fields was partially made in response to my interest in how ideas about lifestyle might be used in medical fields other than epidemiology and public health.

Exploring lay texts and medical texts from different medical disciplines was also a reflection of the constructionist methodology of this thesis: this method is an acknowledgment that medical knowledge about lifestyle is unlikely to be homogeneous and straightforward and that lay and medical ideas about lifestyle should be considered in conjunction with each other, rather than as opposites. As such, this method of data collection also relates to the research question 'How are lay understandings of lifestyle and medical understandings of lifestyle inter-relating?'.

The different medical and lay texts reviewed were as follows:

Undergraduate medical textbooks

General practice texts. These included textbooks for general practitioners and publications from the Royal College of General Practitioners and the Tasmanian Divisions of General Practice.

Mainstream medical journal articles

Epidemiological textbooks and journals

Public health texts and journals

Public health policy documents and reports

Health promotion handouts

Alternative/holistic medicine texts

Leaflets and brochures advertising alternative therapies of products

Self-help, beauty and fitness books

Fitness/exercise/dieting magazines
3.4.1 Journal articles

The following mainstream medical and public health journals were searched using the comprehensive data base of MEDLINE.

*Medical Journal of Australia*
*Modern Medicine Australia*
*Australian and New Zealand Journal of Medicine*
*Australian Family Physician*
*American Journal of Public Health*
*Annual Review of Public Health*
*The Australian and New Zealand Journal of Public Health*
*Epidemiology and Society*
*American Journal of Epidemiology*
*International Journal of Epidemiology*

I selected these particular journals after speaking to librarians at the clinical school library and asking them which were the mainstream journals from each medical field. I also asked the interviewed doctors which journals in these fields they considered to be important. Finally I was also influenced in my selection by which journals were available for searching over a thirty year period on MEDLINE. When possible I selected Australian journals because this research has been conducted in Australia.

Using the database, journals from the 1970s, 1980s and 1990s were searched for articles which contained the words lifestyle, lifestyle factor or risk factor in the title or the MESH. (The MESH is an extended abstract including selected subject headings highlighted throughout the article). After searching the databases for journal articles which referred to lifestyle, lists of abstracts from these articles were compiled. These lists were printed out in hard copy. After reading these over I chose interesting or
relevant articles, from each of the previous three decades (1970s, 1980s, 1990s), which dealt with a range of different diseases, lifestyle issues and research methodologies.

MEDLINE was able to provide extended abstracts for each of these articles. These were then printed out in hard copy. These extended abstracts were my main data source as they were quite detailed and extensive. However, articles which contained continual references to lifestyle as either a topic or a key term (or which looked especially interesting due to an unusual application of the lifestyle approach) were selected and photocopied from the journals held in the library.

3.4.2 Textbooks

I selected epidemiological, public health, undergraduate and general practice textbooks from a range of sources. These included course outlines, library catalogues and on-line searching of medical databases. As with journals, I selected textbooks on the basis of recommendations from clinical school librarians, after speaking with doctors during interviews and on the basis of availability. I also selected textbooks which were frequently referenced in the journal articles reviewed and in the reference lists of textbooks.

As with journal articles described above, I aimed to collect textbooks from the 1970s, 1980s and 1990s. Each time I acquired a textbook I searched for lifestyle as a key word in the chapter headings, index and glossary of each of these books. I also searched for the headings 'risk factor', preventive health, disease prevention, health promotion and health education and coronary heart disease. If I found a reference to lifestyle or any of the above mentioned related topics I would photocopy the relevant pages. I also noted which texts did not contain any references to lifestyle.

3.4.3 Policy documents, practitioner education and health promotion
Public health policy documents such as national goals, targets and strategies, practitioner education documents informing doctors about health promotion, primary health care and screening and health promotion handouts explicitly referring to lifestyle (brochures and leaflets advising about smoking, alcohol, nutrition, pregnancy and conditions associated with lifestyle such as high blood pressure and type two diabetes) were collected.

Policy documents and practitioner education documents were collected from libraries and the Royal College of General Practitioners. Health promotion handouts were collected in the waiting rooms of doctors’ surgeries and the outpatients department of a large public teaching hospital. I also sent away for any health promotion packages which were provided free of charge (QUIT smoking pack, alcoholics anonymous brochures).

Policy documents and practitioner education texts were managed the same way described above for textbooks. As these texts tended to focus heavily on lifestyle I often photocopied large sections. Some texts were given to me and I was able to code directly onto these texts. The health promotion handouts were also analysed in full. There was no need to select certain sections to be photocopied because pamphlets and brochures were very short. Furthermore they were my own property and not borrowed from the library. Thus I had unlimited access to them and could code directly on the originals.

3.4.4 Self-help, alternative/holistic and other lay texts
Self-help books and alternative/holistic medical textbooks were sourced using library catalogues and internet bookshops. Popular magazines and fitness/diet magazines were sourced through the State Library of Tasmania and regular checks in several large newsagencies. I also attended a 'Natural Health and Alternative Therapies Exp'. This was an open day held in a public hall. There were stalls selling alternative/holistic
books and stall holders were handing out advertising leaflets for therapies and products. I also collected pamphlets and handouts on alternative therapies, fitness and nutrition from chemist shops.

Self-help and alternative/holistic books were searched for references to lifestyle in the index, glossaries and contents pages (as described above in the section on medical textbooks). Magazines and pamphlets were read in full and sections which referred to lifestyle as a term or health related behaviours and practices, risk or risk factors, prevention or 'styles of living', were either photocopied or cut out.

3.5 Analysis of textual data

Analysing medical ands lay texts involved two stages. The first was the selection of texts, the selection of examples from texts and the collation and organisation of these. This process has been described above. The second stage was an interpretive thematic analysis of these selected examples of text (Kellehear 1993). This stage is described below. As I followed a similar iterative process to that used when analysing the interview, observation and participant observation data I have only briefly described the process used to analyse texts:

Themes of important messages inherent in the material are looked for. The emerging themes are then categories of analysis. In thematic analysis, frequency is not a major concern as it is in content analysis, but the position of the idea in the narrative is more important (Rice and Ezzy 1999:106).

The selected examples of text were read through closely and coded with the aim of identifying themes within or between the different types of texts in the ways that lifestyle was being conceptualised as an explanatory concept for either disease, illness or health. This coding focused on the types of language used, the principal issues represented as being associated with lifestyle, underlying assumptions and models of thinking, how lifestyle was being defined, and the presence or absence of certain key
concepts associated with lifestyle. For an example of this type of thematic analysis see Hahn (1987:257). Texts were also coded according to visual representations of 'healthy' or 'unhealthy' lifestyles, imagery and mood.

These codes were grouped into different themes using an iterative process of compare and contrast (as described above in the section on analysis of interview data). The different themes were then organised into typologies of different medical and lay conceptions of lifestyle.

3.6 Conclusion

This chapter has provided a detailed account of the research methodology and the research methods used in this project. This has included detailed accounting of data collection and data analysis thus allowing the reader to see the evidence on which the analysis was based (Mishler 1990; Rice and Ezzy 1999:37).

In summary, my research has been conducted within an interpretive constructionist paradigm. I have explored medical understandings of lifestyle using four different types of data which provided a range of 'rich' qualitative material. These data were analysed using an iterative technique imbued by grounded theory (Dey 1993; Mostyn 1985; Seidman 1998; Strauss and Corbin 1994; Layder 1993). As a result I have developed an understanding of the ways lifestyle is conceptualised in medical and lay texts and how individual medical doctors from different medical fields construct, interpret and apply explanatory models for health, illness and disease which focus on lifestyle. This will be described in the following two chapters.

50These different medical and lay conceptions of lifestyle are described in chapter four
Chapter Four
Lifestyle in Medical and Lay Texts

4.0 Introduction
This chapter presents the results of a thematic review of medical and lay texts. This review was conducted as an initial exploration of medical understandings of lifestyle guided by the research question, how are medical understandings of lifestyle being constructed in different medical fields?

In response to this question, the chapter demonstrates that different medical fields utilise different understandings of lifestyle. Thus there is not a unified medical understanding of what lifestyle is or how this might relate to sickness and health. Instead, the review of medical texts demonstrates that there is a range of different conceptions of medicine identifiable within medical texts from different medical fields.

To describe these different medical conceptions of lifestyle I outline a typology of different medical conceptions of lifestyle. The typology is not intended to describe all of the different ways that medical people could conceptualise lifestyle in relation to sickness and health. Instead it provides additional context and a working terminology which can then be used to refer to different medical conceptions of lifestyle in the next chapter (chapter five) which explores doctors’ understandings of lifestyle.

In addition to reviewing medical texts I also reviewed a number of lay texts which were specifically addressing issues of lifestyle, health and disease; for example womens’ magazines, alternative health texts and self-help books. This review was conducted as an initial response to the research question, how do lay and medical understandings of lifestyle inter-relate? This review resulted in the construction of a typology of the two lay approaches to explaining health and disease in terms of lifestyle which were apparent in these texts. As with the typology of medical
conceptions of lifestyle, this typology of lay conceptions is not intended to describe all of the different ways that lay people conceptualise lifestyle. It does however, provide a terminology to refer to two ways that lifestyle is being understood outside medicine. In chapter five, this terminology is used in conjunction with other sociological research into lay knowledges about lifestyle to explore the ways that lay and medical conceptions of lifestyle inter-relate in doctors' constructions of lifestyle.

The chapter concludes with a summary of the different medical and lay conceptions of lifestyle identified in the textual review and discusses textual representations of lifestyle in general. Some implications for medical practice of the conceptions of lifestyle identified in medical and lay texts are also raised. This leads to the next chapter in the thesis (chapter five) which explores how medical doctors construct and apply understandings of lifestyle.

### 4.1 Epidemiological and public health texts

Conceptions of lifestyle vary between the fields of epidemiology and public health. They also vary within these fields. This was discussed in detail in chapter one of this thesis. I chose to present some of the results of my review of epidemiological and public health texts in the first chapter of the thesis because they provided important contextual and background information for the discussions developed in chapter two. Because I have already explained the differences between epidemiological and public health conceptions of lifestyle, these differences are only briefly summarised below for the purpose of describing a typology of epidemiological and public health conceptions of lifestyle. As I did not describe the variation within epidemiological and public health texts in chapter one, this will be discussed in detail after the summary.

Epidemiology is a scientific research discipline seeking to increase knowledge about the causes and distribution of disease. Epidemiological understandings of lifestyle are grounded by the parameters of epidemiological research. They are reductive in that
lifestyle is conceptualised in terms of distinct and isolated behaviours and practices which may be risk factors for various diseases. The epidemiological interest in lifestyle is orientated towards the identification of the causes of disease (with cause being understood within a probabilistic conception of causality and risk) in populations and patterns of disease and health in populations (e.g. Last 1988; Rothman 1998; Shy 1997). For example the following definition of lifestyle is taken from a dictionary of epidemiology:

Lifestyle: The set of habits and customs that is influenced, modified, encouraged or constrained by the lifelong process of socialisation. These habits and customs include use of substances such as alcohol, tobacco, coffee, tea, dietary habits, exercise etc., which have important implications for health and are often the subject of epidemiologic investigation (Last 1988:73).

In contrast, public health is an applied discipline aiming to design, implement and assess strategies to improve health and prevent disease. Unlike epidemiological texts which display an internally consistent and coherent understanding of lifestyle, public health texts reflect two distinct public health discourses each of which has a distinct conception of lifestyle. These are risk factor health promotion and the new public health.

In risk factor health promotion, conceptions of lifestyle are similar to those found in epidemiology except that instead of lifestyle risks being expressed in terms of populations they are represented as the property of individuals. In addition, risk factor health promotion is orientated towards education and the modification of lifestyle behaviours and habits rather than the identification of lifestyle risks (as in epidemiology) (e.g. Stampfer et al. 2000; Krug 1995).

Conceptions of lifestyle in the discourse of the new public health differ from risk factor health promotion because new public health conceptions of lifestyle are strongly
influenced by holistic and structural thinking from nursing, sociology and psychology. The result of this is a biopsychosocial conception of *lifestyles*. In this way of conceptualising lifestyle, behaviours and practices considered to influence health or increase risk of disease are located within a wider social context (e.g. World Health Organisation 1986; O'Connor and Parker 1995:7). The focus remains on education and change. However, this is achieved through structural means such as workplace reform rather than through the education of individuals. The differences between epidemiological, risk factor health promotion and new public health conceptions of lifestyle are summarised below in table 4.0.
Table 4.0. Comparison of epidemiological, risk factor health promotion and new public health conceptions of lifestyle

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Epidemiology</th>
<th>Risk Factor Health Promotion</th>
<th>New Public Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Concern</td>
<td>Studying the distribution and determinants of health and disease in specified populations.</td>
<td>Improving health and reducing disease in populations by producing modifications of behaviours deemed to be risk factors for disease in individuals. Health education.</td>
<td>Improving health and reducing disease in populations through factors such as healthy public policy, enhancing life skills, health education, preventive medicine and community empowerment.</td>
</tr>
<tr>
<td>Definition of lifestyle</td>
<td>Modifiable social factors (as opposed to biological factors) which have a negative impact on physical health. In the 1970s focus only on cardiovascular disease. By the 1990s a large range of diseases considered in terms of possible lifestyle determinants.</td>
<td>Behaviours and attributes of individuals which are deemed to be risk factors for disease. Most commonly cardiovascular disease, adult onset diabetes, lung cancer, sexually transmitted infections and stroke.</td>
<td>Not limited to factors deemed to be risk factors for disease but also includes a generalised conception of 'styles' of living which impact positively and negatively on physical and emotional health.</td>
</tr>
<tr>
<td>The social</td>
<td>Understood as behavioural, non biological.</td>
<td>Understood as modifiable behaviours or as the immediate social environment of individuals.</td>
<td>Behaviours and attributes embedded in structural, cultural, historical and political situation.</td>
</tr>
<tr>
<td>Risk</td>
<td>Important to overall conception of lifestyle. Mathematical risk, the probability of disease in terms of populations, levels of risk.</td>
<td>Primary focus of conception of lifestyle. The property of individuals, all or nothing terms, risk and cause are blurred.</td>
<td>Uses both epidemiological and risk factor conceptions of risk but risk is not the primary focus of this conception of lifestyle.</td>
</tr>
</tbody>
</table>
This typology like other sociological typologies utilising ideal types is a useful aid for discussion, critique and comparison. However, it does serve to mask the variation which was apparent within epidemiological and public health texts. This variation is discussed below.

4.1.1 Variation within epidemiological texts

Within epidemiological texts constructions of lifestyle varied. This was evident both when textbooks or journals from different decades were considered and when different types of texts were examined; for example, journals and textbooks.

Epidemiological textbooks devote very little space to discussions of lifestyle. Lifestyle is rarely indexed in such textbooks and is usually only referred to within the body of the book when examples are being given of risk factors for certain diseases. In the majority of cases these diseases were coronary heart disease and some cancers (e.g. MacMahon and Pugh 1970; Olsen and Trichopoulos 1992; Gordis 1996; Rothman 1998). Thus, while ideas about lifestyle are some of the more prominent epidemiological products in the world outside of epidemiology, within epidemiology models of lifestyle and disease are only one of many available explanatory frameworks. The limited mention of lifestyle as a topic in epidemiological textbooks is also a reflection of a focus on research methods and statistics within textbooks which as a rule are 'how to do it' texts (Fleck 1979). When textbooks from different decades were compared (1970s, 1980s and 1990s) lifestyle was rarely in the index or chapter titles of 1970s texts, was mentioned slightly more frequently in 1980s texts and was more common in 1990s texts (e.g. MacMahon and Pugh 1970; Holland 1970; Alderson 1983; Feinstein 1985; Olsen and Trichopoulos 1992; Rothman 1998). In later texts lifestyle was discussed in relation to a greater number of conditions while in texts from the 1970s and early 1980s it was only discussed in relation to cardiovascular disease.
Unlike epidemiological textbooks, lifestyle is a more common topic within epidemiological journals; for example International Journal of Epidemiology, Epidemiology and Society and the American Journal of Epidemiology. Lifestyle factors are often the focus of epidemiological research seeking to identify the causes or risks or the prognosis after diagnosis for conditions such as heart disease, infertility, some cancers, social inequalities in health and viral diseases such as hepatitis and, during the 1980s/early 1990s, HIV/AIDS. Thus articles which publish research results frequently refer to lifestyle (e.g. Chang and Frentzel 1993; Huang et al. 1996; Twisk et al. 1999).

Reference to lifestyle has increased in epidemiological journal articles over time with these references become increasingly common through the 1970s, 1980s and 1990s. Furthermore, when journal articles are examined over time they are seen to demonstrate the extension of the lifestyle framework from a 1970s focus which was almost exclusively cardiovascular to include additional diseases such as asthma, diabetes, sexually transmitted infections, cataracts and arthritis (Terris 1987).

In addition to an extension of a lifestyle framework to include diseases other than cardiovascular disease, journal articles also demonstrate that epidemiological arguments about how lifestyle might be a disease determinant have become increasingly sophisticated over time. For example epidemiological research into lifestyle and coronary heart disease in the 1960s and 1970s established relationships between diets high in animal fats, low exercise levels and smoking with the development of coronary artery disease (Goals and Targets for Australia's Health in the Year 2000 and Beyond 1993; AIHW 1998). In the 1980s this was refined and the importance of cholesterol was highlighted. However, further research in the late 1980s and 1990s has shown the relationship between diet, exercise and cholesterol levels to be much smaller than originally supposed and genetic and bacterial aspects of arterial disease are now highlighted. In addition cholesterol levels are now recognised as only
one of the important aspects of blood lipids and a range of different fats are now recognised as part of the multi-casual pathway to artery disease (Oliver 1992; Hulley et al. 1992; Kleiner 1995).

Our knowledge is still largely incomplete regarding the relationship between dietary factors and the major diseases of our culture. These illnesses include not only cancer and heart disease, which have received the most attention, but also congenital malformations, degenerative conditions of the eye, fractures, and many infectious diseases that are hypothesised to be influenced by the nutritional status of the host (Willet 1990:17).

4.1.2 Variation within public health texts

As with epidemiological texts, there are variations in the ways that lifestyle is represented between and within different public health texts and between texts published in different decades. Differences between texts were often reflections of the different public health discourses discussed in detail in chapter one and summarised briefly above. These different public health discourses of lifestyle frequently co-exist within the same text and boundaries between them are often indistinct. There was also variation in the ways that lifestyle was conceptualised between textbooks and journal articles.

For example journal articles from The Australian and New Zealand Journal of Public Health, the British Journal of Public Health and Medicine, the Journal of Health Education, and Health Promotion Journal of Australia were frequently examples of epidemiological research being published in public health journals or were discussions and evaluations of various health promotion programs based on risk factor health promotion. As such, they often reflected epidemiological and risk factor health promotion constructions of lifestyle situated within a biomedical framework of disease. It is not surprising that public health journals would favour epidemiological research. Scientific journals have a specific role in formalised scientific knowledge,
which is to publish up to date research findings for an expert audience using esoteric language.

In contrast to this, policy documents such as *Better Health for All by the Year 2000* (AHIW 1998), the *Alma Ata Declaration* (World Health Organisation 1978) or the *Ottawa Charter* (World Health Organisation 1986) frequently reflect a broader biopsychosocial view of lifestyle situated within a notion of health conceptualised not in biomedical terms such as the absence of disease or infirmity but as a state of complete physical, mental and social wellbeing understood as a fundamental human right (World Health Organisation 1986). For example in the *Adelaide Recommendations* which were the result of the second international conference on health promotion, building on the *Ottawa Charter* (World Health Organisation 1986), the main aim of healthy public policy is described as creating a "supportive environment to enable people to lead healthy lives. Such policy makes healthy choices possible or easier for citizens. It makes social and physical environments health-enhancing" (Adelaide Conference 1988:2). As an indication of the way that traditional lifestyle concerns are situated in a wider framework, the key areas identified as immediate priorities in the development of health public policy were supporting the health of women, food and nutrition, tobacco and alcohol and creating supportive environments (Adelaide Conference 1988:3).

Public health textbooks vary in their representations of lifestyle. The breadth of these texts means that examples of both the public health discourses on lifestyle as well as epidemiological constructions of lifestyle, health and disease could be found within the same book. Textbooks published since the mid-1980s generally advocated a new public health approach to public health, thus utilising those conceptions of lifestyle. However, discussions of epidemiological data and existing health promotion programs within those same books frequently utilised a risk factor health promotion conception of lifestyle (e.g. Badura and Kickbusch 1991; Lawson 1991). This was a reflection of
the difference between public health theory and policy and the actual implementation of public health programs. While the aims and theory of the new public health are very broad, the implementation of such policies has generally been restrictive. Richmond (1989:156) argues that this has been the case in most Western countries because the structural, cultural and environmental level change advocated in the new public health is difficult, expensive and slow. Implementation of such a broad scale agenda would also challenge entrenched institutions and ideologies already present in the health care sector. These include managerialism (economic rationalism), the medical profession (also medically allied groups such as physiotherapists, psychologists etc) and powerful lobby groups such as the tobacco lobby (Richmond 1997:156).

Health promotion material such as the leaflets and posters found in doctors' surgeries differed from journal articles, textbooks and policy documents. While these usually reflected a risk factor health promotion view of lifestyle, it was a particularly reductive one. These texts also utilised a highly personalised approach to lifestyle. Statements such as 'your lifestyle' were common. This is quite different from other types of public health texts which are not written for the people whose lifestyles are the topic of conversation. These other types of texts are written for the policy makers, doctors, nurses and dietitians who are trying to produce change and modification in other people's lifestyles.

Another interesting feature of these public health texts is the tension within health promotion publications which are published by pharmaceutical companies or industry boards. These have to advocate medically acceptable lifestyle advice in order to get their pamphlets distributed in medical settings, whilst at the same time encouraging the consumption of various goods for the sake of profit. For example, the Australian

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51 Corporate sponsorship and health promotion have a close relationship in Australia (Duff 1999). Marketing bodies are influential in the formulation of dietary guidelines. They are also major sponsors of research into lifestyle. For example an International Seminar on Lifestyle held in New Zealand May 16-19 1988 had as one of its two major sponsors the Dairy Advisory Bureau (Russell and Buisson 1988).
Dairy Corporation publishes a range of pamphlets advising people to include more calcium in their diet and the Australian Meat Marketing Board publishes a range of pamphlets advising people of the importance of iron in the diet.

In the case of pharmaceutical companies lifestyle advice is treated in the way that doctors often treat alternative medicine, as 'complementary medicine'. For example in a pamphlet published by Pfizer titled 'If you have high blood pressure ...', the first two sections explain what high blood pressure is and that it should be treated "by your doctor using appropriate medication". The next section titled "What you should do to help yourself", describes how many individuals are able to treat their high blood pressure through lifestyle modification. However, the final sections advise that high blood pressure is very dangerous and suggest that lifestyle changes should be used in conjunction with supervised medical treatment using pharmaceutical drugs.

Public health texts reveal a great deal of ambiguity surrounding the meaning of the term lifestyle. As a term lifestyle is often used to refer to both specific risk factors and non-specified social factors. When lifestyle is used to refer to unspecified social factors, specific risk factors for disease are addressed separately (e.g. smoking, blood lipids, BMI, unsafe sex) while the term lifestyle is used to refer to other un-specified non-biological factors. In this context lifestyle is frequently used to talk about exercise; e.g. the phrases 'sedentary lifestyle' or simply 'unhealthy lifestyles'.

4.2 'Mainstream' medical texts

This section describes the ways that a lifestyle is conceptualised in 'mainstream' medical journals, general practice texts and undergraduate textbooks from the bachelor of medicine degree at the University of Tasmania. Conceptions of lifestyle from medical fields other than epidemiology or public health are of particular interest for two reasons. The first is that previous sociological writing about medical understandings of lifestyle has not addressed the ways that lifestyle might be conceptualised in medical
fields other than epidemiology or public health. Secondly, the majority of doctors interviewed or observed for this thesis were general practitioners or hospital specialists. Both of these types of doctors are unlikely to read specialist epidemiological or public health texts but are likely to read mainstream medical journals, general practice texts, and in the case of the young doctors and the doctors who lecture at the medical school, to have some level of familiarity with current undergraduate medical textbooks. Thus their individual understandings of lifestyle (which will be explored in chapter five) are likely to be imbued with the various conceptions of lifestyle found in mainstream medical texts. Thus a terminology to refer to these will be very useful.

Furthermore, in chapter two of this thesis I argued that medical understandings of lifestyle may well transcend the preventive focus of public health (and to a lesser extent epidemiology) because prevention takes up only a small proportion of everyday clinical practice. Thus if doctors are constructing understandings of lifestyle to serve as explanatory frameworks for disease (or health) then they may be using lifestyle in different ways than is commonly found in epidemiology or public health. This review of mainstream medical texts serves as an initial investigation of the question, do medical conceptions of lifestyle from medical fields other than epidemiology and public health transcend the preventive focus found in epidemiology and public health?

The textual review demonstrated that the most common conceptualisation of lifestyle in mainstream medical texts is one informed by the epidemiological notion of lifestyle factors as risk factors for certain diseases. In mainstream medical texts, lifestyle is represented as a risk factor for coronary heart disease, sexually transmitted disease and

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52 While I have not collected any statistics on this issue I did ask the doctors I interviewed where they obtained their information about lifestyle. They frequently said medical journals and cited the journals I reviewed such as *Family Doctor* and *The Australian and New Zealand Journal of Medicine*. They also mentioned the *Lancer* which I did not review. In addition, I also asked the librarians at the medical school library whether doctors would commonly read the specialised epidemiological or public health journals. They suggested that while a doctor with a particular interest in a particular epidemiological or public health issue might do so that most doctors do not have time to read outside of their primary area of work.
some cancers (e.g. Cormack et al. 1992; McWhinney 1989). However, rather than being a direct reflection of epidemiology, mainstream medical conceptions of lifestyle were also very similar to the conceptions of lifestyle found in risk factor health promotion. (A summary of the differences between epidemiological, risk factor health promotion and mainstream medical conceptions of lifestyle risk is presented in table 4.1).

Unlike published epidemiological research about lifestyle (which was generally concerned with lifestyle as a determinant of disease), research about lifestyle published in the mainstream medical journals was much less likely to ask about determinants of disease and more likely to be concerned with either patient knowledge about lifestyle factors or the impact of various types of intervention\textsuperscript{53} on morbidity or mortality; for example, lifestyle change and cardiovascular disease (e.g. Oldenburg et al. 1992), trials of diet modification for lowering plasma cholesterol levels (Johnston et al. 1995) or the end results of stress management courses. This is compatible with the clinical focus of mainstream medical texts. It is also closely aligned with a risk factor health promotion approach to lifestyle.

Secondly, unlike epidemiology and again, more like risk factor health promotion, mainstream medical conceptions of lifestyle factors are individualised and personalised. In this context the doctors authoring these texts describe patients' lifestyles as putting them at risk for developing certain diseases (e.g. Gammon 1990; Murtagh 1994). Mainstream medical texts do, however, demonstrate a significant difference between a public health and mainstream medical approach to risk factor intervention. In public health texts, whilst actual programs are individually targeted, the underlying aim is to achieve a small modification in lifestyle practices across the population in order to shift the risk profile for the population to a lower level

\textsuperscript{53} Sometimes this was explicitly lifestyle intervention, such as a quit smoking campaign. At other times it was medical intervention in the form of surgery or prescribed drugs in conjunction with successful lifestyle change such as a low fat diet or unsuccessful lifestyle change such as bypass surgery when patients continue to smoke.
(Wilkinson 1996:13). In mainstream medical texts, however (probably because such texts have a clinical focus which is by its nature individualist), a more common approach is to advise that patients whose lifestyle behaviours place them at highest risk of developing disease be targeted individually and their own risk profile lowered (Ashenden et al. 1998:340; Pearson 1989).

An example of this is the practice of lifestyle counselling by doctors. In lifestyle counselling doctors (usually general practitioners) are expected to identify their patients' 'unhealthy' or 'risky' lifestyle practices and advise them to change these with the aim of reducing their risk of disease (e.g. Nutting 1986; Stott 1986; RACGP 1998). The most common lifestyle issues which doctors are advised to target are smoking, alcohol consumption, dietary behaviour and exercise (Ashenden et al. 1998:320). While studies of the effectiveness of lifestyle counselling by doctors (measured in terms of patients changing these behaviours) suggest that even when patients do make recommended lifestyle changes these are rarely maintained long-term, medical texts still strongly advise doctors to offer lifestyle counselling (Yeager et al. 1996; Ashenden at al 1998). For example, the United States National Institute of Health recommends "the development of programs for health professionals to communicate to patients the importance of regular physical activity ... It is highly probable that people will be more likely to increase their physical activity if their health care professional counsels them to do so" (NIH 1996:244-245).

A further way that risk factors are personalised in medical texts is when they are discussed in relation to diagnosis (e.g. Wodak 1993:266; Furner and Ross 1993:40-41). In a textbook teaching clinical methods for general practitioners a selection of annotated transcripts from medical consultations are presented combined with commentary and discussion about how to most effectively manage general practice consultations (see Gammon 1990). Lifestyle information about diet, physical activity,

54 Lifestyle counselling seems to be expected by patients as well (Better Health Commission 1986).
smoking and alcohol consumption are listed by Gammon as issues to be considered by general practitioners as part of the diagnostic process (1990:1). The differences between epidemiological, risk factor health promotion and mainstream medical conceptions of lifestyle risk are summarised below in table 4.1.

Table 4.1. Main features of the conceptions of lifestyle risk in mainstream medical texts in comparison with epidemiological or risk factor health promotion

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Epidemiology</th>
<th>Risk Factor Health Promotion</th>
<th>Mainstream Medical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Concern</td>
<td>The identification of risk factors and studying the distribution of risk factors in specified populations.</td>
<td>Shifting population risk profiles through individually targeted health promotion campaigns aiming to achieve a small modification in lifestyle practices across the population.</td>
<td>Improving patient knowledge about lifestyle risk factors, assessing the impact of lifestyle intervention, lifestyle risk as a diagnostic tool.</td>
</tr>
<tr>
<td>Models of Thinking</td>
<td>Medical model of disease, statistical research, population health.</td>
<td>Medical model of disease, epidemiology.</td>
<td>Medical model of disease, clinical practice.</td>
</tr>
<tr>
<td>Definition of</td>
<td>Modifiable social (non-biological) factors which have a negative impact on physical health.</td>
<td>Behaviours and attributes of individuals which place them at 'risk' of disease/which 'cause' disease.</td>
<td>Behaviours and attributes of individuals which place them at 'risk' or disease/which 'cause' disease.</td>
</tr>
<tr>
<td>Lifestyle Risk</td>
<td>Population.</td>
<td>High risk populations, targeting individuals.</td>
<td>Patients, individuals, 'high risk individuals'.</td>
</tr>
<tr>
<td>Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td>Research.</td>
<td>Health Education.</td>
<td>Identifying 'at risk' patients, 'Lifestyle counselling' preventive medicine.</td>
</tr>
<tr>
<td>Tone</td>
<td>Impersonal, scientific.</td>
<td>Prescriptive, authoritative.</td>
<td>Paternalistic, prescriptive, advice giving.</td>
</tr>
</tbody>
</table>

The tone used in mainstream medical texts discussing lifestyle advice and collecting lifestyle information was paternalistic (e.g. Balint 1964; Balint et al. 1970; Hodgkin 1978; Livesey 1986). Patients were written about in such a way as to imply that doctors automatically know what is the best lifestyle for a particular patient. It is also strongly implied in these texts that patients cannot be trusted to tell the truth about their
own lifestyle. For example, when consultation transcripts are included in the texts (e.g. Gammon 1990) the patients' own comments about their lifestyle are described as examples of stubbornness, ignorance or simply misinformation and never as a reflection of a valid point of view. For example, "In history taking, the attitude should be never to believe what the patient tells, and never to disbelieve it; instead search should be made for some other evidence to confirm or refute it" (Gammon 1990:6).

