health psychology: biopsychosocial interactions

MARIE L. CALTABIANO

EDWARD P. SARAFINO

WILEY
Dedication

To my parents Alfio and Rosetta, and my uncle Albert.

In memory and gratitude.
# Brief contents

**PART 1**  
**An introduction: basic issues and processes**  
Chapter 1  
An overview of psychology and health  
Chapter 2  
The body's physical systems

**PART 2**  
**Stress, illness and coping**  
Chapter 3  
Stress — its meaning, impact and sources  
Chapter 4  
Stress, biopsychosocial factors and illness  
Chapter 5  
Coping with and reducing stress

**PART 3**  
**Lifestyles to enhance health and prevent illness**  
Chapter 6  
Health-related behaviour and health promotion  
Chapter 7  
Reducing substance use and abuse  
Chapter 8  
Improving nutrition, weight control and diet, physical activity and safety

**PART 4**  
**Becoming ill and getting medical treatment**  
Chapter 9  
Using health services  
Chapter 10  
In the hospital: the setting, procedures and effects on patients

**PART 5**  
**Physical symptoms: pain and discomfort**  
Chapter 11  
The nature and symptoms of pain  
Chapter 12  
Managing and controlling clinical pain

**PART 6**  
**Chronic and life-threatening health problems**  
Chapter 13  
Serious and disabling chronic illnesses: causes, management and coping  
Chapter 14  
Heart disease, stroke, cancer and AIDS: causes, management and coping

**PART 7**  
**Looking to the future**  
Chapter 15  
What's ahead for health psychology?
Contents

Preface xi
To the student xiii
About the authors xv
Acknowledgements xvi

PART 1 An introduction: basic issues and processes 1

Chapter 1 An overview of psychology and health 3

What is health? 4
An illness/wellness continuum 4
Illness today and in the past 5

Viewpoints from history: physiology, disease processes and the mind 8
Early cultures 8
Ancient Greece and Rome 9
The Middle Ages 9
The Renaissance and after 10

Seeing a need: psychology's role in health 11
Overcoming problems with the Australian health care system 11
'The person' in health and illness 12
How the role of psychology emerged 14

Focus on research
Health and lifestyles 15

Health psychology in Australia 18
Where is health psychology taught in Australia? 22

Current perspectives on health and illness 22
The biopsychosocial perspective 22
The life-span perspective 26

Relating health psychology to other science fields 27
Related fields 27
Health and psychology across cultures 28

Highlight on issues
Careers relating to health and psychology 29

Research methods 32
Experiments 33
Correlational studies 36
Quasi-experimental studies 37
Genetics research 40

Summary 41

Chapter 2 The body's physical systems 43

The nervous system 44
How the nervous system works 44
The central nervous system 46
The peripheral nervous system 51

The endocrine system 53
The endocrine and nervous systems working together 54
Adrenal glands 55
Other glands 55

The digestive system 56
Food's journey through digestive organs 56

Highlight on issues
Our physiological individuality 57
Using nutrients in metabolism 60

The respiratory system 61
The respiratory tract 61

Assess yourself
How many calories do you burn while resting? 62
Respiratory function and disorders 63

The cardiovascular system 64
The heart and blood vessels 64
Blood pressure 66
Blood composition 68
Cardiovascular disorders 69

The immune system 70
Antigens 70
The organs of the immune system 71
Soldiers of the immune system 72

Highlight on issues
When immune functions are absent 74
Defending the body with an immune response 75
Less-than-optimal defences 76

The reproductive system and heredity 77
Conception and prenatal development 77
Genetic processes in development and health 77

Focus on research
Stress and the immune response 79

Summary 81
PART 5  Physical symptoms: pain and discomfort 427

Chapter 11  The nature and symptoms of pain 429

What is pain? 430

The qualities and dimensions of pain 431
Perceiving pain 433

Highlight on issues
Acute pain in burn patients 434

Theories of pain 438

Early theories of pain 438
The gate-control theory of pain 438

Focus on research
Inducing pain in laboratory research 439

Biopsychosocial aspects of pain 444
Neurochemical transmission and inhibition of pain 444
Personal and social experiences and pain 446

