The initial stimulus for this book was the work of David Barker and his research team at the Medical Research Council’s Environmental Epidemiology Unit in Southampton, England, who have conducted extensive studies on the fetal and infant origins of adult disease—in particular, cardiovascular disease, non-insulin-dependent diabetes and chronic bronchitis. Their provocative work has challenged many of the prevailing views on the aetiology of these diseases as being essentially conditions arising in adult life primarily as a result of adult behaviours and risk factors (diet, physical inactivity and smoking etc.). It has provided a framework which may help explain the socio-economic differentials of these conditions evident in all industrialized societies.

The contributors to this book are an interdisciplinary group of researchers, mainly from London, who met regularly in recent years to discuss and critique the ‘Barker Hypothesis’. In this volume they review the evidence of factors influencing chronic disease risk throughout life from the perspectives of epidemiology, sociology and biology. The focus is on cardiovascular disease, diabetes and respiratory disease. The recurring theme is that these diseases arise as a result of an accumulation of risks throughout life (hence the title of the book).

The book is divided into five sections. The editors contributed fully or partially to six of the 13 chapters to ensure a consistency unusual in a multi-author volume of this nature. The organization is logical, beginning with essays defining the context of a life course approach to chronic disease aetiology, and providing an historical perspective with a focus on coronary heart disease. This is followed by a four-chapter section on the development of disease throughout life, which covers cardiovascular disease, breast cancer, diabetes and insulin action, respiratory and allergic diseases, and blood pressure. The third section discusses biological and social processes, and the fourth deals with disease patterns as a function of time, geography, and socio-economic differentials. The final section examines the implications for policy and future research. The chapters are all very well referenced, and the volume has a comprehensive index.

The work of David Barker and colleagues suggesting that a number of chronic diseases had their origins in fetal life was treated with some scepticism by many leading scientists when it was first published in the mid-1980s. As the results have been reproduced in the study of historical cohorts in other populations, and linkages have been made with research in fetal physiology using animal models, the concept of ‘programming’ of the development and function of organ systems during sensitive periods in early life has gained credibility. Data from animal models have demonstrated that poor nutrition in utero can have many long-lasting sequelae in the offspring, related to impact on organ development: reduced number of nephrons in the kidney increasing the risk of renal disease, reduced number of beta-cells in the pancreas related to increased susceptibility to diabetes, morphological changes in the liver resulting in a reduced capacity to clear glucose from the circulation and an increased capacity for hepatic glucose production which could both increase susceptibility to diabetes. Although in many cases the animal models do not accurately reproduce the observations in humans, they illustrate the biological plausibility of the concept of ‘programming’.

The historical context of scientific controversies can be most instructive. As is pointed out
early in this volume, in the first half of this century there was considerable interest in the notion that early life experiences influenced adult health status and longevity. The importance of a 'good constitution' was widely accepted, and the relative importance of nature and nurture was vigorously debated. It was only after the Second World War, when cardiovascular disease mortality rose sharply in Western countries, that the focus switched to adult diet and life-style as being the key to both the management and prevention of many of the major chronic diseases. As is highlighted throughout the book, interventions to address adult risk factors such as smoking, obesity, elevated blood pressure and cholesterol levels have been demonstrated to have major impacts in reducing chronic disease prevalence. Adopting a life course approach to chronic disease epidemiology should not diminish the importance attributed to adult risk factors and behaviours. However, the ‘life-style’ model has its limitations, and fails to fully explain many of the geographical and social differentials in chronic disease risk.

How can the adverse health outcomes of socio-economically disadvantaged groups be explained? For the major chronic diseases which have clear social class gradients such as cardiovascular disease, respiratory diseases, and type 2 diabetes, it is overly simplistic to attribute fully the additional disease burden to the impact of the intrauterine environment. Using chronic obstructive airways disease as an example, there is an excellent discussion of the complex interplay between biological, social and psychosocial factors in contributing to the accumulation of risk over a lifetime (from preconception to old age). What are the policy implications of this life course approach to chronic disease? Should we intervene to improve fetal growth? If we did, would there be unintended adverse consequences? such as increased numbers of caesarean sections secondary to a greater proportion of large babies, increased maternal obesity, or increased risk of ovarian, prostate and breast cancer in the offspring? These are some of the provocative questions posed towards the end of this book.