In addition to conceptualising lifestyle in terms of lifestyle risks, several general practice texts also mentioned lifestyle in the context of discussions about undefined 'social factors' impacting on physical health (e.g. Cormack et al. 1992; McWhinney 1989; Gammon 1990; Morrell 1991):

[T]he social diagnosis is always important ... how will this illness affect and be affected by the patient's work, family or leisure pursuits? ... When it [the social diagnosis] remains in the background and appears to be of little importance, probably the reason is that the patient's relationships are functioning well. However, if the illness puts undue stress on the social relationships, they may quickly come to the fore. The doctor needs to be aware that denial of severe family difficulty is very common (Gammon 1990:8).

As can be see in this quotation, the mainstream medical understanding of the social is focused on the individual and the family, rather than on the structural, cultural or environmental as in the new public health. For example, the following quote from a university course guide summarises this approach:

Unit: Community Health (General Practice): "Teaches students, in the context of general practice, to recognise and understand commonly met symptoms, diseases, chronic illnesses, and conditions which may endanger life or have serious consequences; the opportunities, methods and limitations of prevention, early diagnosis, and management; the social, cultural and

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55This attitude, that patients are unable to understand medical information about lifestyle, is not supported by sociological research (Siegler 1981; Armstrong 1991; Buetow 1995; Johanson et al. 1998). Such research has demonstrated that patients bring their own types of expert knowledge to the consultation and that they are able to make use of medical ideas about lifestyle in a competent and skilled way.
environmental circumstances of individuals and families and how these may affect their health; peer based and individual professional competency reviews; the Australian health system, community rural and urban health care resources and services to other disadvantaged groups; and the GP's role as a provider of continuing 'whole person' care " (University of Tasmania 1999:486).

However, in addition to the individualist focus found in many mainstream medical texts, several general practice textbooks utilised a broader biopsychosocial definition of lifestyle. "The biopsychosocial model provides a useful organising framework for understanding the processes that impact on health and illness from sub-cellular to political and societal levels" (Usherwood 1999:82). When lifestyle was being conceptualised in a biopsychosocial way, the focus was on patients' psychological states and their immediate social environments (e.g. Livesey 1986; Neighbour 1987; Morrell 1991). Usherwood (1999:84) argues that family doctors "have a responsibility which extends beyond the prevention and treatment of physical disease to include emotional and psychosocial issues". Such a conceptualisation of lifestyle was common in mainstream medical texts which were advocating the desirability of health promotion (health promotion was defined in terms of enabling all people to increase control over and improve their health) (e.g. RACGP 1998; Rogers et al. 1999).  

Discussions of lifestyle in these contexts demonstrated an expanded conception of the pathogenic sphere, as discussed in chapter two of this thesis (Lowenberg and Davis 1994). For example, in a report on linking general practice with population health, the authors advise their readers that the difference between preventive health and health promotion is that in health promotion doctors should be concerned with the population as a whole and not just people at risk for specific diseases. They argue that a concern

56 It was not uncommon for one text to demonstrate both a risk factor focus and a broader bio-psychosocial approach to lifestyle. As already discussed in the above section on public health there are several different lifestyle discourses available. These are partially related to context.

57 An expansion in the pathogenic sphere has implications for increased medicalisation (Lowenberg and Davis 1994:581). This is discussed in more detail in chapters five and six.
with the everyday life of populations is the difference between a health promotion perspective and a medical approach to disease prevention (Rogers et al. 1999:12).

In addition to a biopsychosocial approach to lifestyle found in mainstream medical texts interested in health promotion, a looser and more ambiguous conception of lifestyle(s) is also apparent where the term lifestyle is used to refer to often unspecified social factors which might be impacting on a patient’s health state or to any social factors which seem to be impacted upon by a patient’s health state. For example when an illness or medication is described as impacting on a patient’s ‘lifestyle’ (e.g. Polglase et al. 1984) or when a patient’s lifestyle is described as contributing to a difficult to define non-somatic situation such as suicide (e.g. Schlicht et al. 1990) or non-compliance to a medical regime. This conceptualisation of lifestyle was common when lifestyle(s) was being discussed as a management issue for doctors and their patients. (e.g. Jackson 1992; Simpson 1993). As with the example of lifestyle being used in diagnosis discussed earlier, when lifestyle is conceptualised in terms of management it transcends the preventive focus of epidemiology and public health. The following abstract quoted from an article about managing epilepsy written by two doctors working at the epilepsy unit at Westmead Hospital Sydney demonstrates this generalised understanding of lifestyle:

Abstract: OBJECTIVES: To study delay in diagnosis, seizure control, seizure provoking factors, suitable medications and drug side effects in patients with juvenile myoclonic epilepsy. DESIGN: Telephone and personal interview of patients and review of their clinical notes. PARTICIPANTS AND SETTING: Thirty-six patients attending an epilepsy clinic at a tertiary referral hospital. RESULTS: There was a substantial delay in the diagnosis of juvenile myoclonic epilepsy because the symptom of early morning myoclonus was not specifically sought. Sodium valproate is the drug of choice producing absolute seizure control in 63% of cases (19/30). Most patients with poor seizure control had provoked seizures only, emphasising the importance of lifestyle in management (Sharpe and Buchanan 1995:133, italics added).
What can be seen in this conception of lifestyle is an approach informed not by public health or epidemiology but which, instead, draws on conceptions of lifestyle similar to those found in social work, and the sociological chronic illness literature (e.g. Charmaz 1987; Robinson 1993; Thorne 1993). In the chronic illness literature and the social work literature discussions of lifestyle and health focus on how individuals and their families are able to cope successfully with the many demands of chronic illness such as asthma, arthritis, diabetes, multiple sclerosis or epilepsy (Knafl and Deatrick 1986; Charmaz 1990; Altschuler 1997).

Coping successfully is usually defined as effective management of the illness so that an individual is able to maintain their 'normal' lifestyle or able to develop a lifestyle which is achievable within the limitations imposed by medical treatment and physical capacity. These understandings of lifestyle are permeated by the sociological concepts of normalisation and management. Normalisation refers to a process whereby individuals and families living with a chronic illness come to define their ill member and their family life as 'normal': "Numerous researchers have found that the preferred story for many individuals and families managing a chronic condition is one of normalisation, that is essentially normal persons living normal lives" (Robinson 1993:9). Management is defined as an active process of applying specific measures to deal with illness concerns (Brooks and Matson 1987:74). Understanding illness in terms of management highlights the ongoing efforts involved with living with a chronic illness.

The implications of this for medical understandings of lifestyle are that a healthy lifestyle is understood not in terms of risk factors for disease but in terms of what is considered normal and desirable by a patient, their family and to a lesser extent doctors and other health workers. Disease, illness and medical treatment are all seen as factors which impact (usually negatively) on an individual's attempts to live a normal lifestyle. A lifestyle is viewed as a way of being made up of 'ordinary' tasks and actions such as
work, leisure and housework which shifts and changes in response to external pressures (e.g. Gerson et al. 1993; Elser 1990).

As can be seen from this discussion, mainstream medical constructions of lifestyle, health and disease are interesting because they are so varied. Mainstream medical texts such as journals, general practice texts and undergraduate medical texts demonstrate that outside the fields of epidemiology and public health medical conceptions of lifestyle are diverse and complex. These texts display epidemiological, risk factor health promotion and new public health understandings of lifestyle. They also show variations of these because unlike the research field of epidemiology or public health, both which are primarily concerned with patterns of disease and disease prevention in populations, mainstream medicine deals with diagnosis and the management of illness conditions in individuals.

In these contexts structural issues are individualised to focus on the family rather than wider issues such as unemployment or unsafe working conditions for certain types of workers. The psychological aspect of a biopsychosocial model of lifestyle is emphasised, particularly in relation to lifestyle issues such as family and personal relationships.

In addition, mainstream medical conceptions of lifestyle include characterisations of lifestyle not found in epidemiology or public health. See table 4.2 for a summary of the distinctive mainstream medical conceptions of lifestyle.
Table 4.2. Lifestyle in terms of diagnosis and management, distinctive mainstream medical conceptions of lifestyle

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Diagnosis</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Concern</td>
<td>Using knowledge about lifestyle risks as tool for diagnosis. Types of people identified in health promotion as being 'at risk' for certain diseases.</td>
<td>Managing chronic illness and the treatment of disease, achieving a 'normal' lifestyle.</td>
</tr>
<tr>
<td>Models of Thinking</td>
<td>Clinical models for diagnosis, medical model.</td>
<td>Bio-psycho-social and medical models, sociological, behavioural and nursing models.</td>
</tr>
<tr>
<td>Definition of lifestyle</td>
<td>Behaviours or attributes of individuals which are deemed to be risk factors for disease.</td>
<td>Styles of living, everyday life.</td>
</tr>
<tr>
<td>The social</td>
<td>Not applicable, individualist focus.</td>
<td>The social lives of the individual whose illness is being managed, particularly their family, personal relationships and work.</td>
</tr>
<tr>
<td>Risk</td>
<td>Important but blurred with cause.</td>
<td>Risk is not a focus.</td>
</tr>
</tbody>
</table>

An example of the distinctive nature medical conceptions of lifestyle identified in general practice texts is when lifestyle issues are represented as pertaining to the present situation rather than the prevention of future situations. Furthermore, lifestyle is often written about in terms of diagnosis, management and treatment for illness conditions rather than as risks for disease (Furner and Ross, 1993). General practice texts also include broad sweeping notions of 'normal lifestyle' and 'everyday lifestyle'. Here, lifestyle is not being considered in terms of risk but quite differently, in terms of how people want their lives to be, or as something that illness or treatment impacts upon (or which might impact on the efficacy of a particular treatment regime).

4.2.1 Variation within mainstream medical texts

As with epidemiological and public health texts, conceptions of lifestyle vary between different mainstream medical texts and within individual texts. Conceptions of lifestyle have also changed over time. This is demonstrated when texts published in different decades are compared (e.g. Balint et al. 1979; Hasler et al. 1984; Usherwood 1999).
Mainstream medical texts such as general practice guides and textbooks, books about primary health care, journal articles about prevention and family medicine all contained frequent references to lifestyle. As described earlier in this section, these types of texts utilised a range of different conceptions of lifestyle including epidemiological, risk factor health promotion, lifestyle as a diagnostic tool, lifestyle as everyday life which is impacted upon by illness or treatment and other biopsychosocial conceptions of lifestyle (e.g. Usherwood 1990, 1999; Walsh and McPhee 1992; Cohen et al. 1994; Jaen et al. 1994).

In contrast to this, medical textbooks from the bachelor of medicine degree at the University of Tasmania do not reflect a concern with lifestyle. Instead these undergraduate medical textbooks are primarily concerned with scientific medicine (anatomy, physiology, biochemistry) (e.g. Talley and O'Connor 1996; Wilson et al. 1997). This is a reflection of the course material of this undergraduate medical degree which (like other undergraduate medical degrees) is largely focused on biological disorders (and the application of the medical model).

Lifestyle was only touched upon in textbooks for community health, general practice, rural health and to a lesser extent epidemiology and bio-statistics (e.g. Neighbour 1987; Murtagh 1994). These texts provide an individually focused understanding of lifestyle and health. When the term lifestyle is used it is in the context of a brief summary of cardiac risk factors, as a brief summary of risk factor prevention strategies or in the context of referring to a patient's wider social environment. When disease or health is mentioned in terms of social settings or characteristics the individual is the actor being discussed and their social setting is the family. The structural understanding of lifestyle and health found in sociology and traditional public health is only represented in only one recommended textbook for the first year of the degree (Davis and George 1990).
In contrast to undergraduate medical textbooks, mainstream medical journals contained many references to lifestyle. This has changed over time. Lifestyle is a topic which has only become a feature in mainstream (non-epidemiological, non-public health and non-specialist) medical journals since the mid 1970s. Lifestyle as a medical subject heading for these journals did not exist before 1971. This is a reflection of the relative recency of epidemiological and public health concern with non-infectious diseases (Terris 1987:137), and of the expansion of epidemiological ideas and research about lifestyle into other medical fields and popular consciousness which occurred throughout the 1970s (Crawford 1984; Fitzgerald 1994; Peterson and Lupton 1996:1).

When reviewing articles from Medical Journal of Australia, Modern Medicine Australia, Australian and New Zealand Journal of Medicine and Australian Family Physician, I found that the number of articles with lifestyle as a key subject heading had increased over time from only 9 in the period 1971-1976, up to 40 in the period 1981-1986. The number of articles with lifestyle as a key word decreased in the period 1987-1990 and then started to increase again 1991-1996. The increase from the 1970s and sharp peak in the early to mid 1980s consisted mainly of articles about cardiac risk factors. The second climb in the 1990s was partially attributable to articles about risk factors for HIV/AIDS and also to a broadening of the scope of articles where lifestyle was a key subject heading. This reflects the extension of a lifestyle and risk focus to diseases other than cardiac disease.

Articles with lifestyle as a key subject heading were common in the Medical Journal of Australia and Australian Family Physician and uncommon in The Australian and New Zealand Journal of Medicine. Modern Medicine Australia had no articles with lifestyle as a key subject heading. The popularity of epidemiological style research in the Medical Journal of Australia and the popularity of articles about challenges for medical practice such as illness management and patient care in Australian Family Physician explain this pattern.
4.3 Lay texts

As discussed in chapter one, lay perceptions of lifestyle in relation to health and disease have been the focus of considerable sociological research (e.g. Blaxter 1983, 1990, 1997; Whittaker 1995; Kavanagh and Broom 1998; Wiles 1998). This published research has used interview and survey data to demonstrate the considerable variety which exists within lay perceptions of lifestyle.

In order to establish a working terminology of some prominent lay understandings of lifestyle operating within Australian popular culture in the mid-to late-1990s I reviewed a range of lay texts including self-help books, women's magazines, newspapers and alternative medical texts. This review does not reflect the range of different lay understandings of lifestyle and health. However, it has allowed for two ideal types of lay conceptions of lifestyle to be added to the typology of medical conceptions presented in the earlier sections of this thesis.

In addition to risk factor health promotion which frequently crosses between lay and medical texts, there were two additional distinctive approaches to lifestyle and health which frequently occurred in the lay texts reviewed.58 The first of these was common in popular magazines, self-help books, diet and exercise magazines (and also on infotainment television). I have termed this conception of lifestyle 'self-help, health, beauty and fitness industry'. This way of conceiving lifestyle presents a 'healthy' lifestyle as a marketable commodity. The second lay conception of lifestyle was (as would be expected) dominant in alternative/holistic medical texts but was also common in women's magazines, some self-help books and diet/exercise magazines. I have

58 There are also religious discourses on lifestyle, health and disease. I have omitted these as they tend to be restricted to religious texts; for example the small info-magazines produced by the Seventh Day Adventist Church and Jehovah's Witness Church. In these texts I found very similar ideas about lifestyle to those identified in health promotion texts and the self-help and fitness industry except that an emphasis on financial profit is replaced with an emphasis on religious credit. A healthy lifestyle is presented as a vital part of being a Seventh Day Adventist or a Jehovah's Witness.
termed this conception of lifestyle, 'alternative/holistic medicine'. See table 4.3 below for a summary of these two lay approaches.

Figure 4.3. Comparing 'self-help, health, beauty and fitness industry' approach to lifestyle with a 'holistic/alternative medicine' approach

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Self-help, health, beauty and fitness industry</th>
<th>Holistic/alternative medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal concern</td>
<td>'Selling' lifestyle 'facts' lifestyle and identity health, youth, beauty, sexual desirability.</td>
<td>Promoting wellbeing, preventing disease, advocating a 'healthy' lifestyle.</td>
</tr>
<tr>
<td>Models of thinking</td>
<td>Risk factor health promotion, marketing, consumption, individual responsibility.</td>
<td>Non western models of disease, alternative and holistic models of health and disease, occasionally draws on science for legitimacy, individual responsibility.</td>
</tr>
<tr>
<td>Definition of lifestyle</td>
<td>Something which an individual has, a 'healthy' lifestyle or an 'unhealthy lifestyle' constituted through consumption.</td>
<td>All aspects of being, includes physical, spiritual and emotional.</td>
</tr>
<tr>
<td>Risk</td>
<td>Risk factors as direct causes, individualised, personalised.</td>
<td>Rarely mentioned.</td>
</tr>
<tr>
<td>The social</td>
<td>Individualised.</td>
<td>Individualised.</td>
</tr>
</tbody>
</table>

4.3.1 Self-help, health, beauty and fitness industry

Ideas about lifestyle and health in this industry are explicitly centred around the selling of 'lifestyle' information to make monetary profits. Examples include health promotion advertising sponsored by industry bodies such as the Australian Dairy Corporation and the Australian Meat Marketing board, the new breed of info-tainment television shows such as 'Healthy Wealthy and Wise' and 'Good Medicine', books about lifestyle and health written by medical doctors such as 'The LS Factor: Lifestyle and Health' by Hetzel and McMichael (1987), health and beauty pages in magazines such as Cleo and The Australian Women's Weekly and popular magazines which focus explicitly on lifestyle and health such as Men's Health, Health and Fitness and Women and Health.
In this version of a lifestyle approach, health is a state which is achieved by living a 'healthy lifestyle'. Health can be recognised by a suitably slim and youthful appearance:

... health has become an essential prerequisite to participation in the youth valorising, sexualised, death-denying society in contrast to earlier times where modification of lifestyle was part of an ascetic or religious regime ... 'Within this logic, fitness and slimness become associated not only with energy, drive and vitality, but worthiness as a person; likewise the body beautiful comes to be taken as a sign of providence and prescience in health matters' (Hughes 1994:62).

In the representations of a lifestyle approach to understanding disease found in self-help, fitness, beauty and health texts, health is articulated in terms of an individual's identity as constructed through consumption practices.59 This linking of lifestyle, identity and consumption is overt in the cultural products from the self-help, fitness and beauty industry where the body is viewed as a source of investment. Fitness and health are commodities able to be stored as cultural assets (Schilling 1991; Synott 1992; Savage et al. 1992:112; Harvey 1998).

In a time when awareness of the potential health risks of almost any action is heightened and fear of inevitable aging and death is widespread, the purchasing of health foods, self-help books or videos, exercise clothing and equipment is critical to the formation of a self identity as a 'healthy' person (Warde 1994). It also serves to ameliorate feelings of anxiety or guilt about having an 'unhealthy' lifestyle.

This set of ideas about lifestyle and health is strongly informed by risk factor health promotion (thus also by epidemiological research into the determinants of disease).

59 The explicit relationship is between consumption practices and a lifestyle understanding of health. Individuals as consumers are purchasing the signs of a healthy lifestyle (healthy food, exercise clothing and equipment) for their meaning rather than their utility or exchange value (Featherstone 1991; Bauman 1992; Crook et al. 1992).
Like risk factor health promotion, information about lifestyle and health/disease is generally presented as 'medical facts' which can be used by the reader as a guide for the ongoing challenge of achieving and maintaining a 'healthy' lifestyle and preventing disease/disability (e.g. Connor and Connor 1991; Kowalski 1989; Hetzel and McMichael 1987).

Also like risk factor health promotion, in self-help, beauty, health and fitness industry conceptions of lifestyle, lifestyle information is frequently discussed in terms of risk. However, representations of lifestyle risk in self-help/fitness and beauty industry texts are even more reductive than those found in risk factor health promotion. In self-help industry texts statements about risk, disease determinants and lifestyle are presented without any of the qualifying statements found in medical texts. Lay readers are not presented with any competing ideas or evidence about lifestyle and health, nor are they provided with any information about how such research results were obtained. Any awareness of differing levels of risk is lost. Risk factors become direct causes as in the following quotation:

> There is a growing recognition that the major causes of disease and disability in contemporary, affluent, Western society are the result of individual behaviours in daily life and that the key to good health lies much more with the prevention than with the cure (Hetzel and McMichael 1987:2).

To a lesser extent, the self-help and fitness industry understandings about lifestyle and health also contain influences from the wellness movement (and other associated sets of ideas about health) in that they refer to 'feeling better' and 'improved self esteem through fitness', and contain descriptions such as 'vitality', 'energy' and 'wellbeing'. In many cases statements about the 'other' benefits of a healthy lifestyle (other than

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60 Several times a year an article or television story is presented which questions the lifestyle approach. For example an article from *The Hobart Mercury* Thursday Feb 13, 1997 titled 'The Thin, Green Line' describes the plight of children being fed 'health' foods which deprive them of needed fats. These news stories tend to rely on dramatic headlines about the possible dangers of a low fat diet, 'health food' or excessive exercise. These types of texts subvert the health risk discourses to suggest that behaviours and practices currently considered to be healthy may actually be detrimental.
slimness, youth or disease prevention) are fairly cursory and often appear to be an attempt to provide additional motivation to the reader, especially the type based on immediate gratification. This is demonstrated in the following quote from *Cosmopolitan Magazine* "an exercise program will have immediate benefits such as increased feelings of wellbeing and vitality long before weight loss and cardiovascular fitness results become noticeable" (*Cosmopolitan Magazine* January 1999:45).

An interesting variation within the self-help/fitness and beauty industry understanding of lifestyle is that found in advertising material for 'miracle cures'. These brochures, leaflets and advertisements in the back of some magazines promote books, video or cassette tapes which are said to contain information about 'super foods' which prevent and reverse aging, or 'quick and easy' exercise to improve your appearance. Sometimes written by doctors or by skilled lay people with some claim to specialist knowledge, these texts present a lifestyle approach which aims to replace traditional medical therapies such as drugs and surgery and which claim to produce cures in chronic patients.

Another feature of self-help/fitness and beauty industry understandings about lifestyle and health is that these frequently utilise ideas and phrases from alternative medicine. It is in fact very difficult to differentiate between alternative/holistic understandings about health and lifestyle and self-help/fitness and beauty industry understandings in many popular texts. Alternative health information is marketable, fashionable (Easthope 1992; Siahpush 1998) and provides far more scope for the authors of self help texts than the rather limited range of risk factor health promotion.

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61 For a more extensive discussion of this point see Goldstein (2000).
4.3.2 Alternative/holistic medicine.

Holistic and alternative medicine are influential lay discourses on health, bodies and illness (Siahpush 1998). Alternative medicine has risen in popularity since the 1970s. Explanations for this popularity include the women's health movement and gay rights movements both of which have resulted in opposition towards orthodox medicine, and widespread societal changes in levels of trust accorded to orthodox professionals and expert systems. Siahpush (1998) suggests that the popularity of alternative health is a reflection of postmodern values while Coward (1989) stresses the development of new attitudes towards bodies and health:

The notion of being alternative is considerably more than just doing it differently from orthodox medicine. It is also a symbolic activity. It is a profound expression of a new consciousness which individuals have about health and the body. This involves a commitment to finding a new lifestyle, to pursuing a new well-being, and to finding 'natural' ways of achieving this well-being. Above all it is a new consciousness of the importance of the individual in achieving health (Coward 1989:11).

Proponents of alternative health often use the term lifestyle when referring to all aspects of an individual's being, all of which are assumed to affect their physical, emotional and spiritual health (e.g. Chopra 1998). This includes the lifestyle issues mentioned in other lifestyle theories such as diet, exercise and stress but also includes spiritual, emotional and environmental issues, for example see the following two excerpts from alternative health texts:

The reasons for poor health are at least threefold. Firstly there are the obvious physical causes such as an insect sting, a sports injury, a burn or food

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62 Scott (1988) argues that feminist homeopathy is able to address three of the major concerns expressed in feminist critique of biomedicine. Namely "... the power dynamics within the clinical encounter, the degree to which social and environmental issues are incorporated within medical diagnosis and treatment, and the manner in which the patient's subjective experience is used during case taking" (1988:191). Because of these she suggests that homeopathy may be considered a 'feminist' form of medicine. However, importantly she also notes the width of scope allowed homoeopathic practitioners when constructing and enforcing normative forms of behaviour. See also Lowenberg and Davis (1992).
poisoning. Second there are the circumstances in which we live, including damp or noisy housing, exposure to high levels of radiation and other pollutants and poor working conditions such as sub-standard lighting and seating which will result in postural misalignment. Thirdly, and in my view probably the most important of all, is the emotional component. Grief, shock, anger, frustration and other negative emotions can be just as potent a cause of disease as any physical factor. So by launching into the reasons why eating properly is the indispensable foundation of all good health I am not implying that nothing else matters. We need clean air and sunshine as well as the plants on which we are so dependent. In common with other animals we need regular exercise and because our minds are indelibly linked to our bodies we also have deep spiritual and psychological needs. If these are not met, eventually our bodies will show the symptoms of dis-ease (Kitty Campion 1996:10).

**Ten Golden Rules of Health**

1. Stop putting poisons into the body.
2. It takes 5-7 times the normal amount of nutrition to build and repair than it does to maintain.
3. Nothing heals in the human body in less than three months, add one month for every year that you have been sick.
4. Have moderation in all things.
5. Make peace with nature.
6. Live closer to God.
7. You must take responsibility for yourself and your health.
8. Eat as much raw food as possible.
9. Exercise regularly for the rest of your life.
10. Practise and learn to understand completely Hering's Law of Cure, which is "All cures starts from without and from the head down and reverse order as the symptoms have appeared"

developing disease. Rather, these conceptions of lifestyle are based around the encompassing ideals of holism, new age philosophy and the specific conceptions of the body and disease found in approaches as varied as naturopathy, reiki, acupuncture, shiatsu, eastern mysticism, paganism, occult meditation and various non-western medicines and theories of healing.

Unlike the claims made about lifestyle in epidemiological texts and scientific medical journals, accounts of lifestyle in alternative/holistic texts are often characterised by language expressing certainty and fact. This is similar to the risk factor health promotion literature or the self help and fitness industry texts discussed above. However, in the alternative literature far wilder and more extreme statements are made. See, for example, this claim that lifestyle is the cause of multiple sclerosis:

No Mystery
In Australia, one in 2000 people is diagnosed with multiple sclerosis. The allopathic view is that this is a mysterious disease of unknown cause, with no known cure. ... In fact, MS is a disease of civilisation, unknown in primitive societies. As acupuncturist and homoeopath John Craine, points out: 'Rice eating countries show very little evidence of MS; it is much more evident where wheat is the principal grain in the diet. Evidence also shows that MS is a syndrome of malnutrition, derived from a low nutritional diet, not lack of quantity but lack of quality'. MS is mostly spread, he says, in those areas where dairy products are predominant. ...The three main lifestyle factors responsible for degenerative diseases are the modern diet, stress and lack of exercise. ... From clinical and anecdotal evidence there is no doubt that lifestyle methods are the appropriate approach for Ms and if persevered with, there are good grounds for optimism" (Roger French Executive Director of Natural Health Australia writing for Australian Wellbeing Magazine No. 56 1994: 102).

This example also demonstrates another important feature of alternative/holistic conceptions of lifestyle and health, that is a focus on nutrition and digestion. In alternative/holistic accounts on lifestyle and health a focus on the ingestion of 'healthy'
foods appears to be driven not by any functional imperative but, instead, involves the consumption of symbolic meaning, control and individual reflexivity. Thus, like the self help, fitness and beauty industry and contemporary health promotion, alternative/holistic texts often conceive health as a lifestyle choice articulated in terms of self identity and consumption (e.g. Inglis and West 1983; Campion 1996).

Ironically, as with the new public health which also espouses holistic notions of health and a broadening of focus, the alternative practitioners' focus on diet often seems to contradict their arguments about recognising the relationships between all aspects of living and health. By focusing on diet or other alternative practices, alternative/holistic texts frequently end up espousing a narrow lifestylist perspective which is far from being holistic.

Alternative and holistic theories about the relationships between food and disease are rarely considered salient in medical circles (Hamilton et.al. 1995:498). This is largely because of their 'non-scientific' basis. This is a reflection of the distinction commonly made between lay knowledges and medical (scientific) knowledges:

[N]utritional scientists are particularly prone to interpreting this kind of dietary choice [alternative health] as an instance of the persistence of magical and mystical orientations in a contemporary, rational, scientific era but in the guise of modern science. They tend to dismiss the ideas associated with these alternative dietary regimes as mere food faddism and, in fact, a new form of superstition (Hamilton et al. 1995:498).

Despite the differences between alternative/holistic and orthodox medical perspectives they should not be considered as opposites (Wolpe 1990; Montgomery 1991; Lowenberg and Davis 1994; May and Sirur 1998). In an article about the metaphorical systems underlying contemporary ideas about disease Montgomery (1991) argues that biomedicine and holistic health are in fact quite similar in their approach to disease. Modern medicine retains ideas about disease stemming from traditional healing and
older medicines (Greek, Islamic). These ideas also underpin many holistic modalities (Montgomery 1991, 1993) Furthermore, biomedicine has always contained holistic ideas about the environment and personal circumstances and holistic health and biomedicine utilise similar imagery to make sense of disease (1991:362-363).

Similarities between orthodox medicine and alternative therapies can also be seen in the way that health and illness are understood in terms of functional meaning (Crawford 1980:370). This is demonstrated on popular medical info-tainment shows on television and in accompanying magazines (such as Good Medicine or Healthy Wealthy and Wise). These shows and books incorporate alternative therapies such as homeopathy, acupuncture or herbalism with orthodox medical advice. This incorporation is easily achieved because the same language is used to refer to illness states and similar explanations are often given. For example a monthly magazine called Womens Health 63 has a regular page titled 'natures way' written by a naturopath who "offers a holistic approach to treating your medical woes and improving your overall wellbeing" (Womens Health Dec 1999:115). In response to questions written by readers of the magazine, the naturopath offers 'natural' suggestions which are presented in a similar way to medical prescriptions. For example in response to a letter asking for strategies to avoid catching winter colds in an air conditioned office building 'May', the naturopath, offers the following advice:

I'd recommend taking 3000 - 4000 mg of vitamin C daily which will strengthen your cells against bacterial invasion, and a garlic tablet each day to help stimulate your immune system. If you're serious about staying well, you'll also need to reassess your diet. Steer clear of sugar and refined carbohydrates, as they feed viruses and bacteria (Womens Health Dec 1999:115).