Highlight on issues
Placebos and pain 447

Emotions, coping processes and pain 450

Assessing people's pain 453
Self-report methods 453

Assess yourself
Describing your pain 457

Behavioural assessment approaches 458
Psychophysiological measures 459

Pain in children 460
Pain and children's sensory and cognitive development 461
Assessing pain in children 461

Summary 462

Chapter 12  Managing and controlling clinical pain 464

Clinical pain 465
Acute clinical pain 466
Chronic clinical pain 466

Medical treatments for pain 467
Surgical methods for treating pain 468
Chemical methods for treating pain 468

Highlight on issues
Types of pain-relieving chemicals 470

Behavioural and cognitive methods for treating pain 473
The operant approach 473
Relaxation and biofeedback 474
Cognitive techniques 478

Focus on research

Highlight on issues
How durable are the effects of relaxation and biofeedback treatments for pain? 479

Hypnosis and insight-oriented psychotherapy 484
Hypnosis as a treatment for pain 484

Assess yourself
Would behavioural or cognitive methods help your pain? 485

Insight therapy for pain 487

Physiotherapy and stimulation therapies for pain 489
Stimulation therapies 489
Physiotherapy 491

Pain clinics 492
Multidisciplinary programs 492

Highlight on issues
Physical activity and back pain 493

Evaluating the success of pain clinics 494

Summary 495

PART 6  Chronic and life-threatening health problems 497

Chapter 13  Serious and disabling chronic illnesses: causes, management and coping 499

Adjusting to a chronic illness 500
Initial reactions to having a chronic condition 501
Influences on coping with a health crisis 502
The coping process 506

Impacts of different chronic conditions 508
Asthma 509
Epilepsy 512

Highlight on issues
What to do for a seizure 513
Nervous system injuries 514
Diabetes 518

Assess yourself
Do you have diabetes? 520

Highlight on issues
Self-managing diabetes 523

Contents [ ix ]
When I was approached by John Wiley Australia to write an Australian adaptation of Edward Sarafino's *Health Psychology: Biopsychosocial Interactions*, I was extremely excited and felt very privileged to be involved in such a project. I have taught Health Psychology in the Psychology degree program at James Cook University since 1992, and have also taught variations of the subject to Nursing Science and Social Work students. While I have adopted several different texts for these courses, I have often returned to Sarafino's book. This widely respected text is comprehensive, easy to read and well liked by students. Over time, however, I came to recognise the need for a text that was relevant to the experience of students in Australia. Students needed a resource book that was similarly comprehensive, but that cited up-to-date Australian statistics on disease incidence and prevalence, discussed the Australian health care system, examined the findings of national surveys, and reviewed Australian health promotion programs and studies by Australian researchers.

My objective has been to update Sarafino's text with recent research conducted both within and outside Australia. I have incorporated Australian statistics (for example on disease and mortality incidence, and health risk) and documented Australian health programs and health-related research conducted by health psychologists, public health researchers and those working in related fields.

My job was facilitated by the wealth of creative ideas and innovative research in Australia coming out of professions such as public health, psychology and nursing. Although it was not possible to incorporate all these ideas, I believe that the research included represents the high quality of work being done in Australia. I have also incorporated historical material on infectious diseases during the early settlement of Australia, trends over time in eating patterns, smoking and alcohol use in Australia, along with anecdotal data and the recounted experiences of well-known Australians. New sections include those on psychosocial responses to disaster and traumatic events (chapter 3); social support as transactional process (chapter 4); applications of the theories of reasoned action and planned behaviour (chapter 6); and the use of the PRECEDE/PROCEED model as a guiding framework for health promotion in community health psychology (chapter 6). This new material serves to complement Sarafino while maintaining the integrity of the original text.

One additional theme makes this book unique — namely, its sustained focus on life-span development in health and illness. For example, the book discusses how health and health-related behaviour change with age, and describes health care issues and examples that pertain to pediatric and elderly patients.

The biopsychosocial model remains the basic explanatory theme for understanding the whole person in health and illness. The components of the model interrelate in a dynamic and continuous fashion, consistent with the concept of systems. The psychological research cited reflects an eclectic orientation and supports a variety of behavioural, physiological, cognitive and social-personality viewpoints. In addition, gender and sociocultural differences in health and related behaviours are addressed at many points in the book. In these ways, this book presents a balanced view of health psychology, positioning it squarely in the mainstream of current thinking in the field.