Clearly there is a need for more research. These most complex and challenging health problems will not be solved by randomized controlled trials or by simplistic faith in the power of the ‘new genetics’. The editors end the book with a plea for a more sophisticated approach to chronic disease epidemiology, taking into account social, biological and psychosocial influences over the life course—‘from the molecular to the global’. It is a most thoughtful and scholarly volume, and the editors should be encouraged to consider a ‘second edition’ within the next decade.

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**Psychology and Health Promotion**

Paul Bennett and Simon Murphy (eds)

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This is a welcome and useful text. It provides a lively outline of the relationship between psychology and health promotion, and moves a step beyond the well established introductory level market. Clearly, targeted towards an insightful audience (advanced undergraduates, health promotion specialists, etc.) its approach is economic but accomplished, and provides a relevant synthesis of policy, theory and practice.

The development of the biopsychosocial model in psychology has refined our understanding of the complex and sometimes contradictory nature of human behaviour. Health and illness can be considered from different perspectives and different systems, and at different levels of organization. Social systems such as culture and
family are as significant, for example, as cognitive, motivational and emotional aspects of psychology. Likewise, our biological system continually adjusts to accommodate our external, physical and psychological state.

Part of the defining qualities of health psychology, for example, are attempts to integrate educational and scientific contributions both to the promotion and maintenance of health and the prevention and treatment of illness. Interests range from the micro (e.g. the effects on the immune system resulting from stress) to the macro (e.g. culture, ethnicity and society).

Those with a background or interest in health promotion will most likely recognize some of the psychological contributions in the book. The Yale model of communication, the effects of fear appeals, the relationship between self-efficacy and health status, decision-making and behavioural change models, causes and effects of stress are among those discussed. Until now, however, any attempt at deriving a well organized synthesis of the role of psychological theory in relation to health promotion has not been particularly easy.

Organized in four sections, the book allows the reader to dip in at any point. Taken in sequence, these sections discuss: mediators of health and health behaviours, facilitating individual change, population change, and lastly, future considerations.

The opening section begins with a broad-brush critique over influential social and environmental variables. Depending on your perspective, the sheer density of statistics and supporting references, will either distract from the flow and readability, or provide a rich source of data. Thereafter, and from my perspective, the book becomes rather more accessible. Key experiments and developments within psychology are described and we are taken on a rapid-paced journey through classical, operant and social learning theories. Examples of the application of principles deriving from these theories are then outlined. Health locus of control, the health belief model, reasoned action and planned behaviour; stage theories, risk prevention and dispositional optimism and a critique of cognitive models are all contained within a few pages. From this description it is possible to infer the scope of the book.

While depth may be lacking, what results is a skilfully managed approach of open-minded scepticism. The reader is eased through a complex array of cognitive, social and environmental processes. To my mind this works well and results in a confident, honest and clear exposition of the strengths and limitations of psychological knowledge.

Facilitating population change requires an appreciation of the relationship between public policy and health promotion. To this end a profile of environmental initiatives is presented. Thematically, the attempt is to show how psychological theory informs strategies for health enhancement and the prevention of health damaging behaviours. Consideration is given, for example, to the effects of taxation, advertising and legislation. Topical issues such as the promise of peer-led interventions are discussed. Whether the conceptual links between psychology and policy are as easy for the non-psychologist to grasp is a moot point, but the framework for comprehension is clear, with suggestions for further reading.

Media usage is the bread and butter of health promotion. Despite this, the success of media campaigns can best be described as varied. Evaluating strategy within the context of theory enables the authors to consider likely reasons for successes or failures. The authors conclude that mass campaigns probably need to give way to more refined and targeted messages. Understanding the process of message dissemination and interpretation is needed, but theoretical frameworks are suggested which could help facilitate this process. Motivating then maintaining change presents different challenges. As suggested, it may be timely to consider interventions that entail structural as well as individual behavioural outcomes.

Finally, we are invited to reflect on the purpose of health promotion. Distinctly separate theories are argued to be unrealistic and lacking in cohesion. To their credit, the authors willingly engage with a variety of theoretical perspectives and working models, in their attempt to find a means to embrace individual, family and societal complexities. The importance of the way we conceptualize health promotion is reflected in the way we measure health status. The authors argue that until techniques are developed which enable an examination of perceptions of health in social contexts, outcome measures will remain flawed. Moreover, promoting health through partnership, rather than imposition, needs to be taken seriously and integrated into future planning and promotion strategies.
Overall, this book represents good value for money. Its extensive bibliography reflects an approach that is predominantly theoretical, but framed within a context which highlights the relationship of theory to practice. Health promotion is more than psychology, but the explicit relationship is authoritatively documented and beneficial.

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