63 This example crosses between self-help, beauty, health and fitness industry and alternative/holistic health. It is a page in a popular women's magazine, but it is also written by a naturopath and presented as an alternative to orthodox medicine.
In another example of the occasional blurring between lay and medical thought which was apparent in lay texts, alternative/holistic texts often used scientific journal articles or terminology.\(^{64}\) This is despite the fact that alternative/holistic medicine is not based on science. For example, in a pamphlet about gut repair and liver detoxification which is printed by a company producing and selling a detoxification program, the company's claims are expressed using scientific terms such as "inflammatory or toxic reactions", "bacterial imbalances" and "metabolic dysfunction" (Metagenics 1999).

When describing the minerals and chemicals which are provided as tablets and powders in their detoxification program they use terms such as "predigested hydrolysed lactalbumin", "Fructo-oligosaccharides and "medium chain triglycerides". This pamphlet also cites medical journals such as *The Lancet* and *Archives of Surgery*.

In addition to alternative and holistic writings on lifestyle and health being influenced by biomedical language and ideas, alternative/holistic ideas may influence orthodox medical practice. For example, some orthodox practitioners practise acupuncture, homeopathy, massage and meditation. May and Sirur (1998) argue that medical doctors practise alternative treatments (in their case homoeopathy) for a number of reasons: an interest in esoteric and marginal treatments; a desire to avoid unnecessary iatrogenic disease; and because their own experiences of using alternative treatment for their patients suggests that it is helpful. While May and Sirur did not find that the doctors in their study were affected by patient/consumer demand for alternative treatment other authors have written about this. Bakx (1991), for example, sees consumer demand as the driving force behind increased popularity of alternative treatments. Easthope (1993:293) and Kelner (2000) expand on this idea to suggest that orthodox practitioners who offer alternative forms of treatment are tapping into a patient demand for customised care which caters for the individual.

\(^{64}\) Authors of these texts frequently use scientific information or language to gain legitimacy. However, orthodox medical doctors are extremely unlikely to do this in reverse. When investigating medical practitioners who practise alternative therapies Easthope (1992) has found that these doctors explain the success of alternative therapies using scientific/medical explanations rather than the non-scientific arguments which underlie such therapies as acupuncture, Chinese medicine or reiki.
4.4 Conclusion

Section 4.1 of this chapter briefly recapped the key features of epidemiological, risk factor health promotion and new public health approaches to lifestyle (as originally described in chapter one). It demonstrated that epidemiological and public health conceptions of lifestyle are closely related but are not identical. It also demonstrated that public health is not a unified field in relation to understanding lifestyle. Risk factor health promotion varies considerably from the new public health. This section also described variations within the textual representations of lifestyle in epidemiological and public health texts and outlined an 'ideal type' of epidemiological, risk factor health promotion and new public health conception of lifestyle (see table 4.0).

Section 4.2 of the chapter presented the results of a review of mainstream medical texts. These texts include medical journals (non-epidemiological, non-public health and non-specialist), undergraduate medical textbooks and general practice texts. This review establishes which conceptions of lifestyle are used in some areas of 'mainstream medicine': ie outside the specific fields of epidemiology and public health). It also provides support for the argument, outlined in chapter two, that medical ideas about lifestyle from epidemiology or public health are not identical to conceptions of lifestyle used elsewhere in medicine and thus these should not be taken as representative of a unified medical understanding of lifestyle. These results are summarised in table 4.1 and 4.2.

Section 4.3 presented the results of a review of lay texts. These included self-help books, women's magazines and alternative/holistic medicine texts. Two ideal types of lay textual conceptions of lifestyle were described: a self-help, beauty, health and fitness industry conception of lifestyle and an alternative/holistic conception. These are summarised in table 4.3. The results of this review demonstrate that medical

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65See Methods Chapter for details.
understandings of lifestyle are incorporated into these lay conceptions of lifestyle. For example, conceptions of lifestyle from epidemiology and public health are present in self-help, beauty, health and fitness industry conceptions of lifestyle and in alternative/holistic conceptions of lifestyle.

In summary, medical understandings of lifestyle vary between different medical fields. They range from reductive conceptions of lifestyle as isolated behaviours or practices which have been identified as risk factors for disease to wide-ranging biopsychosocial conceptions of lifestyle as everyday life, family, work and personal relationships. It is apparent that within the texts reviewed, medical conceptions of lifestyle from epidemiology and the new public health are used to explain disease and health in populations whereas risk factor health promotion and some mainstream medical conceptions of lifestyle are used to explain disease and health in individuals. Figure 4.4 illustrates the key features of each of the different medical and lay conceptions of lifestyle identified in texts in relation to each other.
Figure 4.4 Overview Of Textual Conceptions Of Lifestyle: Visual Summary Illustrating Inter-Relationships Between The Different Conceptions of Lifestyle

EPIDEMIOLOGICAL
- modifiable, socially isolated physical health populations
- statistical risk medical science
distanced from the individual

PUBLIC HEALTH
- Risk Factor Health Promotion
  - 'Facts'
tension between individual and population
  - individual responsibility
  - education
disease prevention
  - medical science
  - individualised/personalised risk factors
  - control

New Public health
- Structural/environmental cultural Health
  - individuals in social context
  - biopsychosocial definition of health

wellness
inguishing
social sciences
psychology
sociology
toward new types of epidemiology

MAINSTREAM MEDICAL
- epidemiology
- education
- research
- patients
- Journals
- Undergraduate Texts
- n.a.

SELF-HELP, BEAUTY AND FITNESS
- General Practice Texts
- patients
  - risk assessment
  - lifestyle advice
  - resource in clinical reasoning
  - management/treatment
  - biopsychosocial
    - (individualist)
- risk
  - control
  - health
  - aging
  - identity
  - consumption
  - 'facts'
  - individual responsibility

ALTERNATIVE/HOLISTIC
- biopsychosocial
  - science and alternative
  - sources of legitimacy
  - individualist
  - individual responsibility
  - for health
  - identity consumption

Despite the range of medical conceptions of lifestyle identified in medical texts a number of generalised characteristics of medical understandings of lifestyle can be identified. Firstly, when medical texts discuss lifestyle it is nearly always in the context of a discussion about non-biological, 'social' determinants or contexts of disease and health. Conceptions of lifestyle provide an explanatory framework which is used in medicine to explain and account for the social. However, medical conceptions of lifestyle reflect the individualised understandings of the social found in orthodox medical thought. They focus on the individual within their immediate social environment and rarely account for structural or cultural factors such as gender, socioeconomic status, class, race, sexuality or ethnicity. This is in contrast to the sociological approach to explaining patterns of disease and health in terms of lifestyle which was described in chapters two (e.g. Bunton and Macdonald 1992; Cockerham 1995; Abel 1991; Link and Phelan 1995).

This individualised understanding of lifestyle is demonstrated in texts where patients are described as having a certain type of lifestyle or as having lifestyle risks. Because differences in how a healthy lifestyle might be perceived and in how such lifestyles might be achieved are largely ignored in medical conceptions of lifestyle, it is apparent that medical understandings of lifestyle are assumed to be universal even though they are demonstrably located within late twentieth century western culture.

In addition to largely neglecting the structural or cultural aspects of lifestyle (with the exception of some new public health texts), very few of the medical texts reviewed mentioned children when they discussed lifestyle. In medical understandings of lifestyle it is mainly adults who are perceived as having a lifestyle; children, it seems, do not. This is partly a reflection of the emphasis placed on lifestyle choice and individual responsibility for lifestyle choices. In western cultures children are not viewed as independent or autonomous, thus their lifestyles are not formed through

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66It is never acknowledged in medical texts that doctors also have 'lifestyles' or that their opinions about healthy lifestyles are variable.
their own choices but rather, through their parents' 'choices'. This absence of children in medical writing about lifestyle is also a reflection of the third general characteristic of medical conceptions of lifestyle identified in medical texts: the close relationship between lifestyle explanations and the chronic diseases of adulthood such as heart disease, diabetes or some cancers. Lifestyle is an explanatory concept used to explain the causes, risks and prevention of chronic diseases associated with aging and western civilisation.

The different medical conceptions of lifestyle presented in this chapter have several implications for clinical practice. If doctors have available to them, a range of different medical (and lay) conceptions of lifestyle which vary considerably from each other then it is unclear which conceptions they will actually enrol when constructing their own understandings of lifestyle during clinical practice. These different conceptions of lifestyle have implications for patients and for the way that doctors make sense of disease. For example, a risk factor health promotion conception of lifestyle is reductive and moralistic whilst a biopsychosocial conception of lifestyle is less moralistic or reductive but does involve an extension of the pathogenic sphere and thus an extension of the medical gaze to more aspects of a patient's everyday life. An epidemiological conception of lifestyle, while useful for accounting for patterns of health and disease in populations, is unlikely to be useful to a doctor trying to explain to themselves or their patients why one particular person has become unwell.

The complexity associated with how doctors construct their own understandings of lifestyle is further heightened when findings about lay understandings of lifestyle are considered. Sociological research into lay understandings of lifestyle, in relation to sickness and health, has found that lay people actively interpret medical explanations for disease in the light of their own experiences of illness, both in themselves and the illness of other people that they know (Davison et al. 1991, 1992; Nettleton 1995:41). Lay understandings of health and disease have been shown to vary according to social
location. Class, ethnicity, gender, age and geographical location have all been shown to influence how people make sense of sickness and health (Green 1997; Helman 1978, 1981a; Herzlich and Perriet 1987; Blaxter 1990). Lay people have also been shown to resist explanations for disease which do not sit well with their wider beliefs or which imply that they are responsible for their ill-health (Davison et al. 1991, 1992). Because of this, lay people will explain good health in terms of lifestyle but are more likely to explain illness in terms of factors outside of an individual's control, such as fate, bad luck, susceptibility or biological causes such as a virus (Williams 1983:189; Calnan 1987:12; Davison et al. 1991).

While doctors' understandings have not been studied in the same way as those of lay people, the limited studies which have been done suggest that doctors' understandings of lifestyle will also be influenced by their personal values, personal and clinical experiences and the views of patients (Atkinson 1981; Gaines and Hahn 1985; Arksey 1994). Thus when they make use of available medical and lay conceptions of lifestyle it will be in a complicated fashion. The next chapter (chapter five) addresses this issue through the presentation of interview and observation data. Using this data, I describe how individual medical doctors make use of various medical and lay conceptions of lifestyle when constructing their own understandings of lifestyle.
Chapter Five
Doctors' Understandings of Lifestyle

5.0 Introduction

The previous chapter explored medical understandings of lifestyle through a thematic review of medical and lay texts in the form of typologies of lifestyle conceptions. This chapter continues exploring medical understandings of lifestyle by presenting the results of twenty in-depth interviews with doctors, observation of fifty-two doctor/patient consultations and ten participant observations of doctor/patient consultations.

This chapter demonstrates that doctors construct explanatory frameworks by drawing on a range of different understandings of lifestyle to explain a range of different situations. These situations include the risks and causes of disease, disease prevention, the social nature of ill health, the social context of their patients, the management and treatment of illness, the maintenance of health and the delaying of aging.

Understandings of lifestyle vary between different doctors, and individual doctors shift between different ways of talking about lifestyle as the issues they are talking about change. Furthermore because doctors draw on non-medical conceptions of lifestyle their understandings of lifestyle blur the boundaries between lay and medical thought.

Lifestyle is also shown to be an explanatory concept which has a range of benefits and limitations for doctors. It is limited by the individualised nature of medical conceptions of the social, the moralistic nature of many medical and lay conceptions of lifestyle and the unsuitability of lifestyle to provide explanations for why individuals develop disease. It is of benefit to doctors because: lifestyle is an ambiguous concept which can be altered to account for a range of different situations; lifestyle provides doctors with a multi-causal explanation for disease; lifestyle provides doctors with a framework to
address the social (unlike other medical models of disease); lifestyle allows doctors to construct explanatory narratives which draw on everyday language to describe everyday practices; when talking about risk in terms of lifestyle doctors are able to present disease risk as containable and manageable. This is in contrast to other types of disease risk which do not offer patients and doctors the perception that they can manage/control risk.

5.1 A framework for the presentation of results: disease, illness and health

When doctors were talking about lifestyle they did not use a unified understanding of what lifestyle is, or how this might relate to disease, illness or health. Instead, analysis of interview and observation data demonstrated that the doctors in this study shifted between a range of different understandings of lifestyle as the topic they were discussing changed or as one particular way of talking about lifestyle ceased to be useful for them.

There was variation between individual doctors and the shifts between different types of lifestyle understanding were not always clearly identifiable because the doctors often layered different understandings of lifestyle. Nevertheless, when the interview and observation data were analysed it was apparent that doctors spoke about lifestyle in six distinctly different ways which could be organised using the categories of disease, illness and health. By disease I am referring to those times when doctors were explicitly referring to biological disorder and recognised disease entities. By illness I am referring to those times when the doctors spoke about the social context of disease and the experience of being sick. By health I am referring to those times when the doctors spoke about positive states of wellbeing and the maintenance of these states. By differentiating between disease and illness I am using the familiar sociological distinction between disease and illness. However, I am arguing that doctors are concerned with disease, illness and health. This is a point of departure from the usual
assumption underlying the disease/illness distinction, that doctors are concerned mainly with disease whilst illness is of concern to patients and lay people. The different ways that doctors talked about lifestyle are summarised in figure 5.1:

**Figure 5.1 How doctors spoke about lifestyle in different conversational contexts.**

*When talking about disease*

1. Lifestyle as a determinant of disease
2. Lifestyle as a risk factor for disease

*When talking about illness*

3. Lifestyle as a patient's social history
4. Lifestyle in relation to illness management and treatment

*When talking about health*

5. Lifestyle as a commonsense prescription for good health
6. Lifestyle as a magical formula for good health

After distinguishing between the different ways that doctors talked about lifestyle it was evident that many of their conceptions of lifestyle are familiar from the textual review presented in chapter four. However, they also enrolled conceptions of lifestyle which were not evident in the textual review.

When doctors were talking about lifestyle in relation to disease they enrolled conceptions of lifestyle described in chapter four as epidemiological and risk factor health promotion. When doctors were talking about lifestyle in relation to illness, they enrolled biopsychosocial conceptions of lifestyle. These were similar to those conceptions of lifestyle identified in chapter four in some aspects of the new public

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67See for example Dingwall (1976) and Fabrega 1974).
68Each of these will be addressed in detail and demonstrated using examples from interview transcripts, observation and participant observation data, in the body of this chapter.
health, primary health care, general practice texts and the chronic illness literature. When doctors were talking about lifestyle in relation to the maintenance of good health they enrolled conceptions of lifestyle found in risk factor health promotion, the self help, beauty and fitness industry and alternative medicine. They also drew on commonsense lay/folk conceptions of lifestyle which were not found in any of the lay or medical texts reviewed in chapter four.

5.2 Lifestyle and disease

There were two distinct ways that doctors talked about lifestyle when they were talking about disease. These were: lifestyle as a cause of disease; and lifestyle as a risk factor for disease. Doctors rarely used ideas about lifestyle as a sole explanation for disease. Instead they talked about lifestyle in conjunction with other medical frameworks for explaining disease, such as biochemical models, germ theory, genetic explanations and psychological explanations.

5.2.1 Lifestyle as a determinant/cause of disease

None of the doctors I spoke with claimed that lifestyle alone could cause disease. When they talked about lifestyle as a cause of disease their accounts were characterised by uncertainty and qualification.69

When doctors described lifestyle as a cause of disease they spoke about the diseases which in Australia have been the focus of highly publicised lifestyle orientated health promotion campaigns, such as certain cancers, cardiovascular disease, adult onset diabetes and to a lesser extent certain sexually transmitted infections (O'Connor and Parker 1995:49; AIHW 1998:75). When talking about lifestyle as a cause of these diseases the conceptions of lifestyle which doctors used, were similar to those in epidemiology and risk factor health promotion texts. For example, when asked to

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69This is in contrast to their discussions about lifestyle and risk, which I will discuss in the next section, where the doctors frequently talked about risk as though it were cause or a certainty. Uncertainty is a recognised feature of medical knowledge and practice (Fox 2000:409).
describe what they meant by lifestyle in this context doctors gave definitions which included reference to specific types of behaviours such as smoking, high blood pressure, lack of exercise, unprotected sex, and injecting drugs. In the following example Dr G, a 26 year old female registrar provides a clear example of this way of conceptualising lifestyle:

Emily: Are there lifestyle diseases?

Dr G: OK, yeah, well obviously there are a lot that you could mention but obvious ones would be heart disease, lung cancer and their relationship to smoking. That is probably the most obvious one. ... Um, diabetes, you know, cerebrovascular disease, peripheral vascular disease. Most of these tie in with smoking but there are also other unhealthy lifestyle things such as not getting enough exercise, high blood pressure. All those sorts of things add into most of them.

Emily: When you are thinking about those diseases are you saying that lifestyle is a cause of disease or that it's just an issue affecting how a person will experience the disease?

Dr G: Well obviously they are related to the person actually having the disease in the first place.

When I asked doctors why they associated these diseases with lifestyle most stated that they had not learnt about the relationship between lifestyle and these diseases from health promotion because they described health promotion as being aimed more at patients than at doctors. Instead they talked about epidemiological research and made statements such as "These are widely accepted, the connections between lifestyle and these types of diseases" (Dr L). The registrar quoted above (Dr G) did suggest that the relationship between smoking and certain diseases seemed very direct to her because she had been working on a hospital ward full of respiratory cases and that nearly all of her patients were middle aged or elderly smokers. She attributed their respiratory
disease to their cigarette smoking. Thus she implicitly acknowledged clinical experience as an additional source of her knowledge about lifestyle.

Despite using ideas about lifestyle and disease which were derived from (or at least very similar to) the reductive conception of lifestyle found in risk factor health promotion doctors (at least to a degree) overcame the reductive nature of these conceptions of lifestyle by using them in the construction of complex aetiological narratives which describe lifestyle factors as only one factor in a multi-factorial aetiology. The construction of stories which explain disease, define the normal, define the aberrant, and which attribute casualty and responsibility have until recently been associated with non-western cultures and lay people within western cultures (e.g. Foster and Anderson 1978; Kleinman 1980). However, medical anthropologists have demonstrated that biomedical knowledge and practice relies heavily on narrative (Good and Good 1980; Atkinson 1988, 1995). "[C]linical medicine as an institutional discourse both uses storytelling as a central facet of its professional procedures and produces stories by bringing certain kinds of social phenomena under the umbrella of medical expertise" (Epstein 1995:20).

The construction of etiological narratives which describe lifestyle as one of many causes of disease is an understanding of lifestyle informed by the web of causality approach utilised in epidemiology (Kriegler 1994:890). However, this way of describing lifestyle as a cause of disease is also similar to examples described by authors writing about the process of lay epidemiology (e.g. Davison et al. 1991, 1992; Whittaker 1995). Lay epidemiology is the process whereby non-medical individuals use scientific information about lifestyle and disease in conjunction with their own observations of illness and disease and understandings of chance and luck to construct explanations for disease (Davison et al. 1992:678). Through this process they seek to render information about the causes of disease, personally intelligible. While lay epidemiologists make use of medical information, the explanations and understandings
of cause and risk they construct are often different from medical explanations in fields such as epidemiology or public health (Kavanagh and Broom 1998:442)

In the following example Dr A, a female general practitioner in her mid 40s, while clearly describing lifestyle as a cause of disease, also establishes that lifestyle is only one factor among many which may result in the expression of disease:

Emily: Can lifestyle ever be used to explain the cause of disease in the way that bacteria or viruses are used to explain the cause of disease?

Dr A: I think that lifestyle can be a cause of disease and I go back in history there. I think if you read about the impact of white man on Pacific tribes, the Pacific people. There is no doubt that the introduction of white habits caused disease. So refined food caused disease in those people which had not been expressed before, presumably these people have some diabetic gene but it was never expressed because of what they ate. I um, ... ah... Did lifestyle cause disease? Is it an aspect of that lifestyle which caused disease? Now if we talk about coronary heart disease, the things that come together to cause that expression, to cause that disease, to cause something to develop, fatty plaques in your blood vessels, are their genetics, sedentary lifestyle, the fact they smoke, the fact they drink too much alcohol, maybe stress has something to do with it, and the fact that their diet has been, ah, full of animal fats and not enough complex carbohydrates. It's a combination of things that have caused disease to be expressed, many of which are lifestyle.

The most frequently mentioned additional determinant in many of the diseases doctors associated with lifestyle was genetics. When doctors spoke about genetics they spoke about individuals having varying levels of susceptibility to the diseases associated with lifestyle because of 'their genetics'. This notion of an 'individual constitution' is far older than contemporary epidemiological ideas about lifestyle. It is a feature in
nineteenth century medical texts and in twentieth century understandings of immune systems and immunity (Martin 1994). It is also a feature of contemporary lay understandings of bodily imbalance (Peters et al. 1998:559).

Describing genetics as a difficult to assess contributing factor in disease aetiology is a useful strategy for doctors. Attributing disease to genetics suggests that diseases are actually predictable and that their development follows a set of rules; it is just that science has not yet decoded these rules.

As stated in the introduction to this section, doctors frequently seemed to be uncomfortable about claiming that lifestyle actually causes disease. In their statements about cause and lifestyle they raised issues about uncertainty in medical knowledge about the causes of disease. When doctors discussed medical uncertainty about the causes of disease they mentioned most was cancer. In the following example, Dr P, an oncologist in his mid-fifties, describes the way that patients often want to know why they have cancer. While he is able to suggest genetics and cigarette smoking as possible factors contributing to cancer he concludes that for most cancers there is no explanation:

Emily: How do you explain the cause of cancer to your patients? Do you talk about lifestyle as a cause?

Dr P: Well in the case of lung cancer, people with lung cancer know what caused it, nearly always. I had one lady, just recently who had lung cancer at the age of seventy and when she came to see me she had a little cutting from a newspaper from 1968, which she had kept, which said 'smoking does not cause lung cancer'. This had been her talisman all those years you see. So, a lot of people have blind spots and denial and that sort of thing. So, people won't accept it but in terms of what caused it a lot of

70 That doctors spoke about uncertainty in relation to cancer is not surprising. Despite intense medical efforts throughout the twentieth century, medical understanding and control of cancer remains minimal (Fox 2000:412).
people are very concerned to know whether there is a hereditary factor because they are concerned about their children. And most cancers, as far as we know, there isn't. Apart from a few cancers that definitely are, like breast and in a few cases colon cancer and a few others. So, in those cases you give them advice as to what should be done for their children. That's the main reason people want to know. People often ask and we have to say, 'we don't know'. I mean some cancers the risk goes up with smoking but not as dramatically as for lung cancer. The fact is that for most cancers we just don't know.

Discussions of uncertainty regarding whether the causes of disease could be explained in terms of lifestyle were often focused on an individual case. It was as though doctors could easily describe lifestyle as causing disease in the abstract but when confronted with a 'real life situation' lifestyle arguments were no longer as useful or perceived as desirable. There are two possible explanations for this pattern. The first is that epidemiological arguments about lifestyle factors and disease are arguments designed to explain patterns of disease in populations. They are not sufficient to account for most individual cases. This is particularly apparent when a doctor has a patient who develops a serious disease despite having a 'healthy' lifestyle. In this next example Dr C, a general practitioner in her early forties, was clearly saddened and frustrated by her inability to explain the reason why one of her patients had developed cancer: 71

Emily: Do you ever have patients come to see you who are confused about why they got seriously ill with a serious disease because they have been practising a healthy lifestyle?

Dr C: Yes I do.

Emily: Can you think of any examples?

71 Sontag (1978, 1989) has described the ways that the absence of medical explanation for cancer contributes to the fear associated with the disease. It was apparent in doctors' accounts that uncertainty about the causes of cancer is also stressful for doctors.
Dr C: Well I can actually. This happened to a woman that I know, who is actually around the same age as me. She recently came to see me about a sore in her mouth, an ulcer. And it turned out to be oral cancer. The prognosis is very poor and she probably has only a few months to live. She asked me why that happened and I had to say that we just don't know. She had never been a smoker or a drinker. She was very fit and healthy. Sometimes these things just happen and we don't know why.

This example is a particularly interesting one because Dr C mentions that this patient was the same age as her. She also mentioned in a later section of the interview that she had known the female patient referred to above for some years. I noticed during the interviews that when a doctor could relate closely to one of their patients who had developed a serious life threatening disease then they were less likely to offer straightforward explanations for disease and more likely to talk about the unfairness of disease and the unpredictable nature of disease. This relates to a second possible explanation for the way that doctors were reluctant to describe lifestyle as a cause of disease in individual cases: that a lifestyle explanation imputes personal responsibility for disease and that doctors were reluctant to hold individuals responsible for developing disease, particularly serious life-threatening disease.

Lowenberg and Davis (1992) made a similar observation after studying a group of alternative health practitioners. These practitioners offered theoretical explanations for disease which imply that individuals are responsible for their own health. However, when talking about their own patients or when speaking with their patients, these alternative practitioners were reluctant to hold their patients responsible for their own ill-health and offered explanations for disease which contradicted their earlier statements emphasising individual responsibility.

In the following example Dr O, an oncologist in her early forties, talks about one of her patients, a man with recurring melanoma. In this account she differentiates
between internal factors under an individual's control, by which she seems to be
talking about lifestyle factors, and external factors which an individual cannot control.
She goes on to emphasise the unknown aspects of cancer aetiology and the strong
influence of genetics:

Emily: Listening to what you just told me, it seems like you see
lifestyle and disease having a fairly broad and general
relationship? It's not cause and effect then?

Dr O: I don't think it is always as straightforward as that. I think
it is often multi-factorial. Some people will smoke all their life but
they don't get lung cancer. Some people get lung cancer who
don't smoke. Some people get heart disease despite having a low
fat diet, no family history, living a physically active sort of life
and apparently having all these factors in their favour. But these
things are intrinsic to them, other factors, external factors have an
impact on it but there is still something within the genetic material
that has a pretty strong influence as well. I've just got a fellow
who's recently come to see me as a new referral because he has a
relapsed malignant melanoma. He is very sure that his very
stressful life in the last couple of years has contributed to that
relapse and melanoma is something that we know has
immunological sort of tie-ups. And probably things tie into both
mental and physical stress and he has brought that aspect up very
much of late. But just what the dominant factors are is difficult to
tease out.

Another interesting feature of this account is the way that Dr O includes her patient's
own explanation for his relapsed melanoma in her account. While she does not seem to
be giving his version of events much primacy, she is still taking it into
consideration.72 Mention of patients' explanations for disease was common

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72 In contrast to the way that many of the experienced general practitioners and the two oncologists
interviewed seemed to take patients' explanations for their disease relatively seriously, the two
youngest doctors who had only a few years experience expressed doubt about the usefulness of
listening to patients. In addition, when I reviewed medical textbooks about diagnosis I found that the
authors of these books frequently warned against paying much attention to patients' versions of
events. These were described as inaccurate and self-serving (e.g. Nyman 1996; Talley and O'Connor
1997). Sociological research into this issue has found that doctors take patients' explanations more
throughout the interviews, suggesting that anthropological research into doctors' understandings of disease which found that doctors incorporate their patients' own version of events into their own explanatory models is relevant to these results (e.g. Good and Good 1980; Helman 1988).

When doctors were talking about uncertainty and the causes of disease several phrased their discussion in terms of scientific discovery, suggesting that answers to questions about aetiology are 'out there' but just haven't been found yet. Some doctors suggested that further research would support current claims about lifestyle and disease. However, other doctors suggested that further research might very well 'debunk' current thinking about lifestyle and some diseases. Specialists were more likely than general practitioners to mention the need for on-going scientific research into the relative importance of lifestyle in disease aetiology.

As cautionary tales to demonstrate the dangers of assuming that lifestyle causes disease, several doctors talked about recent examples in medical thought where diseases which had been commonly assumed to be largely attributable to lifestyle factors had recently been identified as including bacteria in their aetiology; the two examples offered were bacterial plaques in arteriosclerosis and helicobacter and stomach ulcers. In the next example Dr P, an oncologist with considerable experience as a research scientist and academic, talked about both of these examples:

Emily: So do you think that the considerations that doctors have about lifestyle are greatly influenced by research? Has there been a big change now, for example, in the ways that ulcers are considered?

Dr P: Oh, sure, huge! The popular view was that ulcers were caused by stress and there was this picture of the overworked executive. If you look in the old movies in the thirties, forties and seriously when patients incorporate medical understandings and medical language into their accounts (Peters et al. 1998).
fifties there's a stressed executive puffing away on a cigarette, going like this (mimics smoking).

Emily: Drinking glasses of milk.

Dr P: That's quite right but in fact we know now that it's due to a bug, you know, due to a germ. When I was a medical student there was no possibility that could have been true. If you had suggested it you would have been laughed out of court.

Emily: So in a little under ten years that transition has been smooth?

Dr P: It wasn't smooth.

Emily: It wasn't?

Dr P: No it wasn't smooth. It's more than ten years since it was discovered. This chap in Perth discovered it. Enormous resistance at first because it was part of the medical dogma. First of all that bacteria couldn't live in the stomach, we were told that there was far too much acid around. But I guess now we know that bacteria can live in all sorts of places. .... Changes of perception.

Emily: Actually, on Quantum the other night they said something about bacteria and heart disease. Have you heard anything about it?

Dr P: Well, you see that's another theory which has actually grown out of this ulcer story. People are now re-looking at the possibility of infections being the basis of some other diseases, whether there are bacteria in the cholesterol plaques that lead to heart disease.

Emily: Do you think that this will shake up some of the lifestyle arguments about disease?
Dr P: Well yeah, except that the research is a lot more focused now so I think that even if bacteria is involved, lifestyle is obviously a factor too. These things all interact, hereditary factors and so on. Everybody know that some people smoke cigarettes and live until they're ninety. And that's an argument smokers say, 'Well look why should I give up 'cause my grandfather lived until he was ninety. 'There's obviously more to it than just one of those things, it's the interaction of a whole lot of factors. So lifestyle factors certainly play a part. Indolence, obesity all increase heart disease, there's no question of that. But not every fat person gets heart disease and not everybody who smokes gets heart disease. Maybe there's a bug or maybe not. There are clearly things that we don't understand.

In addition to being a cautionary tale about the importance of ongoing research into the causes of disease, this example also demonstrates the complex aetiological narratives discussed above and the ways that doctors included mention of uncertainty into their discussions of lifestyle and the causes of disease.

When I was speaking with doctors about lifestyle I frequently asked them how they knew the things they claim to know about lifestyle and disease. When asking these questions I was interested in how the doctors would seek to legitimate their claims about lifestyle and whether doctors ever acknowledged any non-medical 'non-reputable' sources of knowledge.