*Health Psychology: Biopsychosocial Interactions — an Australian Perspective* draws on the research and theoretical perspectives of many disciplines to illustrate the interrelationship of psychology and health. This depth makes it a teaching resource suitable for undergraduate and postgraduate courses on health psychology or behavioural medicine taught within Psychology degree programs, Nursing Science or Medicine. The material will be
relevant and interesting to students from disciplines other than psychology, such as public health, nursing, medicine, allied health and social work. Undergraduate training in health psychology has developed rapidly and can play an important role in helping students from many disciplines to understand the interplay of biological, psychological and social factors in people’s health. The text, and the exhaustive bibliography, will also be a valuable resource for practitioners and researchers in allied health professions.

The field of health psychology is exciting because of its relative infancy in Australia. It can be seen as a focal point for the application of psychological principles and psychological theory emanating from many other fields within psychology. Health psychology is particularly interesting because of its relevance to the lives of students, the researchers who study biopsychosocial aspects of health and illness, and the people students will work with in the future. Researchers from many disciplines, including psychology, are uncovering fascinating relationships between behaviour and health, and learning more about the roles of cognition, emotion and personality in health, adjustment to medical conditions and rehabilitation. Keeping up to date across such a broad field has been a challenge. In addition to some two thousand publications cited by Sarafino, close to another thousand, most published in the past few years, have been cited in this Australian edition.

Writing this book has been both a major undertaking and a very rewarding experience. I have read more deeply in the literature than could possibly be acknowledged here, and I am greatly indebted to all those researchers whose work I have cited. As Sarafino has remarked, without their endeavours there would be no health psychology. I would particularly like to thank Professor Don Byrne, for his work on chapters 13 and 14, and Professor Paul Martin, for chapters 11 and 12.

There are a number of other people whose contribution I would like to acknowledge. At John Wiley & Sons Australia, I am indebted to Judith Fox, who was the publishing editor for much of the duration of this project. Without her enthusiasm, encouragement and support this book would not have been possible. I would also like to extend my appreciation to Janine Burford in her role of publishing editor during the latter part of the project, and for the excitement she brought to the final stages. Special thanks are also extended to project editor Jem Bates, who has been a true gem in the expertise he has brought to the editorial process, his coordinating abilities and most importantly in his generosity with time and his patience. A number of other Wiley people deserve special acknowledgement — namely, developmental editor Rebecca Gollan, senior editor Catherine Speddin, publishing assistant Pam Hollander and the Wiley Production staff.

I have also benefited from the many helpful suggestions made by the following reviewers: Paula Shulz, Australian Catholic University McCauley; Don Byrne, Australian National University; Doug MacLean, University of Newcastle; and John Connors, Charles Sturt University, Wagga Wagga.

Other individuals deserve mention. I would like to thank the Head of the School of Psychology at James Cook University, Professor Colin Ryan, for his support and many kind words of encouragement during the writing of this book. Rebecca Wood, in her role as research assistant in the early phases of this project, contributed many hours in organising inter-library loans and photocopying articles. I would also like to thank the countless academics both within and outside my field who have had a significant influence on my work. Of my family, I would like to thank most especially my best friend, sister and colleague, Dr Nerina Caltabiano, and my niece Amelia for their unwavering support. Finally, thank you to the students, who make all this work worthwhile.

Marie L. Caltabiano
October 2001
To the student

'I wish I could help my father stop smoking,' a student in one of our health psychology courses said. Maybe she did help — he had quit by the end of the semester. This example points out two things that will probably make health psychology interesting to you: (1) the material is personally relevant and (2) many of the things you learn can actually be applied in your everyday life. Studying health psychology will also help you answer important questions you may have considered about health and psychology in the past. Does the mind affect our health — and if so, how? What effect does stress have on health and recovery from illness? What can be done to help people lead healthier lives than they do? Why don't patients follow their doctors' advice, and what can health care workers do to help? What special needs do children have as patients, and how can parents and health care workers address these needs? How can families, friends, and health care workers help patients adjust to disabling or life-threatening health problems?