The majority of doctors told me that they had read about lifestyle in relation to disease in scientific medical journals. The two youngest doctors looked at me strangely, surprised that this was even an issue. Dr F told me that "everyone knows about lifestyle and disease". When I asked the doctors if they had learnt about lifestyle during their training many of the doctors said that while they might have done so, they didn't really remember it.\textsuperscript{73} Interestingly, while general practitioners also talked about

\textsuperscript{73} As more than half of the twenty doctors I interviewed had been practising medicine for more than twenty years this is not entirely surprising. Their medical training must feel like a long time ago.
making decisions about the relative importance of lifestyle in disease aetiology on the basis of published scientific research, they were far more likely than any of the specialists to say that they developed their own ideas about the importance of lifestyle in the cause of some diseases based on their clinical experience. In the following example Dr R, a general practitioner in his early forties, describes his opinion about lifestyle and disease in terms of his own experiences with observing relationships between his patients’ behaviours and their diseases:

Emily: Having talked about the multi-factorial nature of many diseases do you still ever think of some diseases as being caused by lifestyle?

Dr R: Well I see a lot of patients who smoke and get a range of illnesses so I tend to think of those conditions as being caused by their smoking. I know that there are other issues involved like hereditary and stress but I still see that smoking plays a large part.

Emily: What about heart disease, does lifestyle play a role there?

Dr R: Well again, it’s difficult. There are people who eat chips and pies, have enormous beer tummies, drink beer and smoke like chimneys and then live to be 83 (laughs). But in my experience many of my patients with heart troubles are smokers who carry a bit too much weight around the middle. They also tend to be stressed people.

In these accounts the similarities between doctors talking about their clinical expertise and lay epidemiology are especially apparent. In the example above Dr R. is constructing his own hypothesis about the causes of smoking-related diseases and

Importantly it may also be a reflection of a medical school curriculum which does not focus on lifestyle. In my review of undergraduate medical texts (reported previous chapter) I found that lifestyle issues received only minimal attention in contemporary undergraduate medical teaching. As contemporary medical arguments about lifestyle and disease only grew to prominence in mid to late 1970s it is highly possible that they were not a feature of medical training more than twenty years ago.
heart disease based not solely on formalised medical knowledge but also on his own experiences and the experiences of people that he sees in his practice. When considering general practitioners and epidemiological knowledge about the causes of disease these doctors are in a very similar position to educated lay people. If expertise is recognised as contingent and not as automatically granted with the title of doctor it is likely that in certain situations and in relation to certain types of highly specialised epidemiological information many doctors are 'lay people'. Current theories of lay epidemiology and popular epidemiology fail to recognise the liminal position of the general practitioner (e.g. Davison et al. 1991, 1992; Brown 1992). General practitioners are not scientific experts in the field of epidemiology and they are community members. As such they are not excluded from processes of lay epidemiology or popular epidemiology. For example, Dr J, a general practitioner in her fifties, offered a similar account about the role of stress:

Dr J: Stress would probably be the most common thing I see. Stress affects people in all kinds of ways. I don't have a lot of old age smokers, though I have a couple who have got lung disease that is directly related to smoking. But the most common thing I see is stress affecting my patients.

Emily: When you did your medical training were you taught about lifestyle and disease then?

Dr J: I don't think ... , it is hard to remember, but I don't think it was seen as such an important factor. I think that smoking was. There was no doubt about that one, we knew that one. And certainly the 'type A' stress type personality was known to be at high risk from cardiac disease. Um, certainly drugs and alcohol were recognised. But I don't think that ongoing, unrelenting stress was seen as an important factor of the same type. I think that it contributes to heart disease as much as other external factors such as hereditary factors and diet.

Emily: Mmm, I can see that.
Dr J: That's my theory, I think that there is a direct link to stress. That is my theory. I have no proof but I'm sure that there is a link somewhere.

Emily: Well we operate with a lot of ideas that might not be scientifically proven, don't we" 

Dr J: Gut feeling.

Another pattern which frequently occurred when doctors were talking about uncertainty and the causes of disease was that talk about uncertainty, however phrased, was usually followed by a more up-beat and positive discussion where issues such as the value of medical research or the importance of lifestyle modification were emphasised. For example:

Emily: But do you ever have a patient who has been working really hard to take care of themselves for a long time but still gets really seriously ill? How do you make sense of that? Do they ever talk with you about 'why has this happened when I did everything right?'

Dr J (emphatically) Yep. Yes, that happens quite frequently. There is no answer for that. All I can tell them is that I just don't know.

Emily: Is that difficult for you as a doctor to do?

Dr J: Yes it is. Because it makes you realise yourself how vulnerable you are. And that is what it really comes down to. We are all vulnerable. (she pauses) But one of the things that I really enjoy about medicine is empowering people. The old style medicine was that we don't tell them anything. I don't like that approach and I never have done. To me it has always been 'what can I tell the person that they couldn't find out for themselves and that will help them to look after themselves?
While I was only able to observe this strategy during the interview (it did not arise during observed consultations) I consider the strategy would serve two functions for doctors in the context of a consultation. First, doctors like their patients to leave on a positive note feeling that something is able to be done about their current or potential condition. Secondly, this strategy also serves to help the doctors feel in control and that they are able to offer useful advice. When, in the example above, Dr J was talking about empowering people and helping them to look after themselves she spoke in a very positive and enthusiastic tone of voice, leaning forward and smiling at me. It was apparent that saying these things had made her feel very good about herself and her role as a doctor. This was in stark contrast to the hesitant tone and worried facial expression I observed when she was talking about how difficult it is when she can’t explain why a patient has become seriously ill and she is made aware of her own vulnerability. Medical uncertainty is emotionally and existentially challenging for doctors and patients. It raises questions about:

the meaning-fullness as well as the efficacy of physicians' efforts to safe-guard their patients well-being, relieve their suffering, heal their ills, restore their health and prolong their lives. ... [I]t evokes the inescapably tragic dimension of medicine: the fact that all patients - and all physicians as well - are mortal (Fox 2000:409).

In the next example Dr P moves almost immediately from saying that 'we don't really know what the causes of disease are' to saying that 'we are not powerless in the face of disease because we can reduce risk' (a much more reassuring statement). Interestingly, he also mentions that medical uncertainty about whether or not lifestyle factors are disease determinants needs to be kept from people, otherwise they would

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74Patients like to feel this way as well (Guadagnoli and Ward 1998:329).
never make the lifestyle changes advised in health promotion and health education campaigns:

Emily: I sometimes wonder if the emphasis on lifestyle factors that we see now, is because they seem to be things that we do something about and it's a way of trying to take control of something that was previously seen as something completely out of our control. But perhaps we have gone too far the other way now and think that by doing all these 'healthy' things we will be fine.

Dr P: Well, yeah, that's certainly true. I often see patients who have cancer and they say, 'Well why have I got cancer?' I do all the right things, I don't smoke and I don't drink a lot. I eat a good diet and exercise, and don't have a lot of stress, so why should I get cancer? But I mean the thing is of course that we don't know the cause of lots of things. We know that these actions will reduce the risk, particularly of heart disease and to a lesser extent cancer, but nobody in the medical field pretends that if you adopt these things you'll never get any disease. Things happen which we don't know the cause. On the other hand, it's very difficult in the public health perspective if you get up and say, don't do this and don't do this and do this and this and you'll reduce your risk of getting things by 3.5%! Well most people would say, well why should I bother!

Occasionally when doctors were talking about lifestyle as a cause of disease they used loose generalised notions of lifestyle as a type of 'gap filler'. That is, they were using undefined ideas about lifestyle to explain disease aetiology in situations where there

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75 This opinion that the uncertainty associated with risk factors should not be publicised is common within the health promotion literature. For example, Egger, Donovan and Spark (1993:17) state that "... health messages in the media cannot afford to be accompanied by the types of qualifications usually found in academic scientific reports" because inconclusive data is vulnerable to selective interpretation by the target audience (e.g. smokers). Dr P was familiar with this perspective due to long term involvement in the development and implementation of health promotion programs focused on lung, cervical and skin cancer. However, an assumption that patients are unable to cope with medical complexity was shared by many of the doctors involved in this research project. When speaking with me doctors frequently made statements which undermined the decision making capacity of their patients. When I was observing consultations the doctor often left information out of his conversation with patients, telling me later that most patients don't want to know all the "maybes".
was no clearly established 'medical' explanation. For example, when talking about diseases such as asthma, some cancers or immune system disorders, doctors used the term lifestyle but rarely specified what lifestyle entailed. For example Dr L stated that "there are more diseases probably caused by lifestyle than we know about". When asked to describe what they meant by lifestyle in such cases doctors often gave a very broad and diffuse definition which included factors such as the environment, pollution, life stress and working conditions. These were quite different from the very focused and specific definitions that doctors gave when they were talking about lifestyle causing diseases targeted in health promotion campaigns such as heart disease or lung cancer.

The gap-filling approach was most popular among the few doctors who were comfortable talking in a fairly relaxed, informal and generalised way about disease (older general practitioners and two oncologists). For example during my interview with Dr H he spoke about lifestyle in this particular way several times. In the following example he clearly describes lifestyle as a likely explanation for some situations where the determinants of particular diseases have not yet been identified:76

Emily: You said earlier that lifestyle factors don't cause disease, that they are risks for disease. So does that mean that in your opinion lifestyle is not a cause of disease?

Dr H: Well it depends on what you mean by lifestyle a bit, doesn't it. I told you before that I think of lifestyle in a very broad way. In relation to saying does lifestyle cause disease, well there are huge gaps in medical knowledge still. I don't think that as doctors we adequately recognise the role of lifestyle in many diseases. Diet, environmental factors, pollutants. All the aspects of modern living really.

76It is apparent that despite the implicit assumption that disease might have multiple causes such a 'gap-filling' conception of lifestyle is not a challenge to the medical model. Dr H is clearly assuming that there are real and identifiable causes of disease; they just haven't been identified yet.
Emily: So are you suggesting that lifestyle may be one of the causes of many different diseases, that just hasn't been identified yet?

Dr H: Well, as we learn more about immune systems and the relationships between stress and health I think it would be naive to say that diseases only have simple direct causes. Even if we find out that cancers are caused by a virus, well a bug isn't going to get you if your immune system is working properly but if you are run down from a poor diet, or polluted with farm chemicals or something.

Emily: Can you think of any specific examples?

Dr H: Well, um, not off the top of my head no. But it's something I think all general practitioners see in their practices. Times when people get sick and you don't know why. There isn't a clear medical explanation. And of course there are many conditions we are aware of which are the result of chemical exposure or nutritional deficiency. It stands to reason that there will be others which just haven't been identified and I suspect that many of these will turn out to be lifestyle.

'Lifestyle' is a useful gap filler because it is an ambiguous concept and thus provides a very flexible explanatory framework. As a term, lifestyle has medical legitimacy from being used in epidemiology and public health. This allows doctors to talk about lifestyle and be perceived as doing so in a scientific and medically informed manner, whether or not this is actually what they are doing. This feature of lifestyle as an explanatory concept is clearly demonstrated in the following section which describes how doctors talked about lifestyle as a risk factor for disease.
5.2.2 Lifestyle as a risk factor for disease

All of the doctors that I interviewed talked about lifestyle in terms of risk factors and prevention. In terms of context, talking about lifestyle as a risk factor for disease usually occurred very early in the interview when I asked doctors questions such as, what is lifestyle? It also arose when they were talking about preventive medicine (including the prevention of diseases which are often targeted in health promotion campaigns).

Doctors were far happier describing lifestyle as a risk for certain diseases than they were about describing lifestyle as a cause of disease. When I asked them why this was the case they told me that "In medicine we talk about lifestyle as a risk for disease, it isn't really a cause of disease" (Dr I), or "risk is medical, it's from epidemiology, it's about the likelihood of something happening" (Dr U). Epidemiological discourse provides concepts and terminology which are familiar to doctors and which are widely accepted by doctors as being a suitably 'medical' approach to lifestyle. Doctors claim legitimacy from epidemiology whichever conceptions of lifestyle they happen to be using at the time.

The distinction made by doctors between risk and cause is clearly illustrated in the following example taken from my interview with Dr K, a female general practitioner in her late forties:

Emily: You said that lifestyle can place people at risk of disease, what do you mean by that?

Dr K: Well, STDs for example. If you don't live a particular lifestyle, you don't get an STD, do you. Or diabetes, adult onset diabetes is the result of the unhealthy western lifestyle with a high fat, high sugar diet, alcohol and little or no exercise.
Emily: That's interesting. But before when I asked you if lifestyle could cause disease you thought that the causes of disease were multi-factorial?

Dr K: Cause is not the same as risk, I mean we can't say that eating fatty foods will cause a heart attack because it's not that simple. But if a person has an unhealthy lifestyle with a bad diet and no exercise they will increase the risk of heart problems.

Despite often explicitly stating that they had derived their understandings of risk from epidemiology, I found that the ways that doctors talked about risk during the interviews suggested that in contrast to the usual epidemiological understanding of relative risk which is relevant to defined populations and not individuals, they do so in an individualised and personalised way to mean an individual's danger of disease. This is far closer to the ways that risk is conceived in risk factor health promotion than it is to epidemiological conceptions of risk (Peterson 1996; Kavanagh and Broom 1998:438).

Furthermore, doctors' descriptions of risk were often very similar to generalised lay understandings of risk as danger which have been described by sociologists investigating lay perceptions of lifestyle and risk (Blaxter 1990, 1997; Douglas 1992; Popay et al. 1998). For example, during my interview with Dr F she offered the following definition of lifestyle:

Emily: What meanings come to mind when you think about lifestyle in relation to medicine?

Dr F: I guess that lifestyle is what people do in their day-to-day life. What they eat, what they do, how they live, who they live with. All that sort of stuff.

Emily: Do you think that a medical definition of lifestyle would be any different from a normal definition of lifestyle? I just realised when I asked that question that I had assumed that
there would be a difference. Do you think there is any difference?

Dr F: I guess that when you are speaking medically that you tend to think of things that people do that are going to affect their health rather than. Yeah, I guess you would limit yourself to things that affect health.

Emily: In what way affect health? Positively? Negatively?

Dr F: Well, (laughs) I guess what springs to mind is negatively but yeah. You tend to think of the risk factors (said with a slightly ironic tone) and stuff.

Emily: Risk factors what do you mean by risk factor?

Dr F: (Still laughing a little ) Well they are things that ... risk factors just anything that people do which has been shown to be a risk for causing certain conditions.

When doctors were asked to describe why lifestyle risks such as smoking or exercise are the focus of so much medical attention and other risks for disease are rarely mentioned they stated that lifestyle factors are social and thus modifiable whereas biological risk factors such as genetic predisposition or existing disease states are not modifiable.

Because they view lifestyle factors as being modifiable and risks as the property of individuals (thus an individual responsibility) doctors frequently talked about lifestyle risk in terms of control. For example, they stated the importance of controlling risk factors for various diseases. They also said that educating and encouraging patients to control their own lifestyles is an important aspect of their role as a doctor. Williams and Boulton made a similar finding when they interviewed general practitioners about the role of disease prevention in general practice (1988). Two examples of doctors
talking about lifestyle in terms of risk and control are from Dr G, a 26 year old female registrar and Dr C, a general practitioner in her early forties:

Dr G: Obviously you know we try to do our best, like with diabetes. We try and get people to control their diabetes as well as possible so that their adverse outcomes down the track are hopefully lessened. You know, whether that actually happens or not is really hard to say but that's what we do. We try to promote people to have a healthy lifestyle, control their diabetes, have good blood pressure, control their weight, those sorts of things.

And from Dr C:

Emily: So what type of relationship are you envisaging between lifestyle and disease?

Dr C: Do you mean? ...

Emily: Well, we talk a lot about lifestyle. It is a term that has become quite commonly used. I am interested in the relationship that you as a doctor perceive as existing between lifestyle and disease.

Dr C: Well, I think one of the biggest things is that we see lifestyle as being things that people have control over. Um, for example, diet, smoking and exercise. ... We also think of it in terms of possible complications. Every complication that we would find (unintelligible)

Emily: Do you consciously bring in lifestyle as a factor to consider with every complication?

Dr C: When presented with a new case, certainly you do. I will ask them questions, certainly with the first consultation, when you take notes. Then you would follow that through to possible complications, particularly if you can see that they correspond. ... If it's something that they can stop or start and have some control over then we will plan how to do that.
The doctors described lifestyle risks as being controllable risks. By this, they meant that explaining the risk of disease in terms of lifestyle offers them and (their patients), the potential to manage and control risks for disease. This perception, that lifestyle risks can be managed and controlled is in contrast to other types of health related risk such as corporeal risk (embodied risk) and environmental risk which do not offer doctors or patients the sense that they can be managed or controlled to the same extent. Kavanagh and Broom (1998) describe how women with abnormal pap smear results (corporeal risk) strive to take control of their embodied risk through lifestyle changes such as reducing stress, and eating a healthy diet (1998:441). These women chose to interpret their risk in terms of lifestyle even though lifestyle risks have greater moral consequences than do embodied risks (Metcalfe 1993). Understanding lifestyle as a risk for disease offers a similar opportunity to doctors.

The way that doctors talk about controlling lifestyle risks has much in common with the narratives of control described in studies of people with a chronic illness. Williams (1984), Radley (1993), Pierret (1993) and Epstein (1995) all describe the importance of narratives of control for people affected by illness. When a person becomes chronically ill they construct narratives which "reconstruct the course of one's life so that it accommodates the illness by providing it with a genesis", and which make sense of life in the face of continuing or worsening disability (Radley 1993:109). Stories such as these are important because they allow people to address the uncertainty

77 Different types of risk are inter-related. In this example embodied risk and lifestyle risk are intermeshed. Lifestyle risks such as sexual activity have been associated with abnormal pap smear results. Kavanagh and Broom (1998:438) also describe the inter-relationship between lifestyle risk and embodied risk in the case of high blood pressure. While hypertension is located in the body it is also "construed as at least partly a function of the person's way of living (lifestyle) and aspects of their social and physical surroundings (environment)".

78 To what extent an individual can control their risk of disease through their lifestyle is questionable. Health related behaviours have been shown to have less influence on disease than the social circumstances in which they are embedded (Nettleton 1995:53). Blaxter (1990:202) found that lifestyle modification has a far greater impact on the health of people whose circumstances are already favourable. For those people already in unfavourable life circumstances (low education, poor living conditions, poverty, poor social relationships), lifestyle modification has only minimal impact. Furthermore, as described in an earlier discussion of life chances, an individual's lifestyle is constrained by their social circumstances.
associated with illness in the terms of "their personal situation and their stock of common knowledge about health and illness" (1993:109).

As demonstrated by the way the doctors interviewed and observed for this thesis talked about controlling the risks of disease through lifestyle, doctors also strive to manage uncertainty about the causes and risks of disease by telling stories which emphasise that disease is predictable and controllable. Understanding disease in terms of lifestyle factors is an explanatory framework which easily allows for the construction of narratives of control. This way of interpreting the meaning that controlling lifestyle risks has for doctors is a very different interpretation from the usual sociological perspective on this issue which is presented in terms of medical control of bodies and patients and as an indicator of increasing medical surveillance (Douglas 1990; Lupton 1993; Hughes 1994; Armstrong 1995).

Doctors' understandings of lifestyle risk are also personalised and individualised when they talk about acquiring information about a "patient's risk factors" (Dr J) as a resource for clinical reasoning/diagnosis. This understanding of lifestyle risk was already familiar to me from my thematic review of medical texts. As described in chapter four, collecting information about a patient's lifestyle (though not necessarily their 'lifestyle risk') was referred to in general practice textbooks as being a vital part of the diagnostic process (Gammon 1990; Hodgkin 1985; Thouless 1974).

During interviews several of the doctors spoke to me about using information concerning lifestyle risks to assist with diagnosis and the prediction of possible complications before surgery or treatment. General practitioners said that they would collect information from patients about 'their' risk factors such as smoking, high blood pressure and exercise levels to help them make a diagnosis. In the case of the two youngest doctors I interviewed, who were both working in a large public hospital, each mentioned that they collect risk factor information from patients before surgery.
In all these cases lifestyle risks were being seen as easily identifiable and as belonging to patients. For example:

Emily: Is it difficult grappling with the idea of risk? I mean they are long term, and they change all the time?

Dr F: Yep. (nodding emphatically) Especially when you are asking people about their habits and stuff when they first come into the hospital and you know a lot of the time they do have the things that you would expect from their risk factors. Like heart disease and stuff.

Emily: Is it hard balancing that in your mind when you are thinking about the causes of disease?

Dr F: I don't know. I think personally, at this stage, I just tend to think well 'this person has this condition'. You ask them about the risks and you identify a few of the risks and that's about as far as you go. You know what I mean? And I don't think that it's that difficult. Often people are aware. Most people know about risks and disease. Well they know certain elements of it. And they will be the ones who actually ask you. They will say, 'I have heard that this can cause breast cancer', and you know, if you explain to them that this gives this much more increased risk, most people understand. Most people understand about risk.

Emily: I suppose we grapple with risk everyday?

Dr F: I think it is a long term thing and like, it's easier to identify risk retrospectively, than to identify it. Like healthy medicine, like pap smears. We all know now that if you have a pap smear then we can pick things up early and then you are less likely to get cancer. In certain areas I think that the preventative thing is there. But a lot of the time is still someone has a disease already and then identify that they have got a risk factor. Do you know what I mean?
This way of speaking about lifestyle and disease, as though lifestyle risks can be used as an indication of current or future disease, is the closest of all the doctors' accounts to the type of reductive understanding of lifestyle risk criticised by many sociologists and outlined in chapter two of this thesis (e.g. Hughes 1994:65; Peterson 1996). Doctors are operating with a very individualised and personalised notion of the social when they talk about lifestyle in terms of risk factors. Three exceptions to this were two specialists who worked in oncology and one general practitioner with graduate level training in epidemiology. These three doctors used a more sophisticated epidemiological conception of lifestyle risk. In the following example Dr P, a male oncologist, uses a conception of risk which recognises that epidemiological statements about risk refer to populations and cannot be easily applied to individuals:

Emily: I wanted to start by asking you how you define lifestyle?

Dr P: I'm not sure what you mean?

Emily: Well I want to know what type of things you consider to be lifestyle factors impacting on disease. But I didn't want to use the words factor or risk factor because then we will have an epidemiological discussion. I thought in everyday medicine you might have a much broader range of stuff that you consider to be lifestyle issues?

Dr P: What I see from that is that you're talking about lifestyle in relation to ideology of disease. Well that really makes more sense than anything as it includes things like smoking and alcohol, diet and exercise and that sort of thing. So from that point of view I think I understand what you're getting at.

Emily: Here's a copy of the types of questions I thought we might cover that might help too. The first question asks what you thought I meant by lifestyle?

79 As described in chapter four, I used a slightly different interview guide for each doctor and these guides were used as a memory prompt for myself and to reassure practitioners that I wouldn't ask any personal or embarrassing questions. In most interviews I did not ask every question on the guide as I
Dr P: Well I'm saying the way that people live their lives.

Emily: A broad definition?

Dr P: But from the point of view of medicine and disease, obviously one focuses on certain aspects of what people do with their lives. So the single fact in people's lives that determines risk of disease that we know about, is smoking. There's no question about that. I mean alcohol intake has a bearing, whether people exercise or not, what sort of food they eat, it's all relevant. Social circumstances are relevant, whether they are on their own or with a family, a support network. All these things are relevant to people getting disease. Unemployment, employment. There's a huge range of factors that affect peoples' risk of getting disease, to some extent. Are these able to change? I suppose that's where doctors would be interested. What factors and so on in life are changeable. You can't change their sex and you can't change their age even though those are risk factors. But you can change some of the others. Some are easier to change than others.

When the doctors were talking about risk factors for disease and disease prevention they often spoke in a very prescriptive, advice-giving fashion. I suspect that the nature of the in-depth interviews were conducive to this type of advice-giving because the doctors thought that I needed to learn about the connections between lifestyle and disease as I was obviously very ignorant (judging by my endless list of questions). In contrast to the interviews, my observation of consultations suggested that this type of advice-giving is relatively unusual in the context of a consultation. This is despite doctors' claims during the interviews that they do offer lifestyle advice during consultations.80

80 In their study of patients' views on health promotion in the consultation, Stott and Pill found that patients are happy to accept lifestyle advice but resent dictatorial advice (1990:131).
My observation of consultations took place at a clinic in a very poor suburb where the majority of patients had a very low level of education, many were unemployed and many had substance abuse problems. When I asked the doctor (Dr I.) why he rarely gave his patients any advice at all about modifying their lifestyle he told me that there are only limited opportunities during a doctor/patient consultation when patients are open to preventive lifestyle advice from their doctors. If given at other times, the lifestyle advice would either be wasted or make the patients defensive, thus ruining rapport.

In my opinion, Dr I's disinclination to offer lifestyle advice was also related to his strong awareness that most of his patients were not in a position to make substantial lifestyle changes. He worked at a practice in an area of socio-economic disadvantage and ran a methadone clinic. Furthermore, Dr I had different expectations regarding what constituted a healthy lifestyle for these patients. He told me that for many of his patients, "... they're doing a pretty good job when they stay off drugs, refrain from committing crimes and turn up on time for their medical appointments" (Dr I).

In contrast with Dr I, one of the GPs in a practice dealing mostly with university students claimed during interview that she frequently offered lifestyle advice to her patients. As a former patient of hers I had found that she offered me lifestyle advice during consultations. Her discussion of this issue during the interview revealed that unlike Dr I, she had little awareness of the external constraints her patients might experience in terms of changing their dietary or exercise habits. For example:

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81 This doctor ran a clinic prescribing methadone and morphine to addicted patients.
82 He did not consider that such an opportunity had arisen during many of the observed consultations.
83 In general practitioner training guides it is suggested that there are only limited opportunities during a consultation when a patient is receptive to lifestyle advice and that most of the time this sort of advice should only be offered if it is requested (see Gammon 1990). The limited sociological research into the ways that doctors talk to their patients about changing lifestyle practices for the purpose of disease prevention suggests that doctors often fail to discuss lifestyle issues during the consultation because they are limited in their opportunities because of time constraints or because of factors such as lack of personal interest in the topic or a disinclination to 'preach to their patients' (Johanson et al. 1998, Williams and Boulton 1988)
Emily: Do you find yourself taking your patients' social situation into consideration when you give lifestyle advice about smoking, or exercise or diet?

Dr C: Yes, definitely. If they appear to be affected by anything external. Though it can be quite difficult to do that. Often when talking to them I will ask them questions about subcultures they might be involved in, where they live, how they are feeling about university or work. Um.

Emily: What about structural issues such as money or housing? Or being too tired to go to the supermarket, or having to use the bus because of not having a car so not liking buy heavy stuff? Things that you as their doctor can't do much about. Do you mention them or just leave them out because you can't touch them really?

Dr C: Well I think it's a lot to do with attitude really. For example when you look at diet. I will often tell people that it's cheaper to cook for yourself than to buy a take-away. And that's the type of thing that if you have the attitude and the information, that you can do it, you know. Lots more fruit and vegetables. Fresh food, low fat, low salt. Yeah. .. I guess it could still be expensive.

Emily: So you do sort of think that it's more a question of information than ability?

Dr C: Well, I suppose it's both really.

A tendency for doctors to talk about disease in a reductive or exclusionary manner or to be ignorant about the social context of the behaviours and habits characterised as lifestyle factors for disease is a frequent topic in the sociological literature (e.g. Lupton 1993; Hughes 1994; Nettleton 1995; Peterson and Lupton 1996). Certainly when doctors are using ideas about lifestyle taken from epidemiology and risk factor health promotion they tend to use limited conceptions of what constitutes the social context of disease. These medical understandings about lifestyle operate with an emphasis on
individual behavioural choices with little reference to structural, cultural or symbolic constraints on these choices. Furthermore, these conceptions of lifestyle are perceived as being universally applicable. There is no sense that what constitutes a 'healthy' lifestyle might be quite different from one person to the next.

When the doctors I spoke with during interviews tried using conceptions of lifestyle from epidemiology or risk factor health promotion to explain why their patients persisted with 'unhealthy' practices despite medical advice to the contrary, they were unable to find satisfactory explanations for this problem within the discourses of epidemiology and risk factor health promotion. The only explanations readily available to account for 'unhealthy' lifestyle choices within risk factor health promotion and epidemiology are moralistic ones which explain these choices in terms of laziness, stupidity, ignorance or lack of self discipline.

However, doctors only rarely explained lifestyle behaviours in these ways because they were unwilling to talk about their patients using negative or derogatory terms. This left them with little choice other than to declare that they could not understand some of their patients' lifestyle choices. For example, Dr F became very frustrated when she talked about patients who persist in smoking cigarettes despite medical advice to the contrary:

Emily: Tell me about an example where you can't make sense of peoples' lifestyle behaviours.

Dr F. Well an easy example comes to mind actually. I've been working on a ward that deals with respiratory illnesses, also in the outpatients' department. We say to people 'you have to stop smoking or this emphysema, or bronchitis or what-ever it is, will just keep coming back'. But they don't. They don't stop smoking. Instead they just keep showing up again and again and needing to be hospitalised. I just can't understand them. It's obvious that their smoking is making them really really sick but
they keep on doing it. Or kids with asthma whose parents smoke. They have to bring the kids into out-patients or into emergency. A doctor will always tell them, don’t smoke in the house at least, but I can smell the smoke on the kid’s clothes, or you see cigarettes in the parents’ handbag.

Emily: Does it ever make you think that maybe they have reasons to smoke, like maybe their lives are really stressful or it’s something social that they enjoy doing with their friends?

Dr F: I can see that might be the case, but I still don’t really understand it. At the moment I am doing vascular surgery, that’s one of my jobs. And virtually every patient that comes in for an operation and everyone that you see in the clinics has got, like is still smoking and you know, they are overweight and they don’t do much.

The doctors involved in this research had a general reluctance to talk about the impact of poverty and disadvantage on their patients’ health. Doctors only occasionally raised the issue of socio-economic factors making it difficult for their patients to make suggested lifestyle changes. When I asked them a direct question about this issue all of the doctors did acknowledge that socio-economic factors would impact on the lifestyle choices of their patients. However, they were very unsure about how this might work. Usually they ignored the part of question that addressed lifestyle and told me in response that they always try to keep a patient’s financial situation in mind when suggesting treatment or medication.

I suspect this reluctance stems from two factors. First, doctors have trouble connecting individual behavioural ‘choices’ with structural issues such as socio-economic status, race or gender, partly because they are not trained to do this during their medical degree and partly because they frequently subscribe to individualist ideologies which stress personal autonomy and choice (Neittaanmaki et al. 1999; Pescosolido and Kronenfeld 1995; Belcher 1997). Secondly, doctors who have no
choice but to be aware of such issues because their practices are in poor suburbs, feel that there isn't anything they can do about this issue so there is no point worrying about them.

This should not be interpreted as an argument on my part that doctors are not concerned with the social context within which their patients become unwell or within which they experience illness. On the contrary, during this project I found that doctors are very interested and concerned with illness.

5.3 Lifestyle and illness
The capacity of lifestyle as an explanatory concept to provide a language and a legitimately medical perspective from which to talk about the social was valued by doctors. While other medical explanatory frameworks do include knowledge about the social (Kelly and Field 1994; Williams 2001:140-141), this is limited. Recognition of this is reflected in the traditional sociological assumption that doctors are only concerned with the biological (disease) and that the social (illness) is a matter of concern for those people outside medicine (Atkinson 1995:25). However, in everyday clinical practice doctors are constantly faced with issues relating to the social causes of ill health, and the social contexts of ill-health. My results demonstrate that doctors use ideas about lifestyle to provide a framework to talk about the social.

Because the conceptions of lifestyle from epidemiology and risk factor health promotion are focused almost entirely on individual behaviours and practices considered to be risk factors for disease they are poorly suited for the construction of explanatory frameworks which account for the social context and experience of illness. Far more suitable are the biopsychosocial conceptions of lifestyle which stem from primary health care, some aspects of the new public health, general practice and the chronic illness literature (eg. WHO 1986; Charmaz 1989, 1990; Usherwood
These are conceptions of lifestyle specifically designed to address social and emotional factors.

While the conceptions of the social used in doctors' biopsychosocial conceptions of lifestyle were far narrower and more individually focused than the sociological approach to the social determinants and contexts of sickness and health, they were, nevertheless, far less reductive than the limited understanding of the social available through risk factor health promotion texts or to a lesser extent, epidemiological writing about lifestyle.

Understanding lifestyle in a biopsychosocial fashion is a very different type of understanding from doctors' understandings of lifestyle described in the previous section. When doctors were talking about lifestyle using biopsychosocial conceptions of lifestyle they were not explicitly associating isolated social behaviours or practices with the development of disease (as in the previous section of this chapter). Instead they described lifestyle in terms of social factors impacting on their patients' experiences of being sick. They spoke in terms of "patients having someone around to look after them when they were too sick to do it themselves" (Dr H), care-giving (making food, cleaning the house, helping with tasks such as bathing), social support and psychological factors such as stress, depression, having a reason to live and/or get better or family relationships and hobbies.

The two most common contexts where doctors used conceptions of lifestyle to talk about illness were when they told me about taking a patients' social history and when they were talking about the management and treatment of illness using lifestyle.
5.3.1 Lifestyle as a patient's social history

In the previous section about disease I described the way that many doctors often offered a definition of lifestyle from risk factor health promotion when I asked them at the beginning of our interview to tell me what they meant by lifestyle. This was certainly the case if they began the interview focusing on disease. However, many of the doctors answered this question by telling me about taking a patient's social history. Social history taking is a well established aspect of a consultation where the patient is asked about family, work, how life is 'going along', and perhaps asked about the medical history of their parents (Usherwood 1999:17).

Social history taking provides doctors with a medically legitimate framework and a time in the consultations when it is appropriate to talk about lifestyle in a biopsychosocial manner, as distinct from the often reductive conceptions of lifestyle found in health promotion and epidemiology. The notion that patients have a social history in addition to a medical history (a history of past medical care including previous diseases, medical procedures, medications, innoculations and screening tests and life events classified as medical such as child birth or menopause) was an important aspect of doctors' understandings of lifestyle and of the social.

Doctors are again using understandings of lifestyle as a resource in clinical reasoning (I have previously described doctors using information about a patient's risk factors as a diagnostic device). However, when talking about lifestyle in terms of social history doctors are using lifestyle to place their patients within a social context. This allows doctors to anticipate which medical measures might be appropriate, but also heightens their awareness of illness, how their patient is experiencing sickness in the present or might experience it in the future. Johanson et al. (1998) made a similar finding in their study of lifestyle discussion in doctor/patient discussions. They found

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84 As described at the beginning of this chapter, doctors shifted between different ways of talking about lifestyle throughout the interviews. Thus a doctor who initially talked about lifestyle in relation to risk factors might then start talking about social history and illness, changing the conceptions of lifestyle they were using as appropriate.
that lifestyle information such as professional life, family life, sleeping habits, housing, exercise, smoking, appetite and drug use is a valuable clinical resource for doctors. Such information indicates various measures which patients could take themselves to improve their health, provides a social context for present health problems, and may indicate the need for medical treatment.

A key feature of this conceptualisation of lifestyle is an explicit distinction being made between the internal biochemical workings of disease and the external social and lifestyle factors that appear to impact on these internal processes. When doctors talked about lifestyle as social history they described lifestyle as an issue relating to illness rather than in terms of disease. At times several doctors I interviewed expressed doubts about whether lifestyle was actually a 'medical' issue because it seemed to refer to the social and the external rather than to the bio-chemical, the medical. For example, in the transcript excerpt below Dr O, a female oncologist, describes lifestyle as a non-medical issue:

Emily: ... is that definition that you just gave a specifically medical definition of lifestyle?

Dr O: I wouldn't have thought it was medical in any way really.

Emily: Oh, I see, how come?

Dr O: Well it's something that comes pre-medicine. I do go into a detailed history with each patient, which includes, um, obviously the medical reasons they have come along to see you but also their past medical history. And a fair bit about things like where they live and with whom, what their support structure is like, factors like alcohol and tobacco that have a fair impact in various cancers but also lots of other illnesses. And, um, their interests and pursuits, their work.
Another important feature of this way of talking about lifestyle is that it requires asking questions, rather than giving advice. In many of the other ways that doctors talked about lifestyle they were the person with the knowledge and when they talked about lifestyle they spoke about imparting this knowledge. When talking about lifestyle as social history doctors described gathering information about lifestyle from their patients.

Because taking a social history involved asking their patients questions but did not necessarily involve assessing the answers to these questions in terms of risk factors or in terms of 'good' or 'bad' behaviours, talking about lifestyle in terms of social history is a time during a consultation when the doctor and the patient come closest to having a conversation, with the difference that the patient is unlikely to be given much of a chance to ask the doctor about his or her family, work or friendships (Johanson et al. 1998:111). In this way, asking social history questions can serve to build intimacy and rapport between doctor and patient (Savage and Armstrong 1990; Corney 1991; Usherwood 1999:34). This was demonstrated in the observed doctor/patient consultations where Dr I always began the consultation by asking his patients about their work and their family.

Rapport building is another positive issue associated with medical concern with lifestyle rarely considered by sociologists when they criticise the way that doctors' interest in lifestyle issues is a reflection of increased medical power and increases the aspects of everyday life considered to be of medical concern (e.g. Lupton 1993; Bunton and Burrows 1995:206; Peterson and Lupton 1996). Studies of patients' levels of satisfaction with a medical consultation show that there is a strong emotional component in a successful consultation (Beckman and Frankel 1984; Calnan and Gabe 1992; Buetow 1995). Many of the doctors I interviewed or observed expressed the opinion that it was important to 'get to know your patients'. For example:
Emily: When is lifestyle an issue that you think about or maybe talk about, during your everyday medical practice?

Dr A: Well I think about it straightaway when a patient first comes to see me. I ask them about their habits, smoking, exercise and diet, I ask them about their family and their working life. If they're a student, because we see a lot of students here, I might ask them about exams or whether they are particularly busy at the moment. Um, I might ask if they are married or have a boyfriend, whether they have any children. That sort of thing. It gives you a chance to get to know them a bit.

Sociological theories of medicalisation are still very relevant when considering medical understandings of lifestyle. When doctors talked about lifestyle in a biopsychosocial way, their understandings of what lifestyle is and how it relates to illness were very broad. This feature of medical understandings of lifestyle is open to sociological interpretation in terms of increasing medicalisation because the wide scope of issues perceived to be lifestyle issues defines many areas of personal life as health related (Peterson and Lupton 1996:5). Lowenberg and Davis (1992:583) have described how orthodox allopathic medicine operates with the doctrine of specific aetiology and thus a narrow pathogenic sphere. In contrast, holistic/alternative health, through an emphasis on the application of a health/illness paradigm to nearly every domain of life, represents an extension of the pathogenic sphere "into lifespheres" previously outside this jurisdiction (1992:585). Lowenberg and Davis argue from this observation that holistic/alternative medicine should be considered in some respects as an extension of medicalisation (1992:594). When considering the way that doctors spoke about lifestyle when they were using biopsychosocial conceptions of lifestyle, it could be argued that these medical understandings of lifestyle also extend the pathogenic sphere and are thus medicalising.

The relationship between alternative/holistic medicine and a lifestyle framework is further demonstrated when doctors' accounts contained explicit references to holism,
notions of wellness and an emphasis on the importance of looking at the 'whole person'. In the next example the oncologist being interviewed offers a wide reaching definition of lifestyle:

Emily: What do you think about when you heard me saying the term lifestyle - what did you expect to be talking about?

Dr O: Lifestyle, um, socio-domestic factors, how you schedule your activities, both home and work, um your interests, your pleasures, your commitments. Things that might have changed over time in terms of your commitments and activities. Style of life but also pace of life. A very broad thing.

Emily: I wonder, if at all, you were taught about lifestyle when you were training, in a specific sense. Was the term used very often?

Dr O: I'm not sure really, um, certainly environmental factors. Yes, I suppose, lifestyle factors? We probably talked about it more as part of the social history which I think is a bit of a misnomer because people might come along with some complaint that may be very much related to smoking in a number of people but they won't address it up front. They'll talk about that after they've talked about various other parts of the medical history and come back to it in social history. Um, alcohol and um tobacco tend to be, with students, talked about there. But you know, with a lot of people it's got nothing to do with social activity as such, perhaps that's how it started but um, to me it has a much higher profile and should come much earlier on. And to me social history is much more family and friends and social network and interests and pursuits, work history etc.

Emily: Is there an interest in social history as part of an attempt to have a more holistic approach or is it because you feel these things objectively affect how a patient recovers or doesn't recover due to a psychological state?

Kelly and Field describe medicine as being far more holistic than medical sociology "gives it credit for" (1994:35).
Dr O: I think it's psyche as well as the physical being, um. I'm not taking umbrage at you by any means but I do dislike the fact that doctors are thought to be non-holistic and I think that if you do the patient full service then you have to be interested in whether they've got heart disease or a child that's just left home in an unhappy state or whatever else and that if you're only interested in the tumour then you'll never get to grips with the patient and you'll never actually get them as well as they should be at any particular point.

And I think that the holistic approach is something that has been, I don't know, perhaps neglected to a degree in years gone by. Where a paternalistic approach is not a good thing but I think that probably, still the general practitioner in particular, who [sic] are not dealing with just a particular illness but are seeing people over a long period of time have to be holistic if they're going to do a decent job. I think all of us should be but perhaps it's been because of time constraints or whatever, not everybody is that interested in your whole person.

Despite doctors frequently speaking about 'the whole person' most doctors were not using conceptions of lifestyle from alternative/holistic medicine. Dr D, a general practitioner in her mid-thirties with a growing interest in alternative treatments and Dr S, a doctor who describes himself as a holistic practitioner, were the only doctors among the twenty interviewed who explicitly spoke about lifestyle using language and ideas from alternative medicine. Dr D talked about prescribing lifestyle practices such as yoga, a special diet or the use of homeopathy in the same way that orthodox practitioners might speak about physiotherapy or prescription drugs. Dr S on the other hand spoke at length about the ways that illness cannot be understood without taking a person's entire life into consideration. He used many examples which drew on his training in alternative medical practices such as herbalism, acupuncture, reiki and meditation.

Apart from Dr S and Dr D, when I suggested that a psycho-social understanding of illness in terms of lifestyle might have something in common with the alternative
health approach the doctors denied this interpretation. Dr J became quite annoyed, as though I had accused her of quackery:

Emily: .... When you think about patients and their lifestyle and their health, do you find yourself having to place them in a broader social context to understand them? Do you have that information? Like their marital situation, their job, their family life, where they live?

Dr J: I don't, I ask. Quite often I don't know, I might never have seen the person before, so I ask.

Emily: Does that reflect an understanding of yours that lifestyle issues need to be understood in a broader social context, that they can't be understood in terms of the individual. Reduced down to risk factors?

Dr J: Mmm, you have to look at the whole person.

Emily: What about alternative health, herbs, nutrition and things like that? Things which might not fit directly into a mainstream lifestyle approach but that a lot of people are interested in now? Do you talk about these issues with your patients?

Dr J: Um, only when they ask me about them. Because I have to say from my own experience that I have seen a lot of people dabbling in that area and quite a lot of them come back and say that it was very expensive and it didn't help. I am very sceptical.

Emily: I can understand that.

Dr J: If it's straight diet then it's another matter. But dabbling in drops of this and drops of that is another matter. I haven't had a lot of experience at all of people being helped by that.

Which particular issues are considered to be issues of lifestyle that should be raised when taking a social history varied between different types of doctors. The
obstetrician/gynaecologist, dermatologist and haematologist gave quite specific
examples which could be clearly related to issues of disease (such as smoking,
exercise and type of employment) while many of the general practitioners and the two
oncologists included issues such as emotional state and relationship pressures. When
I interviewed Dr I, after observing him in general practice consultations, I asked him
about lifestyle questioning in the context of history taking. He emphasised that for
him the major social issues were questions of family situation, interpersonal
relationships and work. For example:

Emily: I noticed that you never use the actual term lifestyle during
a consultation. Is that because you know that I am interested in
that term and it's making you self-conscious or is it just a term
that you rarely use?

Dr I: Well I don't know what you mean by lifestyle really. I mean
we have talked about risk factors but that's really an issue for
prevention. ... Mostly I think of a patient's social history during
the consultation and I might ask them questions about that.

Emily: I noticed that you always ask your patients about their
families. Do you consider family to be an aspect of a person's
lifestyle? In the sense that family is a social factor that might
impact on their health?

Dr I: Well it's standard for doctors to take a social history during
a consultation. You will see that when you read those books
(indicating with a nod, a large box of books he has lent to me, all
of them about the doctor/patient consultation). All of the patients I
have seen this morning have already been to see me, so I have
quite a few details about them already in my notes. You can't see
that. Remember that you are only seeing a small part of what
really goes on.

Emily: Yes, I realise that. So you ask about family as part of
social history?
Dr I: Yes. It works to build rapport because it shows them that I remember them and know what's happening in their lives but I do it for another reason as well. A lot of the time patients come to see the doctor because they are worried about things. It's called somatization. Psychological worries present as a physical problem. Family problems are an important aspect of that. Family relationships and work situations are probably the most important social questions. They have such a major impact on people, they're very important. (Reconstructed quotation from written notes taken during interview with Dr I).

This example clearly demonstrates the issue mentioned earlier in this section, that for doctors talking with their patients about their lifestyle under the rubric of social history taking was important not just because of the bearing this type of information might have on their patient's state of health, but also as a 'getting to know each other' session.

Rural general practitioners or doctors who have a long term relationship with a patient often socialise with their patients and thus talk with their patients about their lives on the basis on first-hand knowledge. For example, Dr H, a general practitioner who worked in a rural area for fifteen years and who also had family living in that rural area, told me that he considered his background knowledge about patients and their knowledge about him was both satisfying and useful because it encouraged better doctoring.86

In contrast to this type of concern with building rapport through discussion of family, other relationships and external pressures, during a dermatology consultation I had with Dr T, I observed that she restricted her history taking questions to behaviours associated with my skin. She did not ask any lifestyle questions about my work,

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86 He told me that when a doctor knows what a patient's life is like it is easier to understand the implications of their illness and to recognise many of the pressures they might experience, such as a physically demanding job, relationship troubles or "a farmer who is allergic to grasses and gets sick every year when cutting and bailing the hay" (Dr H).
relationships or stress. For example, this conversation occurred during my initial consultation for acne on my face:\(^7\)

Dr T: Have you ever had skin problems before this?

Emily: Not really, no.

Dr T: What do you do for a living? You don't work in a kitchen do you?

Emily: No

Dr T: What about swimming, do you spend much time in chlorinated pools?

Emily: Not really.

Dr T: How about your hands? Do you touch your face a lot during the day? Maybe sit leaning on one hand? (reconstructed quotation using notes taken directly after a consultation)

This line of questioning has far more in common with the second way that doctors talked about illness and lifestyle. This was occasioned when doctors spoke about lifestyle in relation to illness management and treatment.

5.3.2 Lifestyle in relation to illness management or treatment

When doctors talked about lifestyle in terms of illness management or treatment, they did so in two different ways. The first concentrates on the impact of a patient's lifestyle on the outcome and experience of treatment or an illness. An example of this understanding of lifestyle occurs when doctors speak about advising their patients to exercise after surgery, childbirth or enforced bed rest. This is not general lifestyle

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\(^7\)I mentioned earlier that several doctors said that asking patients about their lives served to build rapport. In my own experience as a patient of Dr T I found her total focus on my skin and her complete lack of interest in me as a person did make our consultations feel cold and clinical.
advice about the desirability of activity; it is advice based on expert knowledge about blood clots and thrombosis.

In this conception of lifestyle doctors utilise specialised knowledge about diseases and treatments and utilise a focused definition of lifestyle which refers to very particular behaviours or practices which are associated with particular treatments, symptoms or side effects. For example both the oncologists mentioned that patients undergoing radiotherapy and some forms of chemotherapy should be careful about going outside in the sun because they become photosensitive. General practitioners outlined the importance of not drinking alcohol when taking some medications. This conceptualisation of lifestyle is mainly concerned with managing situations in the present rather than the prevention of future ill health. (However, there could also be a focus here on a lifestyle change alleviating a current illness and thus preventing continued illness in the future or even a worsening of the condition, e.g. diet, exercise and diabetes).

The second conceptualisation of lifestyle in terms of illness management or treatment concentrates on the impact of the treatment or disease on ‘a patient’s normal lifestyle’. By this doctors meant the way that a patient would normally live their life. This conception of lifestyle is broad and individually tailored. Each person has their own particular lifestyle. This may include behaviours such as day-to-day activities, employment, hobbies, household tasks, family responsibilities, personal relationships and driving a car. Unlike the first conception of lifestyle in terms of management and treatment, this way of talking about lifestyle is orientated towards the future and the present. In this version lifestyle does not impact on health and illness as much as health and illness impact upon lifestyle.

In terms of context, I found that the first concept of lifestyle in terms of management and treatment occurred very frequently in accounts from three of the specialists. Two
oncologists (Dr O and Dr P) and a dermatologist (Dr T) were all used to dealing with patients who had long term medical treatments. A common example of this was when doctors spoke about modifying diet to cope better with the effects of chemotherapy. Here, doctors are using specialist knowledge about the usual symptoms of chemotherapy and knowledge about interactions between the chemotherapy drugs and the body's ability to digest/excrete certain chemicals found in food:

Emily: .... we were talking a bit about the relationship between lifestyle and the causes of disease, why people get sick. Do you ever use the concept of lifestyle, do you address it in disease management?

Dr O: Yes, yes, there are some factors that are going to help them get through whatever treatment is proposed. Whether it be potentially curative or controlling treatment, or just to reduce symptoms that are there at the time. I don't expect somebody who's got, sorry to keep harking back to lung cancer, but you know, major disease and who's been smoking for 75 years and has perhaps a prognosis of a few months to give up cigarettes. There's no point, you're just going to make their life miserable. But, if you've got somebody who is young and has a good prognosis and they are a smoker then certainly I'd say try and address that. Not to say, 'this is something you must stop tomorrow' but say 'this is something that you can do to try and help yourself', and then you try and wean them off. Being sensible with alcohol when on chemo is important. Also there are some things that make people photosensitive. Particularly with radiotherapy and some drugs. Making sure people are aware and that they cover up when they go outside. Also, I always encourage them to try and maintain their interests and physical activities because when they're not able to get out and do things and be physically active because of a consequence of their illness or their treatment, if they've got a good level of fitness to start then they are not going to be so far down to have to pick up again.
Unlike the specialists who were familiar with managing chronic conditions or three older GPs who frequently worked with older patients and chronic illness, the two younger doctors, both of whom had only worked in a hospital setting, did not talk about lifestyle as a management issue. Several of the other general practitioners were also silent on the issue of lifestyle and illness management, preferring instead to emphasise to me that there is a wide range of effective drugs available for the management of chronic conditions such as high blood pressure and asthma. An exception to this pattern emerged when Dr K, a general practitioner in her fifties, spent a great deal of time during our interview talking about lifestyle changes being a far more effective management strategy for some chronic conditions than medication:

Dr K: Well most people know that they have to manage type two diabetes using diet and exercise so I suppose that's an example of lifestyle. And then there's asthma where we know it's important to keep fit by doing moderate exercise. Another good example is skin conditions. A lot of people don't realise that what they eat and what they bath with can have an impact on their skin. Skin conditions are one of the things that we sometimes can't do much for. The drugs and ointments haven't really changed much since the introduction of cortisone, and that doesn't solve the problem for a lot of people.

Emily: Oh?

Dr K: So I tell people that using special detergents for sensitive skin and washing in pH balanced washing products will make a difference. I actually have a lot of leaflets about it. (She rolls her chair across to a filing cabinet drawer which is full of information leaflets and brochures. She flicks through and pulls out an information/advertising photocopied page by ego pharmaceutical which explains about skin pH in the context of advising patients use certain skin care products and gives it to me) ... Keeping your skin pH right can make a difference, when it gets unbalanced bacteria and fungus have chance to attack the skin.
Emily: I had never realised.

Dr K: Yep, when you are talking about a chronic type condition then lifestyle issues like those can make a real difference. Those sorts of changes can help people to manage and will help that person as much as or in conjunction with treatment.

In the second way of conceptualising lifestyle in terms of illness management and treatment, doctors use their expert knowledge about the outcome of a particular treatment or surgery or disease to talk about the way this will impact on their patients' general experiences of day-to-day living. When doctors talked about this they frequently expressed concern about helping their patients to 'live as close to normal as possible'. In this category I have included discussions of lifestyle where doctors spoke about limitations imposed by illness/disease/disability and patients' attempts to live a lifestyle which they consider to be 'normal for them' even if it may appear quite abnormal to other people (for example, using a wheelchair or using a colostomy bag). Here the enrolment of ideas and concepts from the chronic illness literature is apparent (e.g. Charmaz 1987, 1990; Radley 1993; Thorne 1993).

During my interview with Dr O she expressed concern about trying to achieve normality for her patients within the limits imposed by cancer and cancer treatments. The following example clearly shows the overlapping nature of the different lifestyle accounts. I could also have cited it in the previous section to demonstrate doctors speaking about lifestyle and social history:

Emily: Is it a concept, the concept of lifestyle, that you are conscious of using in your work at all?

Dr O: Yes, um, because I do go into a very detailed history with each patient, which includes um, obviously the medical reason that they've come along to see you but also their past medical history and a fair bit about things like where they live and with whom,
what their support structure is, factors like alcohol and tobacco that have a fair impact in various cancers but also lots of other illness, also their interests and pursuits, their work. What they are able to do at the moment, what they have been able to do previously and what they would like to continue to be able to do and even for the period of their treatment, whether it is likely that is going to be interrupted or not and whether they can have the expectation of getting back to a normal lifestyle for them.

Emily: So that's very much why you use that idea of lifestyle when you are talking to them, to get an idea what their lives have been like, how they would like them to be?

Dr O: Yeah, but also how perhaps what has been done up until then might have had an impact on their illness. It might be to at least a degree correctable and in their favour for how they respond to treatment or what enjoyment they can get out of the time they have remaining if they're not likely to respond to a particular treatment because of the nature of their cancer.

Emily: Do people ever ask you what they can do to help themselves, like lifestyle changes?

Dr O: Most people ask if there's a particular diet they can follow. And usually my answer to that is no, but a so-called good healthy diet and if we haven't already covered that in what they eat um, then addressing that in general terms. I'm not a dietitian, I don't have the charts that give them the vitamin contents of this, that and the other, but I have some sort of broad ideas of what dietary components are going to be helpful and perhaps not so helpful to them. Um, so in those terms I discuss it on a regular basis.

Knowledge about the everyday lives of their patients is important for doctors when they are trying to help a patient rehabilitate after a serious accident resulting in bodily impairment. In this next example Dr H found his extensive background knowledge about a patient whom he also knew socially to be invaluable when helping this patient put his life back together after becoming a quadriplegic in a car accident:
Dr H: When I worked in the country so many of my patients were also friends. This made my job harder sometimes but it also gave me much greater insight into their daily lives.

Emily: What do you mean by that, exactly?

Dr H: Well, you know Paul Williamson don't you?

Emily: Yep

Dr H: Well when he had that car accident and became a quadriplegic it was devastating. I mean it would be a terrible blow to anyone but for a farmer not being able to work his land and do things himself any more was terrible. It can mean the end of income and losing everything that you normally do everyday. Farming is a very hands-on sort of business and being in a wheelchair with only limited use of his arms means not being able to drive a tractor or anything really.

Emily: Yeah. I know that everyone was pretty shaken up by it.

Dr H: Yeah, So I knew that what Paul wanted was to live on his farm, keep his farm running and stay in his house. So that's what we worked towards, him and I. He made changes to the farm operations so that he could run it with help, and they put in ramps and concrete paths to the sheds. And I worked very hard to help him stay well enough to do what he wanted to do. He had to get used to big changes in his lifestyle, really the whole family had their lifestyles changed.

When doctors talked about the everyday lifestyle of their patients they did so largely on the basis of their own clinical experiences of the ways that treatment or illness impact on the lives of their patients. As with the other ways that doctors talked about the social, this is an individualised understanding of the social. While doctors told

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88 Pseudonym used to ensure confidentiality and privacy.
narratives about the way that certain individuals' lifestyle were affected by their illness they did not talk in a generalised or abstract way about how gender, ethnicity, religion or social class affect that ways that people experience chronic illness or medical treatment.

5.4 Lifestyle and health

In addition to using lifestyle as an idea to orientate discussion of the social aspects of sickness doctors spent a great deal of time talking about lifestyle and health. As described in chapter one, medical knowledge is orientated towards addressing disease rather than illness or health (Montgomery 1991; Lock 1985). While, as discussed extensively in this thesis, doctors do seek to explain health and illness, they often have to utilise discourses other than those from medicine in order to achieve this. In relation to health, most medical explanatory frameworks offer explanations for disease not health. These offer doctors little or no scope to talk about what constitutes health and how this can be achieved (Nettleton 1995:36). In contrast, many medical and lay conceptions of lifestyle are orientated towards preventing disease in the future and in so doing implicitly account for the maintenance of health and the prediction of future health states (e.g. Crawford 1984; Blaxter 1990; Williams 1998; Charles and Walters 1998).

When talking about lifestyle and health doctors used a range of different conceptions of lifestyle, including those identified in chapter four such as risk factor health promotion, the new public health and ideas from the self-help and fitness industry lifestyle discourse. They also utilised commonsense understandings about health and lifestyle that are to similar to those described in lay accounts (e.g. Blaxter 1983; 1990, 1997; Popay et al. 1998; Prior et al. 2000).

In one characteristic, however, doctors' discussions of lifestyle and health were very different from lay discourses of lifestyle and health found in the self-help, beauty and
fitness industry. This is because unlike a self-help, beauty and fitness industry conception of lifestyle, doctors emphasised feeling well physically and psychologically and did not describe a healthy lifestyle in terms of 'looking good', 'looking young' or 'looking sexy'.

For the doctors, health was a relative state which was influenced by aging and which could be improved and maintained or which could deteriorate. Furthermore, when doctors talked about health they often described 'feeling well', demonstrating that their definitions of health include an emphasis on emotional wellbeing. This demonstrates that when doctors explain health in terms of lifestyle they use a far wider definition of health than a simple biomedical definition of health as simply the absence of disease or infirmity. The terms used by doctors to talk about health were similar to those identified in studies of lay perceptions of health (Blaxter 1990:3).

When doctors talked about lifestyle and health they did so in two ways. The first entailed commonsense prescriptions for health, and the second entailed accounts which emphasised that it was possible to ensure good health in the future by having a healthy lifestyle.

In both of these ways of talking about lifestyle, the doctors integrated aspects of their own lives and environment in their stories about how to become healthy or how to stay healthy. This is similar to the process described by Williams (1993) as narrative reconstruction. Williams writes about narrative reconstruction in relation to explaining illness and in the section above describing the ways that doctors spoke about illness it was demonstrated that doctors do utilise their own experiences when constructing narratives of illness. However, as is demonstrated in the following two sections, the integration of personal experiences was far more evident in doctors' narratives of health maintenance.
5.4.1 Lifestyle as a commonsense prescription for good health

Accounts which involved doctors telling me commonsense prescriptions for health which emphasised general lifestyle issues such as a 'healthy diet', 'keeping fit', 'managing stress' and 'achieving balance' between the different aspects of everyday life (for example work, leisure, family life, intimate relationships, personal interests) were a feature in interviews and in my ethnographic work. The ideas about what constitutes a healthy lifestyle which I found in these commonsense understandings are strongly informed by popular ideas of achieving bodily balance in order to maintain general health and a strong immune system. In this example Dr C offers a commonsense explanation for health:

Dr C: Students often don't have the healthiest lifestyle. I think that a lot of the problems that patients come to see me about are lifestyle related. If people sleep and eat properly, get some exercise and refrain from pumping their bodies full of poisons then they tend to stay pretty healthy.

Such conceptions of lifestyle are not distinctively 'medical'. While they are certainly informed by medical knowledge, so too are commonsense lay accounts about lifestyle and health (Blaxter 1990; Davison et al. 1991, 1992; Pierret 1993). This is a way of understanding health in terms of having a 'healthy' lifestyle as opposed to understanding disease in terms of an 'unhealthy' lifestyle. Doctors' stories about lifestyle and health represent a broadly 'commonsense' view that living a 'healthy' life is sensible because a person's state of health is related to the things they do in their life. They are not accounts about the cause of disease; nor do they usually argue that a healthy lifestyle will cure someone who already has a disease. Rather they are about staying healthy. For example, Dr L, a general practitioner, suggests that a healthy lifestyle can help a person to stay healthy but it won't cure disease:

Emily: Will a healthy lifestyle stop people from getting sick?
Dr L: Well it's impossible to say that really. I mean living healthily, with a good diet and keeping fit, minimising stress and such like will obviously mean that you are healthier and less likely to get sick.

Emily: But can a person get healthy if they have a healthy lifestyle?

Dr L: Well obviously if you are really ill then changes in diet or something isn't going to be enough to make you better. I saw a young man recently who was really sick with inflammatory bowel disease. Do you know what that is?

Emily: Yep.

Dr L: It's quite a serious condition where people get ulceration in the colon and they can bleed from these sites, it's pretty nasty really. Well he had been avoiding medical treatment and treating himself using diet and herbs. By the time I saw him he was very underweight and anaemic from blood loss. He needed steroidal treatment from a gastro-enterologist and no amount of dietary change or meditation was going to fix him up. So in that situation lifestyle can't really make someone become healthy. But for an already reasonably healthy person, lifestyle changes like eating better and getting exercise will make them feel better. It's difficult to say it will stop them getting a disease though.