As these questions indicate, a knowledge of health psychology can be relevant both now and later when you enter your future career. This is so whether you are studying to be a psychologist, medical social worker, nurse or doctor, physical or occupational therapist, public health worker or health educator. You will learn in this book that the relationship between a person's health and psychology involves a 'two-way street' — each affects the other. Psychological factors go hand in hand with medical approaches in preventing and treating illness and in helping patients adjust to the health problems they develop.

THE BOOK

This book was designed for you, the reader. First and foremost, it provides a thorough and up-to-date presentation of the major issues, theories, concepts and research in health psychology undertaken both within and outside Australia. Throughout the book, the major point of view is 'biopsychosocial' — that is, that health and illness influence and result from the interplay of biological, psychological and social aspects of people's lives. Because integrating these aspects involves complex concepts and technical material, we have made special efforts to write in a straightforward, clear and engaging fashion. When a new term is introduced it is defined immediately; important terms are set in bold type, listed as 'key terms' at the end of the chapter and defined in the glossary at the back of the book. Examples and case studies are included to clarify sometimes complex concepts.

Three types of boxed feature are presented throughout the book in order to illustrate or elaborate on surrounding content. These features are identified in the text by the corresponding icons.

Highlight on Issues. Applied, high-interest and new frontier topics are highlighted here. They feature issues such as the effects of second-hand smoke, the burden of caregiving, careers relating to health and psychology, breast and testicular self-examination, and acute pain in burn patients.

Focus on Research. These features spotlight the research methods used in health psychology, reviewing unique or interesting research findings on topics such as heredity and alcohol abuse, the effect on heart disease of changing Type A behaviour, stress and immune response, and inducing pain in laboratory research.

Assess Yourself. Here students are given the opportunity to examine their own health-related characteristics, knowledge and beliefs on issues such as daily hassles, eating self-efficacy, alcohol use, AIDS, responding to pain, emotional support and ethical questions.

To help you absorb the material and remember it longer, the book also includes the following learning aids:

- Chapter contents and prologue. Each chapter begins with a contents list that outlines the major topics in the order in which they are covered. The prologue then introduces the chapter with a vignette that is relevant to the material ahead and gives an overview of the ideas you will read about.
- Illustrations. The many figures and tables in each chapter are designed to clarify concepts and research findings and help them stick in your mind.
Summary and key terms. Each chapter closes with two features: (1) the summary, which presents the most important ideas covered, and (2) the key terms — a list of the most important terms in the chapter.

Glossary. The glossary at the back of the book gives definitions of important terms and concepts, along with pronunciation keys for the most difficult words. It will be useful when you are studying or reading and are not sure of the exact meaning or pronunciation of a term.

**ORGANISATION**

The text is organised so that the main focus progresses across chapters from primary prevention (parts 1 to 3), through secondary prevention (parts 4 and 5), to tertiary prevention and care (part 6). The book is divided into seven parts.

**Part 1.** Chapter 1 presents a history and overview of health psychology, and introduces the main concepts and research methods used. Chapter 2 introduces the body's physical systems to help the student to understand how these systems interrelate. This introduction provides students with a useful resource to refer back to when each system is discussed in later chapters. (You will note in the sections on metabolism and body weight that we have retained the imperial unit of measure the calorie, since this term remains more generally recognised than the kilojoule. The metric equivalent of one calorie is 4.186 kilojoules.)

**Part 2.** Chapters 3 and 4 examine stress in relation to illness, and chapter 5 looks at ways of coping with and reducing stress. The position of this discussion early in the book recognises stress's influence on a wide range of health-related problems.

**Part 3.** The following chapters consider largely non-clinical approaches to enhancing health and preventing illness. Chapter 6 discusses health-related behaviours and public health promotion programs. Chapter 7 focuses on smoking, and on alcohol and drug use and abuse. Chapter 8 considers nutrition, weight control, physical activity and safety issues.

**Part 4.** Chapter 9 describes the kinds of health services available in Australia, the patient–practitioner relationship, and patients' adherence to medical regimes. Chapter 10 introduces the hospital setting, staff and procedures, how patients cope with the physical and mental stresses they experience there, and the role of health psychologists in this coping process.

**Part 5.** Pain is the focus of the next two chapters. Chapter 11 explores the nature of clinical pain and its symptoms, while chapter 12 discusses medical and psychosocial approaches to managing and controlling pain.