While the example I have used directly above focuses on medically defined disease and treatment, the majority of times that doctors talked about lifestyle in a commonsense way, the things they said might equally have been found in the self-help literature in a popular magazine or offered by someone's mother. Interestingly, whenever I asked doctors the source of this type of lifestyle knowledge they (as usual) cited evidence based medicine or having read about it in a journal. In some of the interviews I

89 Doctors never claimed to have acquired knowledge from health promotion. This is a reflection of their perception that health promotion is aimed at patients not doctors. As doctors frequently utilised conceptions of lifestyle from risk factor health promotion when they were talking about lifestyle as a risk for disease it is apparent that they do acquire information about lifestyle from this source.
asked the doctor if they had ever learnt about health and lifestyle from sources other than medical sources (e.g. magazines, television or family members). Their responses to this question were mixed. Some doctors said that they already knew about lifestyle so they didn’t need to learn about it from anywhere else. Other doctors told me that it was possible. However, they seemed to think it was a very strange question to ask, implying that the source of doctors' knowledge was self evident; it was 'medicine'.

Several general practitioners stated that, in addition to learning about lifestyle and health from epidemiological research and medical journals, they had developed their ideas about lifestyle through clinical experience. This is demonstrated in the following excerpt from my interview with Dr J, a 45 year old female general practitioner:

Emily: If you were thinking about lifestyle, as a doctor, what sort of things would you be thinking about?

Dr J: Um, probably stress levels, exercise and diet.

Emily: Would you be thinking about those because they are factors which have been identified by epidemiological research or would it be a more commonsense way of thinking? What I mean by that is that while I haven’t trained as a doctor I feel that stress levels affect my health even though I have not actually read studies which say that they do.

Dr J: Yeah, mm. It's a bit of both really. It's reading and it's experience, I have spent 25 years in general practice.

Commonsense type of accounts were often personalised, expressing an opinion that a healthy lifestyle is one that suits the individual as well as being one that fulfils the everyday criteria of a healthy lifestyle (e.g. 'a good diet and exercise'). The following example is taken from my interview with Dr H. In this example he describes his own lifestyle which he considers to be healthy for him:
Emily: Do you have a healthy lifestyle?

Dr H: Well I try to. I don't work full days every day of the week any more so that I can spend time with my family as well as time for exercise and other interests. You came along to the medical history symposium that I organised didn't you?

Emily: Mmm, it was great.

Dr H: Yeah, so I try to have a balanced lifestyle. Not just practice work all of the time. I went overseas last year and did a bit of research in the US about the history of important medical schools and prepared the paper that I presented at the Symposium.

Emily: Mmm

Dr H: And of course exercise is important. If you don't use muscles you just lose them and then everything can go. Karen and I both go to the gym and I walk the dog every day. ... Is that the sort of thing that meant?

Emily: Yeah, I was really interested in what do you think a healthy lifestyle is?

Dr H: Well, it's one that keeps people well. Keeping stress levels down is part of it, so is what you eat, spending time with family, keeping fit. And we all have spiritual side as well. I go to church regularly and I think that for me that is part of a healthy lifestyle.

This type of lifestyle account occurred frequently during the participant observed consultations. For example, during a consultation with Dr C, I complained about feeling tired all of the time. She suggested that I make lifestyle changes:

Emily: Ever since I had the virus I just don't feel well at all. Really tired and lethargic all the time with a sore throat. I'm wondering if I should have a blood test for glandular fever?

90 Pseudonym used to protect privacy and confidentiality.
Dr C: Not at this stage. It can take a while to get over a virus. Are you getting enough sleep?

Emily: All I do is sleep.

Dr C: Well I think you should give it another week before we think about doing any tests. Probably you will be feeling much better by then. You could do some gentle exercise. Sometimes tiredness can be the result of inactivity. There are things you can do to boost your immune system and make yourself healthier all round. Eating green vegies and fruit, and get plenty of sleep. Also you could try some vitamin C and echinachea. A good multivitamin never goes amiss (re-constructed quotation using notes taken after consultation).

In general, commonsense prescriptions for well-being were characterised by moderation and were presented very much in terms of advice but not as certainties or as dictates. In contrast, the next way that the doctors talked about a healthy lifestyle, as being a certain way to stay healthy in the future, was not characterised by either moderation or a recognition that a 'healthy' lifestyle is not a guarantee of a long and healthy life. In addition, in arguing that a healthy lifestyle is a guaranteed way of achieving health and longevity, these doctors are implying that a 'healthy lifestyle' is a moral imperative.91

5.4.2 A 'healthy' lifestyle as a magical formula for good health

Several doctors, all general practitioners, spoke about having a 'healthy lifestyle' as though this were a certain way of controlling future health, a 'magical formula' for future health. This way of explaining health in terms of lifestyle has elements in common with religious views on an ascetic lifestyle being a path to virtue and eternal life. These accounts were also quite evangelical because the doctors seemed to be trying to convince me that I should adopt a healthy lifestyle, a type of lifestyle

91See White et al. (1995) for a discussion of bodywork as a moral imperative.
conversion. This is similar to the way that proponents of alternative diets (organic foods, whole foods and vegetarianism) speak about food and health. Hamilton et al. (1995:498) describe how the attitudes and beliefs of consumers of whole and health foods can be interpreted as having a magical or mystical orientation even when presented in the guise of rational science.

In addition, while doctors' accounts about a 'healthy' lifestyle leading to good health were positive and up-beat in tone they were also potentially moralising and censoring. Because they were expressed with such certainty and posited a healthy lifestyle as the cause of future good health their implicit claims about individual responsibility for state of health were clear. This is apparent in the following example: 92

Dr E: Well a person's lifestyle is their health. The way that people live their lives is their health. ... do you want to talk about Ottawa? You do know about the Ottawa Charter in 1988?

Emily: Yes.

Dr E: Well that was where we planned a lot of the public health stuff that you see now. You see a healthy lifestyle, exercise and diet really are so important. By practicing a healthy lifestyle people live longer and healthier.

Emily: So what type of relationship do you see between lifestyle and health? Is it a very direct one?

Dr E: Well it's direct in the sense that if a person lives a healthy lifestyle they are going to be healthy! If you mean in a causal sense it is more difficult. Look, the Greeks knew about lifestyle

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92 This example is from Dr E. who was an interesting doctor to speak with about lifestyle because he had been on a consultative committee in the 1970s in Canada which resulted in the drafting of the Ottawa Charter. At the time I spoke to him he seemed to be quite worried about the aging process. I felt strongly that he was experiencing first hand the dissonance between the positive 'upbeat' arguments about lifestyle practices and youthfulness which he kept talking about and the inevitable physical decline of age which he was experiencing. While he spoke to me at great length about the virtue of exercise for disease prevention and health he also expressed frustration and anger about his physical pain from a back injury resulting from running.
and health. That's where the word gymnasium comes from. Healthy body, healthy mind.

Emily: You mentioned before that you have always exercised a lot ... (He interrupts).

Dr E: Yes, yes I have always exercised, running, climbing swimming and cycling, marathons as well. People who don't exercise are really just asking for health problems later in life. Do you exercise?

Emily: Um, well sometimes I seem to get it together but not regularly, no.

Dr E: Well you really should. You are getting into your mid twenties now and things start to slow down after 25. Staying well is really a personal decision in many ways.

These accounts were usually offered by the doctors who described themselves as having a strong personal belief in the importance of exercise and nutrition. However, in addition to these doctors, several other doctors also spoke about lifestyle in this way, in reaction to discussion of uncertainty about lifestyle and the prevention of disease, as though these doctors felt that the interview needed to regain a sense of hope and action. (I mentioned earlier in this chapter that doctors frequently talked in a very positive way about lifestyle and health after they had talked about uncertainty with regard to the cause of disease). The following example is taken from an interview with a GP in her late forties, also with a strong personal commitment to exercise:

Emily: So is it important having a healthy lifestyle?

Dr B: Well it's very very important. I talk about it with every single patient who comes in here. Diet, exercise, smoking and drinking, safe sex.

Emily: Why is it so important?
Dr B: Well I guess it's a bit of a thing of mine. I really believe in it, especially exercise. I run everyday, ride my bike and swim. My kids all do a lot of exercise. It's vital really for staying healthy into the future. I can't stress it strongly enough really.

Emily: Have you always exercised?

Dr B: I have always been active but now that we know so much about exercise and health I do it knowing that it really works.

When doctors talk about control during this way of understanding lifestyle they described controlling their own health through lifestyle. As part of this personalised approach they often used words like believe or feel. This is in contrast to the times when doctors described controlling a patients lifestyle. When they did speak about patients, several doctors described lifestyle advice as a valuable gift which they can give their patients to help them to control their own future or in this next example, the doctor's own children's future. The doctors that talked about lifestyle and health in this way saw youthfulness and health occurring in conjunction with each other without the need to make any special lifestyle efforts. For older people to be healthy, many years of lifestyle vigilance were required:

Dr J: What you do with your health in your forties is what you will be in your sixties. That is my little saying because I really do believe that. If you just look the other way and drink a lot and smoke a lot, don't exercise, .. then they are probably going to end up with diabetes at sixty five, heart disease and not feel very well. Possibly well before that. So prevention takes place really from your age but most of us didn't know that in our twenties, whereas my children know that. They are on low fat diets now, in their twenties. So that is knowledge that they have that I didn't have. But I do know it now and I can take steps to do something about it, and therefore I feel that I can really stop the damage. And that is lifestyle thinking.
Emily: You seem to see knowing about lifestyle as a very empowering thing that gives people some type of control over their own health?

Dr J: That is exactly right. That is probably right on the point and I like that. So much in the world you can't control what happens to you but people finding out really can help them. If they choose not to, well then I guess that is OK to a point, but then you can't blame someone else. This is one really strong area where you do have more control over how you actually feel.

This example also demonstrates the way that these doctors perceived epidemiological research into lifestyle as 'proof' that a 'healthy' lifestyle will result in future good health and longevity. This is a point of view familiar from my review of the self-help, beauty and fitness industry literature. Self-help books and articles about exercise and diet in women's magazines also see epidemiological data as 'proof' for arguments about the guaranteed positive effects of a 'healthy' lifestyle (e.g. Hetzel and McMichael 1989).

As already mentioned, most of the doctors involved in this project did not talk about lifestyle and alternative medicine or therapies. One doctor, however, identified himself as a holistic practitioner. His accounts of lifestyle were permeated with ideas and terminology from various alternative healing modalities. They also enrolled scientific medical frameworks from various biomedical fields such as neurophysiology, psychology and immunology. His accounts of lifestyle and health emphasised controlling aging through lifestyle. For example:

Dr S: ... I worked in accident and emergency for several years in a large city hospital. That has a very intense relationship where people come in close to death and you both agree to try and salvage them. That's what western medicine is really, salvage medicine. It does a really good job at that, dealing with acute emergencies like broken bones or a ruptured appendix. But it
can't deal with other things at all well. What I'm really into now is anti-aging medicine.

Emily: Oh, really, what exactly is that?

Dr S: It's about total well-being, mind, body and spirit. Living in such a way as to prevent disease and achieve on-going health and vitality by, eating anti-oxidant foods, avoiding foods that cause aging and toxification, taking nutritional supplements like drinks composed or marine algae, certain fruits. Learning and practising meditation avoiding pharmaceutical and other drugs. Many things really. You see Western medicine is not focused on staying well, it's all about fixing disease or symptoms. Problems that may have taken many years to develop. In anti-aging medicine we take a preventive approach and see that ill-health is not inevitable. It's the result of the way we live.

Lifestyle understandings of health which identify the "precursors of future illness" serve to "deconstruct mortality ... into a number of different diseases, each of which is 'avoidable in principle' through the development of appropriate [ie. medically or scientifically endorsed] 'survival strategies' " (Williams 1998:441). Doctors who describe a 'healthy' lifestyle as a 'magical formula' for future good health are using a logic whereby "death it seems only haunts those who are 'careless of personal health'" (1998:441). This logic ignores (or neglects) the inescapable fact that everyone will eventually die of something.

The doctors I spoke with were of course more aware of this fact than many lay people. They had been working with the evidence since they began their medical training. Nevertheless, as it is for many non-medical people, the attraction of a lifestylist orientation was strong (Crawford 1984; Glassner 1989; Fitzgerald 1994). Unlike many lay people, however, doctors are unable to rely solely on this particular understanding of lifestyle because it is constantly contradicted by their clinical (and
personal) experiences, and because they also have access to other 'medical' explanations for disease and health.

### 5.5 Discussion

The interview, observation and participant observation data presented in this chapter have shown that doctors do not use a unified medical understanding of lifestyle. Instead, doctors construct different understandings of lifestyle according to context. These different types of lifestyle understanding draw on a range of different conceptions of what lifestyle is and how it relates to bodies, disease, illness or health. Many of these are familiar from the textual review presented in chapter four. For example, doctors frequently enrolled the conceptions of lifestyle found in epidemiology and risk factor health promotion when they were talking about biological disease (e.g. Russell and Buisson 1988; Rose 1992; Rothman 1998). When talking about illness doctors used broad and wide ranging understandings of lifestyle which drew on biopsychosocial conceptions of lifestyle, similar to those identified in mainstream medical texts, in particular general practice texts, new public health texts and the chronic illness literature (e.g. Neighbour 1987; Scheingold 1988; Gammon 1990; Stewart 1995). When talking about positive states of well-being (health) doctors were unable to find suitable understandings of lifestyle within the mainstream medical literature or epidemiology. Instead they enrolled conceptions of lifestyle from risk factor health promotion and the lay discourses of the self-help, beauty and fitness industry (e.g. Rosenfeld 1986; Hetzel and McMichael 1987; Kowalski 1989). This is summarised visually below in table 5.1:
Table 5.2 The conceptions of lifestyle used by doctors when talking about lifestyle in relation to disease, illness or health

<table>
<thead>
<tr>
<th>Different conceptions of lifestyle</th>
<th>When talking about Disease</th>
<th>When talking about Illness</th>
<th>When talking about Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidemiological</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Factor Health Promotion</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>New Public Health</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>General Practice, Primary Health Care and Chronic Illness Literature</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Self Help, Beauty and Fitness Industry</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Alternative Medicine</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Commonsense/Folk</td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Doctors’ own lifestyle</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

As can be seen in table 5.1, while doctors' understandings of lifestyle reflect the range of conceptions of lifestyle identified in the textual review. However, doctors also used conceptions of lifestyle which were not apparent in these texts (either medical or lay). This occurred when doctors talked about lifestyle and health using commonsense/folk conceptions of lifestyle or when they spoke about a 'healthy' lifestyle in terms of their own lifestyle. Medical knowledge in practice is not a direct reflection of formalised knowledge as found in texts (Wright and Treacher 1982b:13). In addition to scientific medical knowledge, the doctors who were interviewed and observed for this thesis construct their understandings of lifestyle using their clinical expertise, their personal values and life experiences and in tandem with their patients.
The data presented in this chapter also demonstrate that many of the doctors' understandings of lifestyle reflect the individualistic and body-centred orientation of orthodox medical thought. They are often universalistic and rarely account for structural or cultural differences. Because doctors understand the social determinants of disease in terms of individual behaviour their understandings either explicitly or implicitly imply that if a person becomes unwell with a lifestyle-related condition then they are individually responsible for this situation. This was apparent when doctors talked about lifestyle as a cause or a risk factor for disease. However, when talking about individual patients, doctors were reluctant to explain their sickness in this way. Instead they actively avoided using ideas about lifestyle which implied that individuals are morally responsible for their disease.

The data presented in this chapter have also demonstrated that explaining disease, illness and health in terms of lifestyle has a number of advantages for doctors. First, 'lifestyle' provides a useful explanatory framework for doctors because conceptions of lifestyle are ambiguous and thus flexible. Secondly, lifestyle provides doctors with a medically legitimate language and framework which they can use to talk about the social. Thirdly, talking about lifestyle allow doctors to talk about everyday experiences and practices and to explain disease or health using everyday language. Fourthly, understanding lifestyle as a risk for disease provides doctors with the sense that they can control and manage disease risk.

In addition when doctors used conceptions of lifestyle which are not distinctly medical, their understandings blur the boundaries between lay and medical thought. This also occured when doctors claimed to be using an epidemiological (thus scientific/medical) conception of lifestyle risk when in fact they were using conceptions of risk more closely aligned with those from risk factor health promotion and lay processes of 'lay epidemiology'.
Each of the issues mentioned in this summary are discussed in more detail below.

5.5.1 A useful explanatory framework

Lifestyle provides doctors with a useful explanatory framework for a number of reasons. First, as demonstrated throughout this chapter, lifestyle is an ambiguous concept and thus provides doctors with a usefully flexible explanatory framework which can be altered to account for a range of different situations. These situations include explaining the causes of disease, managing and treating illness and maintaining good health.

Unlike many traditional medical explanatory frameworks (e.g. germ theory) which are clearly established and relatively stable, understandings of lifestyle have gained a place in the medical canon without ever being clarified or defined. Because of this ambiguity, lifestyle is a liminal medical concept where many discourses on the body, health, illness and disease meet and are contested. Thus the term lifestyle and ensuing perceptions about what lifestyle is and how this relates to disease, illness and health are open to interpretation within different medical disciplines and by individual doctors. Lifestyle also provides doctors with a satisfactory explanation for disease where aetiology is multi-factorial and no straightforward explanations can be constructed using other medical models of disease. This was demonstrated when doctors used lifestyle as a 'gap-filler' in situations where there was no clear medical explanation for disease.

Secondly, understandings of lifestyle provide doctors with a widely accepted terminology and framework with they can use to talk about the social context of disease and the social experiences of sickness (illness). Other medical frameworks do not provide doctors with a useful way of addressing the social. In the same way, lifestyle frameworks, because of their emphasis on disease prevention are able to provide doctors with explanations not only for why people get sick but for why people
stay well. Again, this is in contrast to most other medical explanatory frameworks which are characterised by a focus on disease not health.

Thirdly, explaining health, disease and illness in terms of lifestyle also allows doctors to construct explanatory narratives which draw on everyday language and which refer to everyday practices and behaviours. This has several advantages for doctors. Talking about everyday life aids in rapport-building between doctors and their patients. Explaining disease, illness and health in familiar and accessible terms also serves as a useful heuristic device for doctors. Unlike other medical explanatory frameworks which rely on esoteric language and concepts, doctors talk about lifestyle in accessible and familiar ways.

Finally, the way that doctors talk about lifestyle as a risk factor for disease provides patients and their doctors with a sense of control over the causes and risk of disease. This is in contrast to other types of disease risk which offer patients and doctors very little opportunity to manage or control risk (for example corporeal risk and environmental risk).  

5.5.2 Individualism, morality and universalism

The interview, observation and participant observation data presented in this chapter also demonstrate that doctors understand the social determinants and contexts of ill-health and health in a far more individualistic manner than sociologists (e.g. Armstrong 1983; Calnan 1987; Blaxter 1990; Nettleton 1995). This is particularly apparent when they talk about lifestyle as a cause of disease or as a risk factor for disease. The individualistic way that doctors understand lifestyle is a reflection of the orthodox medical perspective which is based on assumptions of individualism and naturalism (Gordon 1988a:23).

93 Environmental risks include toxic chemicals, pollution and nuclear waste. Corporeal risks (or embodied risks) are "distinguished by being located within the bodies of individual people" such as high blood pressure or an abnormal pap smear result (Kavanagh and Broom 1998:438).
While doctors did use a broader biopsychosocial understandings of lifestyle to talk about illness and health these understandings of lifestyle still focused on the individual within their immediate social environment (family, work, intimate relationships). None of the doctors explicitly addressed gender, ethnicity, race, social class or socio-economic status as factors which both constrain lifestyle choices or which might result in differing perceptions of what constitutes a 'healthy' or an 'unhealthy' lifestyle. nor did they recognise that their own understandings of lifestyle are located culturally and historically. This suggests that doctors were assuming that the way they understood lifestyle was universally applicable. Kirmayer (1988) recognises this characteristic of medical biopsychosocial approaches:

Without consistent attention to the experience of illness and the socio-moral dimensions of sickness, the "biopsychosocial approach" of contemporary medical education will become just another technique for rationalizing the patient as a system of medical facts. Personality and stress will be variables duly noted and entered into the equation of the patient's distress, while disease remains the one solid fact about the person (Kirmayer 1988:83-83).

As described in chapter two, two negative implications of a universalistic and individualistic understanding of lifestyle are that such an understanding holds individuals morally responsible for their own sickness and is potentially discriminatory. Both of these problems were apparent in doctors' conversation about lifestyle. This was demonstrated most clearly when doctors talked about the causes of disease or risks for disease and when doctors talked about lifestyle as a 'magical' formula for health.

Importantly, however, many of the doctors were reluctant to impute individual responsibility for disease. When they were talking about individual patients they avoided using conceptions of lifestyle from moralising and discriminatory discourses such as those from the self-help, beauty and fitness industry or risk factor health
promotion. Instead they emphasised that they were uncertain about the nature of the relationship between disease and lifestyle. They preferred instead to say that 'we don't really know what causes many diseases'.

5.5.3 Blurring the boundaries between medical and lay knowledges

The results presented in this chapter also demonstrate that there are many similarities between doctors' understandings of lifestyle and lay perceptions of lifestyle in relation to health, illness and diseases. When the doctors explained illness or disease in terms of lifestyle they integrated their own personal experiences of bodies, health and sickness with scientific medical information about lifestyle and disease. This is similar to the process of lay epidemiology (Davison et al. 1992, 1991; Brown 1992).

This blurring of boundaries between medical and lay perceptions of lifestyle was also apparent when the doctors talked about lifestyle and health. For example, doctors often gave commonsense lifestyle prescriptions for health which varied according to their personal experiences and opinions. This is similar to the findings of other sociological studies of doctors' perceptions of lifestyle in the context of disease prevention (Davies 1984; Boulton and Williams 1986; Williams and Boulton 1988).

It is also not a surprise that doctors utilised lay conceptions of lifestyle and talked about lifestyle in a similar fashion to lay people. Anthropological and sociological research has demonstrated convincingly that doctors do not restrict themselves to 'medical' ideas about disease and health. Instead they make use of a range of medical and lay ideas (e.g. Helman 1988; Ben-Sira 1990; Shapiro 1990):

[Research into medicine and medical knowledge has shown medicine to be] ... changing, pluralistic, problematic, powerful, provocative. What medicine proclaims itself to be - unified, scientific, biological and not social, non-judgemental - it is shown not to resemble very much. Those matters about which medicine keeps fairly silent, it turns out come closer to being central to its clinical practice - managing errors and learning to conduct a shared moral
discourse about mistakes, handling issues of competence and competition among biomedical practitioners, practicing in value-laden contexts on problems for which social science is a more relevant knowledge base than biological science, integrating folk and scientific models of illness in clinical communication ... (Gaines and Hahn 1985:3).

Further, as discussed in chapter two, many doctors are not experts in the fields of epidemiology and population health. Thus doctors cannot always be considered as medical experts and thus as distinct from all lay people. In relation to epidemiological research about lifestyle many doctors are in a similar position to well educated lay people.

Lifestyle explanations for disease are far more open to non-scientific, folk and lay assumptions than are other medical understandings of disease. Lifestyle explanations have entered popular culture and have been highly publicised through health promotion and marketing campaigns. Furthermore they use everyday language, refer to everyday practices and behaviours and contain a range of socio-cultural assumptions about desirable behaviour (Hughes 1994). While other medical explanations for disease (e.g. genetic models or environmental models) are also imbued with sociocultural values these other medical explanations for disease are less obviously affected by such assumptions. Consequently utilising lifestyle as an explanatory concept increases the opportunities for doctors to use folk, commonsense and other ideas and for lay and medical accounts about lifestyle to converge. Studies of lay perceptions of lifestyle show that lay people use medical and scientific understandings of lifestyle in addition to folk understandings (e.g. Blaxter 1983,1990, 1997; Calnan 1987; Pierret 1993).
5.5.4 Differences between the doctors

The analysis presented in this chapter also demonstrates that individual doctors display considerable variation in the ways that they define lifestyle and how they explain sickness and health in terms of lifestyle. While each doctor’s personal understandings of lifestyle were unique because of the influence of their personal values and experiences, several patterns of difference were apparent. As I had expected to find differences between males and female, I was surprised when I could not discern any clear differences between them. Instead the clear patterns of difference were between different types of doctors, namely among the specialists, between specialists and general practitioners, between the two young doctors and the other middle-aged doctors, and finally, between doctors of any persuasion who expressed a strong personal commitment to a 'healthy' lifestyle and those who did not.

Among the specialists the clearest difference was between the oncologists (Dr O and Dr P), gynaecologist/obstetrician (Dr M) and haematologist on one hand, and the dermatologist (Dr T) and epidemiologist/rheumatologist (Dr N) on the other. The first group of specialists displayed a range of different understandings of lifestyle and shied away from making moralistic comments or implying that individuals are responsible for the development of diseases associated with lifestyle. The second group of specialists relied heavily on the understandings of lifestyle from epidemiology and risk factor health promotion. They seemed largely unaware of the moral implications of these types of lifestyle understanding. In addition, neither of these specialists spoke about medical uncertainty about the relationship between lifestyle, disease and health. Instead they spoke about medical knowledge about lifestyle as undisputed 'facts'.

Apart from Dr T and Dr N, the medical specialists were more comfortable than other types of doctors (GPs and the two young hospital based doctors) in talking about gaps in medical knowledge and in acknowledging medical uncertainty about the relationship

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94 A surprising stance for an epidemiologist actively involved in research.
between lifestyle, disease and health. In contrast, general practitioners were (as a group) less comfortable talking about medical uncertainty. This seemed to be related to the importance they placed on not painting a negative picture about the ability of medicine to "make a difference" (Dr S).

This difference is interesting in the light of the second pattern of difference between general practitioners and specialists; the discussion of clinical experience. Specialists (and the two young hospital based doctors) also made different claims for legitimacy than did GPs. When asked where they had acquired their medical knowledge about lifestyle, specialists all cited scientific research as the primary source of their information about lifestyle. General practitioners also did this but in addition they also claimed legitimacy for their medical knowledge on the grounds of clinical experience. Clinical experience was highly valued by general practitioners. Many of them began our interview by telling me how many years they had been practising and where they had worked (geographical location, movement between practices, being a partner in their own practice). Specialists did not offer this type of information until they were asked about their background. Then they were more likely to tell me about their training than about their years of experience as a doctor.

Furthermore, many of the examples from their clinical experience which were raised by general practitioners, were examples which suggested that the relationship between lifestyle and the development of disease was uncertain. Despite this, as discussed above, many of general practitioners were uncomfortable when talking about medical uncertainty about lifestyle and were more 'up-beat' than specialists when stressing the importance of a 'healthy' lifestyle.

The two youngest doctors (Dr F aged 24 and Dr G aged 26) were distinctly different from the older and more experienced general practitioners and specialists. Both of these doctors relied very heavily on risk factor health promotion understandings of
lifestyle. Associated with this, they were far more certain about the relationship between lifestyle and diseases and far more censorious and moralistic when talking about their patients' lifestyles. Furthermore, neither of these doctors talked about clinical experience which cast doubt on risk factor health promotion arguments about lifestyle and disease. They had only worked in a hospital and for a very limited amount of time. Their attitude towards their patients was markedly different from the empathy and compassion frequently expressed by many of the general practitioners and two oncologists and the one haematologist.

The final pattern of difference between doctors was between doctors who explicitly stated that they had a strong personal commitment to a 'healthy' lifestyle (defined by these doctors as exercise, not smoking cigarettes, eating a low-fat diet and reducing stress) and those doctors who did not claim such a commitment. Those doctors who told me that they were committed to having a 'healthy' lifestyle (GPs: Dr B, Dr E, Dr H, Dr J, Dr S95 and Epidemiologist: Dr N) used understandings of lifestyle which emphasised a direct relationship between lifestyle and disease. They were also the doctors who spoke about lifestyle as a 'magical' formula for health.

95 Dr S, who described himself as a holistic practitioner, also expressed a very strong commitment to a 'healthy' lifestyle. However, unlike the other general practitioners, Dr S described this healthy lifestyle in terms of emotions, attitudes and alternative practices such as meditation and eating special foods (such as algae and rare fruits). In line with his alternative orientation he did not talk about lifestyle in terms of risk factor health promotion. However, when using his own definition of a healthy lifestyle he did speak about lifestyle in the way which I have termed a 'magical' formula for health and longevity.
5.6 Conclusion

In contrast to the image presented to the world by the medical profession, which is an image of the medical approach to disease being unified, consistent and stable (or the reflection of this image found in traditional medical sociology), doctors make sense of health, disease and illness in a complex, personalised, shifting and contingent fashion which draws on a range of different explanatory frameworks (Gaines and Hahn 1985; Helman 1985a, 1985b, 1988). The interview, observation and participant observation data presented in this chapter reflect this complexity.

For example, when constructing explanatory frameworks which emphasise the role of lifestyle, individual doctors and specific types of doctors varied in their constructions. When explaining disease in terms of lifestyle, doctors also enrolled other medical explanatory frameworks, for example germ theory and genetic models. Furthermore, doctors' understandings of lifestyle draw on a range of different conceptions of lifestyle. These conceptions vary in the ways that lifestyle is defined and in the perceived relationship between lifestyle and disease, illness or health.

Doctors' understandings of lifestyle also blur the boundaries between medical and lay thought. Doctors often constructed explanations for health or disease which included their personal opinions about a desirable lifestyle. Furthermore, doctors' understandings of lifestyle were often constructed using similar processes to lay epidemiology and in certain contexts, they enrolled lay conceptions of lifestyle.

The data presented in this chapter also reflect the individualised nature of medical understandings of lifestyle from epidemiology and risk factor health promotion. While doctors' conceptions of the social and how they conceptualised lifestyle shifted according to context, doctors rarely recognised that lifestyle behaviours are culturally embedded or structurally constrained. In an associated issue, many of the different understandings of lifestyle constructed by the doctors reflected the moralistic and risk
centric characteristics of "healthism/lifestylism" (Crawford 1978, 1980, 1984; White et al. 1995).

However, despite the limitations of a lifestyle approach (e.g. medical understandings of lifestyle are not very successful at accounting for structural patterns of health), the data presented in this chapter have also shown lifestyle to be a very useful explanatory concept for doctors. Reasons for this usefulness include: flexibility; the heuristic value of a medical explanatory model which uses everyday language and refers to everyday practices; the capacity of lifestyle frameworks to address the social; and the suitability of such frameworks for explaining why people stay healthy or how to become healthy.

The ways that doctors involved in this study constructed and utilised ideas about lifestyle were in some ways similar to the usual sociological characterisations of medical understandings of lifestyle (e.g. Hughes 1994, Peterson and Lupton 1996). However, they also varied from this sociological characterisation. This issue will be addressed in the next chapter (chapter six).
Chapter Six
Discussion

6.0 Introduction
This thesis has explored medical understandings of lifestyle through analysis of medical and lay texts, twenty in-depth interviews with medical doctors, and observation and participant observation of doctor/patient consultations. Guiding the analysis of this data were the following questions: How are ideas about lifestyle being constructed and used in medical fields other than epidemiology and public health? How are doctors constructing ideas about lifestyle? How do lay and medical ideas about lifestyle inter-relate in medical texts and doctors' accounts?

The results of this research demonstrate that medical understandings of lifestyle are far more varied than would be expected from the sociological writing on this issue (e.g. Taylor and Ford 1981; Dean et al. 1995; Peterson 1996; Peterson and Lupton 1996). Furthermore, while medical explanatory frameworks have been found to have limitations, lifestyle also appears to offer doctors a range of benefits which are not offered by other medical explanatory models. The benefits identified in this research which are offered by a lifestyle approach have not been recognised in sociological writing about lifestyle models.

In this chapter these results are discussed in relation to the sociological critique of lifestyle as a medical explanatory framework and wider theoretical issues for medical sociology.
6.1 Summary of argument and results

The thesis began by locating contemporary medical understandings of lifestyle within the context of medical explanatory frameworks in general. I argued that understanding disease and illness in terms of lifestyle is not a new approach; however, contemporary medical understandings of lifestyle which are the focus of this thesis differ from earlier medical (and lay) understandings of lifestyle because they reflect the social processes, demographic features and public health policies of advanced industrialised countries such as the United Kingdom and Australia. Furthermore, contemporary medical understandings of lifestyle stem from the fields of epidemiology and public health. They are characterised by: a focus on the social aspects of disease causation (often expressed in terms of risk factors for disease); a multi-causal aetiological perspective; and a focus on the prevention of disease and the maintenance or fostering of good health.

The sociological response to medical use of lifestyle as an explanatory concept has been mixed. While many writers have welcomed medical incorporation of a social model of disease (e.g. Coreil et al. 1985; Kickbusch 1986a, 1986b; Badura and Kickbusch 1991a, 1991b; Byde 1989; Storer et al. 1997), others have criticised a lifestyle approach to disease prevention (e.g. Fitzgerald 1994; Bunton and Burrows 1995). Such authors point to problems such as the failure of lifestyle focused health education programs to producing lasting improvements in health outcomes and the problems associated with the epidemiological research into lifestyle. Writers have also described medical explanatory frameworks which explain disease and health in terms of lifestyle as being limited in scope and characterised by a range of features which have negative implications for those affected by diseases considered to be 'lifestyle diseases'.

Medical attempts to explain health and disease in terms of lifestyle have been described as reductive, socially divorced, moralistic, potentially discriminatory and as a
perpetuation of the medical tradition of explaining health and illness in a modernist science-based manner (Crawford 1980, 1984; Kaplan 1988; Richardson 1991; Bunton and Burrows 1995). Furthermore, the medical approach to lifestyle (and wider cultural understandings of lifestyle, disease and health i.e. 'lifestylism' or 'healthism') has also been criticised for reflecting, supporting and perpetuating the commodification of bodies and health (Williams 1998; Featherstone 1991:184-186; Glassner 1989).

This sociological critique of a lifestyle approach is, in relation to some aspects of epidemiology and public health, convincing. However, due to an over-reliance on traditional sociological assumptions about the nature of medical knowledge and practice the sociological critique of a lifestyle approach is also characterised by a moralistic and judgmental attitude towards medicine. Sociological criticisms of medical understandings of lifestyle implicitly assume that medicine is an homogeneous body of knowledge and practice peopled by 'like-minded practitioners'. This assumption is apparent in two features of sociological writing about lifestyle as a medical explanatory concept: the frequent conflation of epidemiology with public health; and the way that understandings of lifestyle identified in public health and epidemiology are viewed as being representative of a unified medical perspective on lifestyle. This is a naive perspective to take because medicine is comprised of various disciplines and sub-disciplines which operate with a range of different theories and practices related to explaining disease. "Sociologists cannot, therefore, simply rely on evidence from merely one segment or branch of medicine, extrapolating on this basis to the profession as a whole" (Williams 2001:138).

This assumption, that medicine is coherent and homogeneous, underlies two additional weaknesses in the sociological critique of a lifestyle approach. First, sociologists have not explored the way that doctors construct and apply understandings of lifestyle. Empirical evidence on the ways that individual doctors understand lifestyle in relation to sickness and health is minimal (e.g. Williams and Boulton 1988; Johanson et al.
1994, 1998; Calnan and Williams 1995), and these few studies have not been incorporated into the sociological critique.

Secondly, sociological authors criticising medical understandings of lifestyle have failed to empirically explore the inter-relationship between lay and medical understandings of lifestyle. Lay understandings of lifestyle have been extensively studied and described in terms of 'lay epidemiology (e.g. Davison et al. 1991, 1992; Frankel et al. 1991); however, medical understandings have been assumed to be self-evident and clearly separate from lay knowledges. Thus the inclusion of medical ideas into lay perceptions of lifestyle and disease has been investigated but the inclusion of lay ideas into medical understandings has largely been inferred. This is evident, for example, when the socio-cultural basis of medical ideas about lifestyle has been described as a largely negative situation on the grounds that such ideas are potentially moralistic and certainly not neutral as is meant to be the case with scientific knowledge (Lupton 1993; Hughes 1994; Peterson and Lupton 1996).

These three areas of underdevelopment in sociological knowledge about the ways that medical people explain health and disease in terms of lifestyle were established as the rationale for this thesis, which addresses them through empirical research into the ways that lifestyle is being constructed and applied by medical doctors. The empirical research was conducted within the parameters of an interpretive constructionist methodological framework using multiple methods of data and an iterative analytic process.

In the first of the two results chapters the different ways that lifestyle is conceptualised in medical and lay texts were described using evidence from a thematic review of medical texts. In this chapter I argued that while conceptions of lifestyle (in relation to disease) are often similar or shared between different medical texts, such conceptions do differ between epidemiological, risk factor health promotion, new public health and
mainstream medical texts. Furthermore, within the lay texts reviewed, two distinct approaches to lifestyle were apparent: a self-help, beauty and fitness industry conception; and an alternative/holistic conception. These lay approaches were also imbued with aspects of medical conceptions of lifestyle. Thus lifestyle was revealed as an explanatory concept open to a range of interpretations and applications.

The following chapter presented evidence from twenty in-depth interviews with doctors, observation of fifty-two doctor/patient consultations and participant observation of eight doctor/patient consultations. These data demonstrated that doctors do not use a unified medical understanding of lifestyle. Instead they construct a variety of different understandings of lifestyle according to the issues being discussed (disease, illness or health). Doctors draw on a range of medical and lay ideas about lifestyle when constructing their understandings.

Six distinctly different ways that doctors used understandings of lifestyle to talk about health, illness and disease were described and illustrated with evidence taken from interview transcripts and field notes. On the basis of this evidence I argued that how doctors understand lifestyle varies according to the issue they are explaining using lifestyle, and also according to issues related to each individual doctor. These include, the area of medicine in which a doctor works, their level of medical experience and their age. It was also shown that whether or not a doctor has personal commitment or lack of commitment to a 'healthy lifestyle' impacts on how they talk about lifestyle and how they perceive lifestyle as relating to health, illness and disease.

Furthermore, analysis of the doctors' conversation about lifestyle revealed lifestyle to be an interesting explanatory framework for reasons not recognised in the sociological critique. The term lifestyle derives considerable medical legitimacy from epidemiology and thus provides doctors with a medically acceptable framework to use when accounting for the social determinants of disease and the social context within which
their patients experience disease (i.e. illness). Additionally, a lifestyle framework allows doctors to explain why some people are healthy and others not, and how to maintain or improve states of health and wellbeing. This is a feature lacking in many other medical models of disease such as germ theory. Thus talking about lifestyle provides a setting for doctors to discuss the social determinants and social contexts of disease, issues associated with illness and associated with health.

Lifestyle is an ambiguous concept and this ambiguity is of value to doctors because it allows for considerable flexibility of interpretation and application as well as the inclusion of non-medical understandings. Doctors draw on non-medical conceptions of lifestyle, including commonsense and folk knowledges, personal experience, the self-help and fitness industry, para-medical ideas such as those found in the new public health (deriving from sources as varied as social welfare, nursing, sociology and psychology), subverted statistical understandings of risk (such as those used by lay people or in risk factor health promotion) and statistical understandings of risk from epidemiology.

Interestingly, the results showed that the feature of lifestyle risk which has been the focus of so much criticism from sociologists (that such an understanding implicitly holds individuals responsible for their ill-health or good health because lifestyle risks are conceived of in terms of individual choice), is for doctors (at least in certain situations) one of the more attractive aspects of understanding sickness and health in terms of lifestyle. This is because explaining health, illness or disease in terms of lifestyle risk is seen by doctors to offer their patients the capacity to manage their risk of disease, or to actively maintain or improve their health. Unlike other conceptions of disease risk which offer patients (and their doctors) little opportunity to manage risk, lifestyle risks are seen as liberating by many doctors because they are something that a patient can do to 'help themselves'. As discussed in chapter five, Kavanagh and Broom (1998) make a similar claim about lifestyle risk. They found that women with
abnormal pap smear results often interpret this embodied disease risk in terms of lifestyle because such an interpretation offers them strategies for the management and containment of risk.

6.2 Discussing these results in relation to the sociological critique of lifestyle as a medical explanatory framework

The sociologists whose writings about medical use of lifestyle as an explanatory concept were reviewed in chapter two (e.g. Lupton 1993, 1994b; Peterson and Lupton 1996; Richmond 1997; Crawford 1980; Fitzgerald 1994) have argued that medical understandings of lifestyle are fundamentally flawed due to their reductive and moralistic nature. When the various findings of this thesis are considered in relation to this argument this sociological argument is itself revealed as reductive, and moralistic. Medical understandings of lifestyle have been shown to vary considerably between different medical fields, between different medical doctors, and even within the accounts of individual doctors. Some medical understandings of lifestyle are characterised by the negative attributes described by sociologists, others, however, are not.

When the medical texts reviewed in chapter two are considered it is apparent that, apart from a few isolated examples in the new public health literature, the majority of medical texts display, in comparison to a sociological perspective, a reductive, socially divorced and individualistic understanding of lifestyle. For example, in epidemiological journal articles lifestyle was frequently conceived in terms of isolated behaviours such as coffee consumption or a high fat diet (e.g. Johnston et al. 1995). Considered in this way the cultural complexity and social variation of these practices and behaviours is absent and their context within wider social situation is erased. However, in the context of epidemiological research this way of understanding lifestyle is largely pragmatic. Research designs and the limitations in size associated with the publication of scientific research encourage epidemiologists to work within a
limited focus and to limit discussion in articles to the most relevant details. In addition it should be remembered that sociology and epidemiology operate with quite different perspectives on what usefully constitutes a social determinant of disease (Link and Phelan 1995). From this position the sociological critique has value as a reminder of the complexities masked in epidemiological research and of the potential for epidemiological research to reflect and perpetuate patterns of social disadvantage (e.g. Skolbekken 1995). However it is also rather naive in the context of the way that epidemiology operates. Whilst epidemiology is reductionist "in that it usually relies on creating categories of people or risk factors" classification is an essential feature of epidemiology (Plant and Rushworth 1998:1147).  

Epidemiology has to take this reductionist approach; it is integral to epidemiology. Imagine trying to determine associations and causes of health problems, identify and estimate the extent of health problems of populations and plan health services if a reductionist and classificatory approach were not possible (Plant and Rushworth 1998:1148).

The sociological criticism that epidemiology has a reductive understanding of the social seems more a statement of difference than a viable critique unless the critique is aimed at making epidemiology more like sociology or establishing that sociology is a more suitable discipline to be addressing the social aspects of health/ill-health. Furthermore, there is a growing movement within epidemiology which encourages both increased awareness of the ethical consequences of epidemiological classification of risk and the formulation of more complex and sophisticated modelling techniques which allow for the inclusion of greater complexity (Susser 1996; Syme 1996; Shy 1997; Plant and Rushworth 1998). This new epidemiological perspective has been termed 'ecologism' or 'eco-epidemiology'. This perspective views the individual as "embedded in a seamless web of relationships, including cultural systems, social,

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96Plant and Rushworth (1998) recognise that epidemiological classification is not without problems. They describe how these classifications (e.g. risk factors) represent underlying assumptions about what is of importance and that these different classifications have implications for individuals and populations.

97A clear example of sociological imperialism; see Strong (1979a:199)
economic, and political systems at the local, national and international levels" Smith 1998:57-58).

However, in the context of texts from public health and mainstream medicine sociological arguments that medical understandings of lifestyle are reductive carries more weight. Public health in particular claims to address the wider social and cultural aspects of lifestyle and when it repeatedly fails to do so, as demonstrated in my review of texts and in many other sociological studies (e.g. Lupton 1994b; Nettleton 1995:228; Peterson and Lupton 1996) the implication is a failure of the central mission of public health; that is, improving public health.

While some public health texts (particularly those from the new public health) or mainstream medical texts such as those from general practice, were shown to apply a biopsychosocial understanding of lifestyle, this conception was focused on the individual within their immediate social environment (family, relationships, work) rather than on structural or cultural factors (e.g. Hasler and Schofield 1984; Jonas et al. 2000). This was still a narrower and more individualised conception of the social than that advocated by the sociologists criticising public health. Furthermore, studies of public health disease prevention programs demonstrate that when these biopsychosocial understandings of lifestyle are operationalised the result is usually little different from risk factor understandings (Richmond 1997).

When doctors' constructions of lifestyle are considered, sociological arguments are seen to less accurate in their representation. Similarly to medical texts, individual medical doctors also display an individualistic and, to varying degrees, socially divorced understanding of lifestyle issues. This is clearly demonstrated in their

98 *Instead of studying the individual reduction in risk from heart disease resulting from a reduction in dietary saturated fat, an ecologic approach might examine the individual and social risk resulting from the cultural, economic, and political support for a high fat, meat based diet. In addition, such an analysis would consider ancillary risks such as environmental contamination from animal wastes, the relationship between anti-biotic resistant bacteria and feeding antibiotics to livestock, and the destruction of tropical rainforests to satisfy demand for beef* (Smith 1998:57-58).
discussions about lifestyle and the causes of disease, lifestyle risks and their evangelical accounts of a 'healthy' lifestyle as a formula for good health. However, in many contexts doctors' understandings of the social seem to provide adequate explanations for disease or health within their usual setting, that is, the context of doctor/patient consultation. It is questionable then whether a more sociological approach (i.e. structural-cultural perspective) would be of benefit to doctors or their patients.

An individualistic, socially isolated conception of lifestyle sits easily within the general medical perspective and within many wider cultural understandings about health and disease which also emphasise the biological nature of disease and which do not locate health related behaviours in a wider social or cultural context (Nettleton 1995:44-47; Pierret 1993). While many of the sociologists reviewed in chapter two might deplore the limitations of this approach, it appears likely on the basis of other research (e.g. Pierret 1993; Johanson et al. 1994, 1998; Blaxter 1997), that many patients would be quite happy with this understanding of lifestyle as it is very similar to their own.

In some situations, however, such as when doctors try to explain why their patients do not make suggested lifestyle changes, their individualistic understanding of the social context of health related behaviours is an impediment for them because such an understanding of lifestyle cannot adequately account for these situations. In these contexts doctors might find considerable utility in a more sociological perspective which was able to locate lifestyle 'choices' within a framework of life chances. Whether or not they would be able to 'do anything' with this increased understanding is, however, debateable, given both the constraints of the doctor/patient relationship and the possibly negative consequences of further medical influence on people lives which would be occasioned by doctors asking their patients to locate themselves within wider structures of power and inequality.
In some contexts doctors did display a far more socially located understanding of lifestyle than that which would be expected after reading some sociological criticism (e.g. Hughes 1994; Lupton 1993; Peterson 1996; Peterson and Lupton 1996), or from reading texts from the extreme end of reductive medical understandings of lifestyle (e.g. risk factor health promotion). These broader conceptions of lifestyle were apparent when doctors talked about lifestyle in terms of a patient's social history, for example, they described employment, family, personal relationships, financial pressures, children, loneliness and life stage events such as 'empty nest syndrome' as being aspects of a patients' lifestyles.

While this type of lifestyle understanding can be considered from the perspective of 'surveillance medicine' (Armstrong 1995), as an extension of medical gaze and the sphere of medical concern and control, it could also be seen as positive evidence that doctors are using a biopsychosocial approach to account for the social nature of sickness and health. That is, they are transcending the biological reductionism of orthodox medical approaches to ill-health which has been the focus of considerable sociological criticism (e.g. Engel 1981; Hahn 1983; Germov 1997b):

The boundaries between health and disease, between well and sick are far from clear and never will be clear, for they are diffused by cultural, social and psychological considerations. ... By evaluating all the factors contributing to both illness and patienthood, rather than giving primacy to biological factors alone, a biopsychosocial model would make it possible to explain why some individuals experience as "illness" conditions which others regard merely as "problems of living" (Engel 1981:598).

However, in using a biopsychosocial approach doctors are still using a far narrower and individual centred concept of the social aspects of sickness and health than a sociological perspective which encompasses social structures, cultural difference and

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99 This type of lifestyle understanding has been interpreted in precisely this fashion by many of the authors discussed in chapter two; For example Lupton (1994a and 1994b) and Glassner (1989).
historical and geographical location. For example, none of the doctors I spoke with mentioned or displayed awareness of cultural variations, ethnicity or even gender as compounding factors related to both perceptions of what a healthy lifestyle is and constraints surrounding available lifestyle choices. When doctors talked about lifestyle they frequently did so in a universalising manner which erased the issue of difference by omission. The universalising nature of epidemiological research on lifestyle is recognised by sociologists (and some epidemiologists such as Marmot et al. 1978, 1991) and was commented on in chapter two. However, a tendency to explain disease in terms of lifestyle in a universalising manner is not restricted to doctors. Lay people also tend to ignore cultural and gender differences when they talk about lifestyle and disease (Wiles 1998; Emslie et al. 2001).

This observation relates closely to another sociological criticism of medical understandings of lifestyle, that they are moralistic and potentially discriminatory (Bunton and Burrows 1996; Davis and George 1992:394). As described in chapter two, labelling a disease as being the outcome of "a particular lifestyle means that substantial sociocultural values covering a range of beliefs on how we should live have already been incorporated into its nosology" (Hughes 1994:61). Discrimination can emerge from a lifestyle approach in a range of ways, as when individuals are charged higher health insurance premiums because they smoke or when risk factor health promotion campaigns fail to recognised that lifestyle risks are unequally distributed across the community (Davis and George 1992:394; Nettleton 1995:161).

In relation to medical texts, the results of my thematic review (presented in chapter four) demonstrate that explicit moralism is clearly apparent in the conceptions of lifestyle found in risk factor health promotion, some new public health texts and most general practice texts. For example, in many general practice texts patients were

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100 The biopsychosocial model has been described as remaining firmly fixed within a biomedical paradigm which emphasises individual care and the treatment of physical disease. It thus fails to acknowledge the structural forces operating to affect the health of individuals and populations (Knight 1997:145).
described as untrustworthy and as poor judges of what constitutes a 'healthy lifestyle' (e.g. Gammon 1990).

However, in relation to the doctors interviewed and observed for this project, the issue becomes ambiguous. These doctors were undoubtedly moralistic in many of the different ways that they talked about lifestyle. For example, when doctors talked about cigarette smoking or diet and exercise they frequently implied that these were the results of laziness or a lack of self discipline if not stupidity or an inability of patients to understand 'what's good for them'. For the doctors who spoke about health using an evangelical type of lifestyle understanding, the moralistic undertones of their discussion was overt. They described health as being achievable through lifestyle practices such as exercise and diet and thus implicitly placed all those who are not healthy in the position of having brought their situation upon themselves. The two youngest doctors in particular and two female general practitioners with firmly stated personal commitments to a 'healthy lifestyle' frequently expressed their opinion that an unhealthy lifestyle was a type of personal failing. One of the younger doctors went to the extreme of claiming that smokers should be denied expensive surgical treatments for smoking related illnesses if they continue to smoke. 101

In many ways, however, the doctors demonstrated an awareness of the moralistic nature of many conceptions of lifestyle, and tried to overcome this problem. None of the doctors I spoke with used only one conception of lifestyle. While at times nearly all of the doctors spoke about lifestyle in a moralistic or discriminatory fashion, these same doctors also expressed concern about any suggestion that I made that people might be to blame for their 'lifestyle diseases'. Most doctors denied that an individual's lifestyle can be the cause of their disease. They also seemed very reluctant to impute that their patients were responsible for their ill-health. Two oncologists, one

101 After she had reflected on this statement she changed her mind, saying that "it wouldn't really be fair to do that" (Dr F).
haematologist and several of the general practitioners spoke about uncertainty over the causes of disease and displayed great compassion and empathy towards their patients.

These findings are supported by results from several other qualitative studies of doctors (e.g. Boulton and Williams 1983, 1986, 1988; Williams et al. 1989; Calnan and Williams 1995; Johanson et al. 1994). Williams and Boulton (1988) found that several of the doctors they interviewed about prevention in general practice considered that the lifestyle focused approach to disease found in health promotion should be avoided by doctors because it was intrusive and moralistic (1988:242). Calnan and Williams (1995) also found that many of the general practitioners they interviewed saw health promotion as a "moral intrusion" and were sceptical about the efficacy of an understanding of disease which emphasises lifestyle (1994:385-86).

Another sociological criticism outlined in chapter two, is that a lifestyle perspective contributes to the commodification of bodies and health (Glassner 1989; Featherstone 1991:184-186; Lupton 1994a; Williams 1998). In the sense that a lifestyle approach to health and illness commodifies bodies and health as "the interests of good health merge with the desire to be sexually attractive, to be able to successfully market one's body" (Lupton 1994a:37), neither medical texts nor the constructions of doctors reflect this aspect of lifestylism. In fact, the almost complete absence of reference to 'looking good' or looking 'slim' or looking 'healthy' was a marked feature in medical texts and doctors' accounts. The closest that doctors came to this perspective was when they spoke about a healthy lifestyle as a clear pathway to future good health.

However, the absence of a commodified understanding of lifestyle in medical texts and doctors' accounts is important precisely because it is absent. In both of these locations, it is apparent that medical understandings of lifestyle ignore that the practices associated with a 'healthy lifestyle' involve consumption which, like all forms of consumption, "is constrained by social and material contexts" (Nettleton 1995:51;
Annandale 1998:119). This feature of doctors' accounts was described in chapter five when I commented on the way that general practitioners took it for granted that their patients would be able to afford the costs associated with exercise and 'healthy foods', or to have the leisure time necessary for 'healthy' pursuits such as exercise.

The final sociological criticism of lifestyle as a medical explanatory framework is that such an approach is a modernist and science-based perspective (Peterson and Lupton 1996). In chapter two, I explained that this critique has two separate parts. The first is that medical use of a lifestyle approach has at times been represented as an attempt by medicine to overcome the reductive nature of traditional medical understandings of disease in favour of a biopsychosocial understanding. Sociological critics such as Hughes (1994) or Peterson and Lupton (1996) have argued that medical understandings of lifestyle rely heavily on mathematical conceptions of risk and thus are merely an extension of the orthodox modernist scientific medical perspective.

Certainly epidemiology, through an emphasis on scientific and rational methods of "monitoring, measuring and regulating the population in the interests of improving health status" (Peterson and Lupton 1996:27), is a flag bearer for modernity. However, one of the most significant findings in this research is that epidemiological conceptions of lifestyle and lifestyle risk have only varying levels of influence on other medical understandings of lifestyle. The differences in conceptions of lifestyle risk between epidemiology and public health (in particular risk factor health promotion) were discussed in chapters one, two and three of this thesis. The wide range of other understandings of lifestyle (other than epidemiological) which have imbued mainstream medical writings about lifestyle were described in chapter two (for example understandings from the social sciences, nursing and welfare).

When individual doctors are considered it was demonstrated throughout the interviews and observation that while doctors claim legitimacy from epidemiology and reputable
scientific sources such as medical journals, in practice their understandings of lifestyle also reflect a range of other influences. These include commonsense and popular understandings, the self-help and fitness industry and alternative medicine, in addition to the other influences mentioned above such as nursing, the social sciences and welfare.

For example, doctors only rarely used an epidemiological understanding of risk. Instead they were far more likely to talk about risk as a personalised and individualised entity. That is, they spoke of probabilities and individual danger in addition to states of risk or no risk. This way of talking about risk is similar to conceptions of risk identified in risk factor health promotion and in lay accounts (e.g. Blaxter 1997; Kavanagh and Broom 1998). It is not an understanding of lifestyle risk grounded in population health statistics. Rather it is closely aligned with lay descriptions of risk (Davison et al. 1991, 1992; Frankel et al. 1991; Pierret 1993; Blaxter 1997).

When doctors talk about lifestyle a blurring of boundaries between scientific and non-scientific understandings of lifestyle, between epidemiological, public health, mainstream medical, self-help, beauty and fitness industry, alternative medical and other popular and folk understandings occurs. The lifestyle advice offered by doctors represents a shift in what constitutes medical advice and thus the lines between expert and non-expert knowledge. The types of lifestyle advice offered by doctors in this research could all have been offered by pharmacists, nurses or lay people such as mothers. Even the specialised understandings of lifestyle associated with the management of illness and treatment are not so ‘medical’ that they might not equally be offered by nurses or paramedical workers such as physiotherapists.

102 The inter-relationship between medical and non-medical understandings is complex in ‘lay epidemiology’. I have argued in chapter two and chapter five that many doctors are in a similar position to well educated lay people when it comes to interpreting and utilising epidemiological understandings of lifestyle and risk and can thus be considered as lay epidemiologists themselves. It is important to remember that Davison et al. (1991) found that the lay people they interviewed also make use of epidemiological understandings.
Furthermore, it is also apparent that non-medical and non-scientific understandings of lifestyle are heavily imbued with scientific and medical understandings (Blaxter 1983, 1990, 1997; Herzlich and Pierret 1987; Pierret 1993). It is also clear that science remains the primary source of legitimation for claims about lifestyle, even many of those made in alternative medical texts (e.g. French 1994:102; Campion 1996:22). Because of this, it is difficult to consider many medical understandings as being particularly modernist or science-based in the way claimed by Peterson and Lupton (1996). That is, as a continuation of modernist medical traditions of explaining disease.

This observation relates to the second aspect of the sociological critique that medical understandings of lifestyle are modernist and science based. This stems from the critique and questioning of science which occurred throughout the second half of the twentieth century (Kuhn 1970; Harding 1991; Webster 1991:9). One result of this debate is that scientific knowledge and practice has been shown to involve considerable sociocultural values (Wright and Treacher 1982a, 1982b; Gordon 1988a). This claim has been taken up by many writers for whom the medical claim of legitimacy from science is doubtful (Brandt 1991).

From this perspective, medical claims that medical arguments about lifestyle are valid and useful because they are derived from modern research methods are viewed with scepticism by sociologists who point to the 'non-scientific' nature of much medical research. Peterson and Lupton (1996) and Hughes (1994) express concern at the way medical understandings of lifestyle are often represented as a value-free, modern scientific perspective from which to make sense of health and disease in terms of lifestyle, when closer examination reveals such an approach to be deeply imbued with value-laden assumptions about how people should live their lives. When the results of this thesis are considered in relation to this criticism, the results support Peterson and Lupton's and Hughes' claims. Medical understandings of lifestyle, whether in medical texts or when doctors are interviewed or observed, are clearly not neutral or even
particularly scientific (with the lesser exception of epidemiology). However, whether this is a negative feature of medical understandings of lifestyle is dependant on which sociocultural values are being discussed. Further, this criticism can be levelled at all medical and 'scientific' knowledges to some extent.

These authors also argue that the lifestyle explanations for disease seen in public health and epidemiology are becoming "the predominant explanatory model ... within medicine and among the lay population" (Hughes 1994:61). This claim is not supported by my results. As I demonstrated in chapter five, doctors rarely use lifestyle as an isolated explanatory framework. They also use a range of other medical models of disease. Furthermore, when they do explain health or disease in terms of lifestyle they do not restrict themselves to the conceptions of lifestyle referred to by Peterson and Lupton (1995) or Hughes (1994); that is to those conceptions found in epidemiology, risk factor health promotion, the new public health or self help texts.

Furthermore, the continual discussion of genetics as a factor in the causes of disease throughout the interviews and in wider medical thought (e.g. the human genome project) provide evidence that genetic explanations for disease are becoming increasingly prominent (Willis 1997; Davison et al. 1994). A lifestyle approach may shift to the periphery of medical attention as genetic explanations come to the fore. Press reports about genetic predisposition to chronic diseases such as heart disease suggest that lifestyle risks might increasingly be interpreted within a genetic framework. Instead of recommending lifestyle changes across the board doctors would advise individuals to adopt specific lifestyle regimens because they are seen to be genetically predisposed to developing various 'lifestyle disease' such as heart disease or adult onset diabetes (Davison et al. 1994; Richards 1993). With the advent

103 Epidemiology, as with other scientific knowledges, is also imbued with wider sociocultural assumptions. This has been discussed in chapter two.

104 Note also that references to lifestyle were almost totally absent in undergraduate medical textbooks. A lifestyle approach is not considered to be core medical knowledge when this is measured by inclusion in the curriculum for a medical degree.
of gene therapy the continuance of current lifestyle explanations is in further doubt. There would be no need for lifestyle changes if genetic predisposition could be 'corrected'\(^\text{105}\) (Anderson 1995:97-98; Williams 1997:1044).

Genetic explanations are also likely to increase in popularity because they provide doctors with a very useful explanatory strategy. As they currently stand (i.e. not well understood) they serve as a useful 'umbrella' explanation to deal with uncertainty. They also sit easily with older understandings about the causes of disease such as bad blood and racial and class based understandings (Epstein 1995). Such explanations also continue the lifestylist emphasis on risk and are quantifiable and science based. As an individualistic bio-chemical explanation they sit well with the medical model and the general universalism and individualism of western medicine.

A genetic focused explanatory framework also has the potential to perpetuate the inequalities underlying current lifestyle understandings. Wealthy first world countries would be able to afford these new technologies and people living in these countries would have the affluence and leisure to make lifestyle changes. Developing countries are unlikely to be able to pay for the new technologies and these countries are only now coming into the types of lifestyle practices (such as cigarette smoking) associated with morbidity and mortality. An example is given in China and India, where rates of cigarette smoking are reaching epidemic levels (JAMA 1997; WHO 2000). Within affluent nations like Australia there is still likely to be a disparity between rich and poor when it comes to paying for gene technology, and the current socioeconomic (and other constraints) on lifestyle choices would remain.

A related and important feature of medical understandings of lifestyle is how a lifestyle approach (however conceptualised) is limited in application. Throughout this research

\(^\text{105}\) In a similar fashion, several doctors told me during interview that with the advent of cholesterol lowering drugs many people no longer feel a need to eat a low fat diet. One general practitioner told me that patients prefer to take medication for high blood pressure, than trying to lower blood pressure using lifestyle measures.
I have observed lifestyle being used to explain chronic diseases such as heart disease, states of good health and poor health and issues associated with chronic illness and some medical treatment. I have not observed lifestyle being used in discussion of children, psychological disturbances such as schizophrenia or acute disease states. Unexpectedly, I found very little reference to sexually transmitted infections, hepatitis or HIV/AIDS.

Of these lacunae, it is the absence of any mention of children in the majority of medical texts or doctors' talk that I find the most interesting. Lifestyle is seen by doctors as a property of adults and not children. I expect this is closely related to the assumption that lifestyles involve choices and individual responsibility. Neither of these characteristics are associated with children in western cultures. Furthermore, lifestyle arguments are still strongly associated with heart disease (a disease of adults) and the types of behaviours or practices associated with adulthood, such as drinking alcohol or smoking cigarettes. However, a rash of recent medical publication about childhood obesity and poor cardiovascular health in children and teenagers suggests that the lifestyle framework is being expanded to include children (Golan and Weizman 2001; Malina 2001; Fulton et al. 2001). This concern has been reflected in the Australian popular press. Several news programs have recently run stories on ‘fat camps’ for obese American children, and have included interviewees with nutritionists who were expressing concern about Australian children playing computer games inside and eating 'junk food' instead of playing outside and eating 'healthy' food.

In addition to an increase in the sphere of 'lifestyle' of concern to include children, explanatory frameworks emphasising lifestyle have transcended their original preventive focus. Prevention in the form of primary health care and lifestyle modification through health education has long been recognised as an issue for general practitioners (Stott 1986; Stott and Pill 1990; RACGP 1998). Armstrong (1979) and Davies (1984) have described the way that general practitioners use prevention to
establish a sphere of speciality and professional expertise which is distinct from hospital medicine. Castel (1991:290) hypothesises that one consequence of this change in medical practice is that the assessment of lifestyle problems and providing advice about disease prevention strategies will be transformed by doctors into 'an activity of expertise'.

This study demonstrates that understandings of lifestyle are used by doctors other than general practitioners, and used for tasks other than prevention. However, whether this can be construed as the application of expertise is a complex issue. As frequently demonstrated throughout this thesis, lifestyle models blur the boundaries between medical and non-medical knowledge. This can also be expressed as the boundary between art and science in medicine (Gordon 1988b):

The two types of clinical knowledge are linked to two dominant metaphors in medicine - "art" and "science". Their relationship is often depicted as physicians learning "basic science" principles (theory, universals), which they then "apply" to the care of individual patients, which is where the "art" comes in. ... Metaphors and symbols notwithstanding, the literature on medicine documents that both medical science and practice are often neither very scientific nor very artful - even by their own standards (Gordon 1988b:260).

Gordon describes the development of 'evidence based medicine' as an attempt to make medical practice (art) more scientific (1988b:262-263). She draws a parallel between the increasing visibility of the patient through medical surveillance and the way that doctors are "being asked to make their practice more visible" (1988b:257). The data presented in this thesis suggest that for many doctors, asking their patient's about their lifestyle is a valuable clinical resource which they use for the purposes of diagnosis, disease prevention, management and treatment. As such, it involves the

Evidence based medicine is a methodology for medical decision making which aims to help doctors to practice medicine in a more 'scientific' manner by helping them to understand and critically evaluate medical literature and medical treatments on the basis of 'best external clinical evidence'.
application of expertise. However, despite the emphasis placed on rationality and science by health promotion advocates (e.g. Grimshaw et al. 1995; Pels et al. 1989; Worral et al. 1997), the ways that doctors understand and apply conceptions of lifestyle seem far more closely aligned with the 'artfulness' described by Gordon (1988b) and Elstein (1976) than the 'science' represented as desirable by the Royal Australian College of General Practitioners (1998) or authors such as Hawe et al. (1990) and (Britt et al. 1999).

6.3 Implications for the sociological critique of a lifestyle approach

Both sets of results, the review of texts and interviews/observation with doctors, indicate that there is no unified medical understanding of lifestyle in relation to ill-health. In particular, the conceptions of lifestyle and the perceived relationships between these understandings of lifestyle and states of health and disease, which are found in epidemiology and public health, are only some of a range of approaches to lifestyle used by doctors. Furthermore, the distinctions between lay and medical understandings of lifestyle are blurred. This was demonstrated when lay and medical texts were explored and in doctors' talk about lifestyle where the doctors frequently spoke about lifestyle in a similar fashion to lay people.

These results have a range of implications for the sociological critique of a lifestyle approach and for wider sociological characterisations of medical knowledge and practice. In relation to the sociological critique, the first implication is that the critique should be clearly recognised as a critique of the ways that ideas about lifestyle have been constructed and operationalised in various public health programs and strategies and to a lesser extent, within the field of epidemiology, and not as a critique of all medical understandings of lifestyle. Even within this limited context, many sociologists (e.g. Lupton 1993; Peterson 1996; Hughes 1994) have failed to recognise
the many differences between epidemiology and public health and the range of different ideas about lifestyle which operate within public health.

Secondly, the critique should be expanded to include recognition of the complexity associated with medical knowledge and practice and the benefits offered to doctors by explaining disease and health in terms of lifestyle. The sociological critique of a lifestyle approach fails to recognise the range of different conceptions of lifestyle which operate within medicine, the range of other models of disease operating concurrently within medicine, and the way that individual doctors construct explanatory frameworks of disease and health in practice.

These characteristics of sociological critique of lifestyle as an explanatory framework in public health and health promotion are associated with a particular interpretation of Foucault which emphasises surveillance, disciplinary power over bodies and the 'dominance' of medicine (e.g. Lupton 1993; Peterson and Lupton 1996). A key feature of the sociological critique of lifestyle informed by this perspective is a defensive or even aggressively anti-medicine stance. Medicine and medical practitioners are viewed as controlling, dominant and as implicitly dangerous or threatening. They are also represented as having an incorrect understanding of the social determinants of health and illness. Medical attempts to explain health and disease in terms of lifestyle are represented as incorrect, flawed, and fundamentally less worthy than sociological explanations:

What we have here in effect ... is a further challenge to medicine involving not simply a 'debunking' of medical 'truth' claims, but a more or less wholesale crediting to the sociocultural side of the balance sheet of the body and disease qua fabricated or discursive entities ... The net result is the 'advancement' of these particular sociological critiques, in the eyes of its exponents at least, vis-a-vis other 'rival' disciplines or bodies of knowledge such as medicine, and their claims to know and explain the world. A somewhat arrogant assumption or form of sociologism, ... based on an 'I
know best ideology' in which sociologists' own particular version of reality is seen as somewhat superior to that ... of the medical scientist (Williams 2001:150).

Many authors as Armstrong (1995) and Bunton et al. (1995) write about medicine from this type of Foucauldian perspective in a manner which is tempered by considerable balance. However, others such as Peterson and Lupton (1996) construct a medicine which emerges from their writings as a powerful and dominant institution with malevolent implications if not intent.

While such a hostile approach has advantages at times, it cannot be considered a universally useful position for a sociological researcher. As I have demonstrated in this thesis, a critical stance from a defensively pro-sociology/anti-medicine position has failed to acknowledge the complexity associated with lifestyle as a medical explanatory concept. This type of approach results in the reification of medicine and implies firstly that doctors are cultural dupes who will not challenge, adapt or change unpalatable medical ideas, and also, that lay people are in much the same position. Williams (2001:150) describes this "largely 'overdrawn' viewpoint" as describing a situation where resistance and change are represented as difficult or indecipherable.

Such a perspective also tends to over-emphasise the negative aspects of a lifestyle focused medical explanatory framework for patients and lay people while overlooking the potential benefits of medical ways of making sense of health and disease. As demonstrated in this thesis, while a lifestyle approach has limitations it also offers a range of benefits for patients and for the doctors who use these ideas. "In stressing the limitations of medical interventions the physical and social contributions of modern medicine are all too frequently ignored [by sociologists]" (Kelly and Fields 1994:36). Frank (1997) reminds the reader that while a lifestyle approach is not the solution to problems of chronic disease often touted by public health proponents, lives have been extended and deaths made easier through the application of disease prevention
strategies emphasising lifestyle. Authors who write about the experience of living with serious and/or chronic illnesses stress the value of medical frameworks which can be used by medical and non-medical people to explain the cause of such situations and which also provide people with the means for improving health and reducing uncertainty (Robinson 1993; Prior et al. 2000):

In relation to wider sociological characterisations, the results of this thesis provide further empirical support for the on-going sociological debate about the usefulness of traditional sociological descriptors, such as the lay/medical distinction, the disease/illness distinction and the medical model (Strong 1979a, 1979b, 1984; Kleinman 1980; Lindenbaum and Lock 1993; Gaines and Hahn 1985; Atkinson 1995:25; Williams 2001).

As outlined in chapter one, three traditional sociological characterisations of the medical approach to disease are bound together by the underlying assumption that medicine is a coherent, homogeneous and easily identified body of knowledge (Helman 1985a:293; Atkinson 1995:25-27). These characterisations are the lay/medical distinction, the disease/illness distinction and the medical model. The results of this thesis have demonstrated that medical understandings of lifestyle are not homogeneous or coherent. For example, the review of medical texts demonstrated that there is no unified medical approach to lifestyle. Both texts and doctors' talk demonstrated that understanding sickness and health in terms of lifestyle is only one of many different approaches used by doctors. Medical understandings of disease are multiple and varied.

This thesis also demonstrates that medical and lay ideas about bodies, health and disease are intermingled. The idea that such an entity as 'lifestyle' exists and that a person's or a group of peoples' lifestyle can be used to explain their health is an idea which sits on the boundaries of medical and lay knowledge. As such, this thesis
provides evidence that the lay/medical distinction has limitations. Furthermore, interview and observation data demonstrate that doctors do not restrict their attention to disease but are also very concerned with illness and health. This provides empirical support for the argument that the disease/illness distinction, while a useful sociological device (see chapter one), can only suggest some of the ways that doctors actually work (e.g. Good and Good 1980; Atkinson 1995).

These issues, that doctors use a range of different models of disease; that they make use of lay knowledges; that medical practice is not a direct reflection of formalised written medical knowledge; that doctors include the social in their explanations for disease; and that they are very concerned with wellbeing and not just biological dysfunction are all further empirical evidence that the medical model should be recognised as an ideal type and not as an accurate description of the way that doctors really do make sense of disease.107

6.4 Conclusion
This chapter has discussed my research findings in relation to the sociological critique of lifestyle as a medical explanatory framework. The conclusion reached is that the sociologists whose writing was reviewed in chapter two have successfully recognised that medical understandings of lifestyle reflect and reproduce a range of sociocultural assumptions about health, bodies and desirable ways of living. They have also recognised that medical understandings of lifestyle reflect an individualised and personalised conception of the social which (unlike the sociological conceptions of the social) fails to recognise that lifestyle behaviours and practices are culturally embedded and structurally constrained. Medical understandings of lifestyle are in many ways universalistic and reflect the orthodox medical perspective which locates the causes of disease and health in the individual regardless of ethnicity, race, socioeconomic status or gender.

107 As described in chapter one, as an ideal type, the medical model has been a valuable aid for comparison, description and critique (Conrad and Schneider 1980:77, Atkinson 1995:26-27)
Furthermore the sociological critique has also been successful when writing about medical constructions of lifestyle from the areas of risk factor health promotion, epidemiology and the new public health. The negative implications of these understandings of lifestyle for medicalisation and the emergence of new forms of disciplinary surveillance have been convincingly argued by authors such as Armstrong (1995), Bunton et al. (1995) and Peterson and Lupton (1996).

However, sociological writing about lifestyle has failed to acknowledge the complexity and variation within medical understandings of lifestyle, the dynamic nature of medical understandings of lifestyle and the benefits for doctors (and at times for their patients) offered by lifestyle as an explanatory device. This is the result of an absence of empirical research (such as that presented in this thesis) which investigates how doctors understand disease, health and illness in terms of lifestyle and how they apply these understandings during clinical practice.

Because medical understandings of lifestyle are so complex many of the sociological assumptions about the ways that doctors understand and apply lifestyle as an explanatory framework were not reflected in the research results. For example, in my analysis of interviews and observation data I demonstrated that epidemiological conceptions of lifestyle and lifestyle risk have only varying levels of influence on doctors' understandings. Furthermore, this analysis also demonstrated that doctors' understandings of lifestyle are often similar to lay understandings of lifestyle.

The tendency to reify medical understandings of lifestyle is a reflection of the critical stance taken by sociologists writing about medical understandings of lifestyle in particular and medical knowledge and practice in general. Such a critical stance is much easier if the object of criticism is perceived as concrete and consistent. Wright and Treacher's (1982b) argument that the structure and content of medical knowledge
is largely unexplored by sociologists who have considered this knowledge to be self-evident can be applied to sociological writing about medical understandings of lifestyle.

In a related issue, the sociological criticism that medical understandings of lifestyle are less truthful and less useful than sociological arguments about lifestyle as a social determinant of disease and health has been problematised in this chapter. In many contexts, the narrow individualised conceptions of the social found in doctors' understandings were impediments for them when they were trying to explain their patients' 'unhealthy' lifestyle choices'. However, doctors' conceptions of the social were shown to provide an adequate explanatory framework for the prevention of disease and the maintenance of health, within the context of the consultation.

I have suggested that some of the sociological antagonism towards medical understandings of lifestyle might usefully be understood as a reflection of disciplinary boundary skirmishing between medicine and sociology. The social aspects of health and illness are recognised by sociologists as falling within the disciplinary domain of sociology. When these issues are appropriated by medicine, and from a sociological perspective, subverted or misinterpreted, such happenings are a threat to sociological imperialism (Strong 1979a; Williams 2001).

In conclusion, medical understandings of lifestyle are far more complex and interesting than the risk-centric, moralistic and reductive conceptions of lifestyle described by many sociologist (Hughes 1994; Lupton 1993, 1994b; Peterson 1996; Peterson and Lupton 1996). Medical understandings of lifestyle vary within and between different medical fields. Different conceptions of lifestyle are enrolled to construct explanatory frameworks for different situations. The constructions of different types of doctors and individual doctors vary and doctors' understandings of lifestyle blur the boundaries between lay and medical thought. While the limitations and negative
implications of explaining health and illness in terms of lifestyle have been well
documented in the sociological literature (Armstrong 1995; Nettleton 1995), this
research demonstrates that as an explanatory concept, lifestyle also has a range of
advantages for doctors which transcend measurable health outcomes.
Appendix A. Details About Each Interview Participant

(New first names were given to each doctor. The first initial of this pseudonym has been used throughout the thesis to identify each doctor. For example Dr A is 'Alice'. Doctors are listed here in alphabetical order according to pseudonym). To maintain confidentiality ages have in some cases been changed, as have practice details.

Dr A: General Practitioner

Alice is in her mid 40s and is co-partner in her own general practice. This practice has a patient mix which consists largely of university students, young families from the immediate area and elderly people. Alice comes from a family of doctors and takes 'being a doctor' very seriously. She made it clear to me that she considers doctors and scientists to have the only legitimate and truthful understanding of bodies and illness. She has a very authoritative tone and dominated the interview. When she spoke about her patients she often sounded 'paternalistic'. This interview was conducted in her office during her lunchbreak and ran for 57 minutes. I tape recorded the interview. I arranged this interview after Alice responded to a letter I had sent outlining the project and requesting an interview.

Dr B: General Practitioner

Beth is in her mid-40s and is co-partner with Alice in the practice mentioned above. She trained in Hobart and has always worked as a general practitioner. Beth spoke a great deal about her personal interest in sport and fitness and her children's involvement in competitive sport. She asked me about my own history and when she discovered that I had attended the same high school where her children currently went to school she became much friendlier towards me. Like her practice partner Alice, Beth seems very confident about the correctness of her medical knowledge. She acted as though I were an poorly informed patient who wanted to learn about having a healthy lifestyle. This interview was conducted in her office during her lunchbreak and ran for
60 minutes. It was tape recorded. I arranged this interview after Beth responded to a letter I had sent outlining the project and requesting an interview,

Dr C: Formerly an Anaesthetist currently a General Practitioner

Claire is in her early 40s. She is a salaried doctor working part-time in a general practice surgery. She trained in Hobart and then moved to London where she trained and worked as an anaesthetist. Claire was a relaxed but formal interviewee. This interview was conducted in her office after she had finished work for the day and it ran for 58 minutes. It was tape recorded. I arranged this interview after Claire telling Claire about the project during a consultation. With her consent I took notes from two of our consultations and included these in my participant observation data.

Dr D: General Practitioner

Della is in her late 30s. She works at the surgery with Claire. Della decided to work in general practice during her undergraduate medical training and started work in general practice as soon as she had completed her training. Because she had at times during my undergraduate years been my own doctor I was interested to see how the interview would run. Our prior acquaintance and Della's own relaxed personality resulted in a long an vibrant interview. She was particularly interested in the topic (lifestyle) because she related this to the alternative therapies she was learning about. This interview was conducted in her office before she started work for the afternoon and it ran for 1 hour and ten minutes. It was tape recorded. I organised the interview after Della responded to a letter I had sent outlining the project and requesting an interview.

Dr E: General Practitioner

Eric is in his late 60s. At the time of the interview he was working in a rehabilitation hospital. However he has worked in general practice for most of his life and was still doing so as a locum. Eric trained at Cambridge and described a privileged middle class upbringing in the United Kingdom. His age and experience provided a valuable
perspective for the research. His father had also been a doctor and during the interview he often told anecdotes detailing his father's experiences as well as his own. Eric also has a long term interest in health promotion. During the 1970s he attended several important conferences and summits in Canada as a consultant when they were developing their public health system\(^{108}\). He spoke about this a great deal during the interview. He was an extremely authoritative man and I found him very difficult to talk with as he didn't listen to my questions. However, he enjoyed the opportunity to instruct a student. This interview went for over three hours and only ended because he had to go on rounds. I tape recorded the first two hours of this interview and then ran out of tape so took written notes. I arranged this interview after Dr F (Felicity) suggested Eric's name to me after our interview. She had done her GP training with him as part of her medical degree and considered that he would be interested in the topic of lifestyle. I phoned him and he agreed to be interviewed.

**Dr F: First Year Resident**

Felicity is 24 and working as a first year resident at a large public teaching hospital. She plans to become a general practitioner and work in a rural area. Our interview was conducted in her home and this created a nice change from the interviews which were held in doctors consulting rooms. The interview ran for sixty minutes. Felicity was working on a respiratory ward at the time of the interview and she used frequently raised the problem of smoking as an example of a lifestyle issue. Interestingly she smoked a cigarette before and after the interview. I tape recorded the interview. I arranged this interview after a friend of mine suggested Felicity as a possible interviewee and gave me her phone number.

**Dr G: Registrar**

Gail is 26 year old doctor recently out of medical school. She works in the same teaching hospital as Felicity. I interviewed Gail twice. The first time over lunch in a

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\(^{108}\) Many of the contemporary ideas about lifestyle focused health promotion were first developed in Canada during the 1970s (Bercovitz 1998, Rutten 1995)
quiet restaurant. This was the first interview I conducted for this research project and we spent most of our time talking about the research and discussing possible interview questions. The second time I interviewed her in her home using a tape recorder. This interview ran for nearly two hours. She has a very forceful and authoritarian personality but was an interesting interviewee because she had such strong and clearly expressed opinions. However, at times I was taken aback at her low opinion of patient's intelligence. This interview was arranged after Gail responded to a letter requesting an interview. In addition we have known each other since we were young.

Dr H: General Practitioner

Harry is 46 years old. He trained in Hobart then worked on the mainland before returning to Tasmania to become a rural GP for fifteen years. After this he moved to Hobart and started working in a large general practice. Harry has an interest in the history or medicine and I have attended several seminars he arranged. Our interview was held in his house one evening and it ran for a little under two hours. It tape recorded the interview. This interview was quite different to the other interviews because Harry and my parents have been friends for many years. He frequently talked about people that I knew or mentioned situations that I was already aware of. For example a mutual friend of his and my parents who had a serious car accident. This interview was easily arranged by phoning him at home.

Dr I: General Practitioner

Ian is 49 years old and has worked as a general practitioner in Launceston for the last 23 years. Ian's practice is in a very poor suburb and he runs a methadone program through his practice. I interviewed Ian without a tape recorder but taking notes several times over a period of days while I was observing his consultations with patients. We would speak in the morning before patients arrived, in between patients, during lunch break and in the car. I contacted Ian through my supervisor.
Dr J: General Practitioner

Jane is 45 years old and a partner in a large general practice. This practice has a mixed patient load with a large proportion of elderly people due to the vicinity of three retirement homes. Jane has always worked as a general practitioner. Our interview was held in her consulting room and it ran for 1 hour and ten minutes. I tape recorded the interview. Jane was a friendly interviewee who demonstrated a commitment to education. This is why she agreed to participate in the research, she said that she feels an obligation to train students. I arranged this interview after Jane responded to a letter I had sent requesting an interview.

Dr K: General Practitioner

Kate is 47 years old and is co-partner in a two doctor general practice. She has worked as a GP since she finished her medical training. Kate is a very pleasant and down to earth woman. Her practice is in an old bluestone cottage and feels like a house, not a doctors surgery. In her consulting room she had normal flowery bedsheets on the exam table rather than clinical hospital linen. Kate is a firm proponent of prevention and was an enthusiastic interviewee. Our interview was held in her consulting room and ran for one hour and ten minutes. I tape recorded the interview however the tape was later ruined during transcription and I had to rely heavily on notes made in my fieldwork diary directly after the interview. I arranged this interview after Kate responded to a letter I had sent requesting an interview.

Dr L: General Practitioner

Linton is 38 years old. He works as a general practitioner in a large practice in one of Hobart's Northern suburbs. Linton trained in Brisbane and has worked in Africa and the United Kingdom. He moved to Hobart in 1993 with his wife. Our interview was held at the home of a mutual friend and was not tape recorded. Instead written notes were taken during the interview and after the interview. This interview lasted for fifty
minutes. Several weeks later we met again at a dinner party and I was able to ask him several questions which had occurred to me after our initial interview. On this occasion notes were taken several hours later when I got home. I arranged this interview after Linton's name was suggested to me by mutual friends. They spoke with him first and then told me that he agreeable to an interview. I then phoned his surgery and arranged a time.

Dr M: Obstetrician/Gynaecologist
Matthew was initially a formal interviewee but become enthusiastic and relaxed as he talked about his patients. Our interview was held in his consulting room and lasted for thirty five minutes. This interview was tape recorded. I arranged this interview after meeting Matthew socially. After our interview I was referred to see Matthew by my GP. With his consent I took notes from this consultation and included these in my participant observation data.

Dr N: Epidemiologist
Nick is in his early 40s. He trained in Hobart and then in Sydney. This interview was held in his office at the university and it ran for forty five minutes. This interview was tape recorded, however, the recording failed and I used my field work diary notes for the purpose of analysis. I arranged this interview after Nick responded to a letter I had sent requesting an interview.

Dr O: Medical Oncologist
Olive is her early 40s and works as a medical oncologist and as a lecturer. Our interview was held in her office at the medical school and it ran for one hour and ten minutes. The interview was tape recorded. Olive was a challenging interviewee who asked me questions as well. She was a vivid speaker and unlike many doctors I spoke with seemed happy to talk about ideas not just 'facts' or details of practice. I arranged this interview after Olive responded to a letter I had sent requesting an interview.
Dr P: Oncologist
Phillip is in his mid to late fifties. He trained and worked in Australia and overseas. In addition to working as an oncologist he also teaches in a medical school and conducts epidemiological research. Our interview was conducted in his office and ran for one hour. It was a satisfying and dynamic interview because Phillip has a long term interest in lifestyle as a medical issue. He was able to talk as a practicing specialist, as a university academic and teacher and as a doctor who conducts epidemiological research and has worked on many health promotion campaigns. As with many of the other interviews with senior doctors, it was a rather one sided interview, where Philip told me 'facts' and opinions rather than the two of us discussing lifestyle in a two-sided manner. The interview was tape recorded. I arranged this interview after Phillip responded to a letter I had sent requesting an interview.

Dr R: General Practitioner
Riley is a forty three years old. He is co-partner in a General Practice. Riley was born in Hobart and he also trained here. He has worked as a general practitioner since finishing his training. His practice is made up of a lot of elderly people and young people with 'healthcare' cards (thus socio-economically disadvantaged). However, because he is a general practitioner who will assist at home births and he also provides antenatal care he also has a lot of young families in his practice. As a person Riley is gentle with a pronounced sense of humour. Our interview was very relaxed and informal. It was held in his office but that tape recorder failed during the interview. After this I took notes during and after the interview. I arranged this interview easily because Riley is my own doctor. With his consent I took notes from my consultations with Riley and included these in my participant observation data.

Dr S: General Practitioner
Sam is 42 years old and runs a self described holistic medical practice from his own outside of Hobart. He has trained and worked in South Africa, The United Kingdom, The Philippines, Japan and the United States in addition to Sydney and Hobart. While he is currently working as a general practitioner He has also worked in hospitals as an emergency room doctor and trained in rheumatology. He has a strong interest in alternative and holistic therapies. Our interview was held after hours in his consulting room. It ran for 2 hours and was tape recorded. This was a very interesting interview. Sam is a charismatic man with an interest in counselling skills. He spent some of the interview trying to 'bring me out'. I arranged this interview after Sam's name was suggested to me by a fellow sociology student. I phoned him and he agreed to be interviewed.

**Dr T: Dermatologist**

Tracey is 45 years old. She agreed to be interviewed after being contacted by a doctor that we both knew who spoke with her on my behalf. She was obviously very busy and the interview only ran for half an hour. It was tape recorded. The interview ran for half an hour and the tape recording failed completely. For analysis I relied on the field notes taken after the interview. After the interview I went to see Tracey as patient. With her consent I took notes from this consultation and included these in my participant observation data.

**Dr U Haematologist**

Ulric was 57 years old. He works as a haematologist in a large public hospital and also has a private practice. Ulric was very pleasant to interview. He is a very calm and relaxed person and seemed to enjoy the interview. Our interview was held in his office at his private consulting rooms. I arranged this interview after meeting him during the time I spent with a friend in an oncology outpatients clinic. The interview was tape recorded and ran for 50 minutes.
Appendix B Observation Schedule

Cover Page

Date: 7/08/20
Observation Number for the Day:

Number and Status of People in the Room:

Length of Consultation:

Reasons for Patient Seeing the Doctor in This Instance:

Relevant but non-identifying information about patient and the reason for seeing the doctor (woman, early twenties Hep B vaccination)
<table>
<thead>
<tr>
<th>Issues mentioned by doctor</th>
<th>Context</th>
</tr>
</thead>
</table>

**Did the doctor use lifestyle discussion as a strategy during the consultation**
- general discussion about being healthy/feeling good
- general advice giving
- diagnosis
- suggesting the need for screening
- explaining why they were sick
- predicting that they might develop a particular condition in the future
- managing/treating an existing condition
- interaction with pharm drugs
- preventing illness in the future?
- other

**What role did the patient play in any discussion about lifestyle and health?**
- raised issue of lifestyle themselves
- told narratives of illness which included lifestyle explanations for why they got sick
- how they will get better
- denied that lifestyle was an issue
- offered alternative explanations
PROMPTS

When the doctor talked to the patient did they talk about why the patient had developed a condition?
Yes No

Was this
in response to the patient asking them why they had become ill
an issue raised by the doctor
as part of a shared discussion between the doctor and patient
other

What type of explanations did they give?
we just don't know why this happens? genetics
the environment med/drug
a germ, virus etc specific behaviours
lifestyle in general multi-factorial
other

In any context, did the doctor talk about:
smoking drinking alcohol
lack of exercise eating fatty foods
eating too much sugar unsafe sex
physical stress emotional stress
family relationships/problems working conditions
housing problems poverty
issue related to sex, race, age or ethnicity other
life stage issues
lifestyle risk factors

In what context?
a general discussion about lifestyle
a general discussion about lifestyles talking specifically about a patients lifestyle to the patient
talking to me
in relation to a specific disease/illness?
in relation to a specific lifestyle behaviour or action
just talking about social factors
in an understanding way
other
Appendix C. Information Sheets and Consent Forms

(These were used for interviews with doctors and observation of doctor patient consultation)

Information Sheet

In-Depth Interviews With Medical Practitioners

Purpose. The interview will focus on lifestyle, health and disease. Information from the interview will contribute to my doctoral research into medical interpretations and applications of lifestyle models of disease

About This Interview. In this interview I will be asking questions centred around the medical use of notions of lifestyle for understanding the aetiology of disease, the prevention of disease and the management of disease. However, the ensuing discussion should remain flexible and largely guided by your opinions and feelings on the topics being discussed. With your consent the interview will be recorded and some written notes taken. You are under no obligation to answer my questions and should feel free to express any feelings of discomfort or dissatisfaction with me. You are also free to ask me to leave at any time during the interview.

Confidentiality and Privacy. The questions asked in this interview will not be personal. Your name will not be stored with the interview transcript and will not be used for any purpose other than research feedback. You will not be identified in the written presentation of this research. Tapes of the interview, transcriptions of these tapes and any other notes taken during the interview will be kept safely in a locked office for the duration of the research project, stored under locked conditions for five years as specified under NHMRC guidelines and then destroyed. These tapes, transcriptions and written notes will not be used for any other purpose other than this project.
Consent Form

Agreement of consent to be signed by the interviewee.
"I have read the information provided in this letter. I have asked Emily to explain any information that I did not understand. I now agree to participate in this interview."

Signed ................................................................. Date .../.../...

Agreement to protect the confidentiality and privacy of the interviewee to be signed by Emily Hansen.
"I am satisfied that this interviewee has understood the information in this letter and feels comfortable about participating in this interview. I will fulfil my agreement to protect their confidentiality and privacy."

Signed ................................................................. Date .../.../...

Thank you very much for your help, my research would not be possible without your generous sharing of time and expert knowledge. This is your copy of the information and consent form. I will keep a signed duplicate of the consent form. Feel free to contact me about the research at any time.

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Research Supervisor: Associate Professor Dr Gary Easthope
Department of Sociology and Social Work
Information For Patients Concerning
My Observation of Medical Consultations

Hello, my name is Emily Hansen. I would like to be present during your consultation with your doctor to observe how doctors talk about social and behavioural factors related to health and illness. I am a student studying for a doctorate at the University of Tasmania and this is part of my research for the degree.

What I would like to do. With the consent of both you and your doctor I will observe the consultation and take some written notes. At any stage during the consultation either you or your doctor may request that I leave the room and/or destroy my written notes. It is important to emphasise at this point that my focus is on the doctor's use of medical language. I do not have any interest in collecting identifying information about you, the patient.

Confidentiality and Privacy. All aspects of the consultation will be treated as confidential. No identifying information about you (the patient) will be collected. Any written notes taken during the consultations will be kept safely in a locked office for the duration of the research project. These will then be stored under locked conditions for five years as specified under the National Health and Medical Research Council guidelines and then destroyed. No information collected during the observations will be used for any purposes other than this research project.

Thankyou!

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