**Part 6.** The following two chapters emphasise tertiary prevention through an examination of chronic and life-threatening health problems. Chapter 13 addresses serious chronic illnesses, such as asthma, diabetes and arthritis, along with their medical and psychosocial treatments. Chapter 14 examines four high-mortality illnesses — heart disease, stroke, cancer and AIDS — and people's experiences with terminal illness and death.

**Part 7.** Finally, chapter 15 looks to the future of health psychology, its goals and controversies, and, not least, career opportunities in the field in Australia.

**STUDY HINTS**

There are many ways you can use the features of this book to learn and study well, and you may want to 'experiment' to find the best way for you. The following is one method that works well for many students.

Survey the chapter first. Read the contents list and browse through the chapter, examining the figures and tables. Some students also find it useful to read the summary first, even though it contains terms they may not yet understand. Then read the preface. As you begin each new section of the chapter, look at its title and turn it into a question. Thus, the heading early in chapter 1, 'An illness/wellness continuum', might become 'What is an illness/wellness continuum?' Doing this helps you focus on your reading. After reading the section, reflect on what you have just read. Can you answer the question you asked when you reworded the title?

When you have finished the body of the chapter, review what you have read by reading the summary and trying to define the items in the list of key terms. If there is something you do not understand, look it up in the chapter or glossary. Last, re-read the chapter at least once, concentrating on the important concepts or ideas. You may find it helpful to underline or highlight selected material now that you have a good idea of what is important. If your exam will consist of 'objective' questions, such as multiple choice, using this approach intensively should be effective. If your exam will have essay items, you will probably find it helpful to develop a list of likely questions and write an outline or a complete answer for each one.

We hope that you enjoy this book, that you learn a great deal from it, and that you will share our enthusiasm and fascination for health psychology by the time you finish the course.

Edward P. Sarafino
Marie L. Caltabiano
About the authors

Dr Marie L. Caltabiano is a senior lecturer in the School of Psychology at James Cook University, Cairns Campus. Her interest in health psychology began with her doctoral research into the stress-modering benefits of leisure. Her research has been in the areas of the psychosocial aspects of stress, stress management, immunocompetence, burnout, craving and disordered eating, parental coping, adolescent health risk behaviours and women's health. She has published papers in the Australian and New Zealand Journal of Public Health, Climacteric, Psychological Reports, the Journal of Social Psychology, the Australian Journal of Marriage and Family, Leisure Studies, Society and Leisure and Adolescence. Dr Caltabiano is a member of the Australian Psychological Society, the APS College of Health Psychologists, the American Psychological Society, the Public Health Association of Australia and the International Federation of University Women. She has been on the advisory board of the international journals Human Relations and Perceptual and Motor Skills.

From 1995 to 1997 Dr Caltabiano was an Associate Dean within the Faculty of Arts at James Cook University. In 1997 and 1998 she was Chair of the Editorial Board of the Centre for Social and Welfare Research. She is co-editor, with Richard Hill and Rosemary Frangos (1996), of the book Achieving Inclusion: Exploring Issues in Disability, and co-author of Menopausal Health and the Family and Influences of Healthy Eating Practices in Ethnic Communities (1997), both published by the Centre for Social and Welfare Research, James Cook University.

Don Byrne is Professor of Clinical and Health Psychology at the Australian National University. He is currently Deputy Dean of the Faculty of Science at the ANU and chairs the University's research grants committee. His research interests include the roles of stress and behaviour in mediating risk of cardiovascular disease; the measurement, causes and management of occupational stress; and the role of coping in response to chemotherapy among women with breast cancer. Research in these and related areas has resulted in the publication of 11 books (as author or editor) and more than 100 papers in refereed journals or as invited book chapters. Professor Byrne is a Fellow of the Academy of the Social Sciences in Australia, the Australian Psychological Society and the International College of Psychosomatic Medicine, of which he is a past president. He remains on the Executive Council of the College and is also a member of the Australian Academy of Science's National Committee on Psychology.

Paul R. Martin is Professor and Head of the School of Psychology at the University of New England (UNE) and President of the Australian Psychological Society (APS). He completed his doctorate at the University of Oxford. He held a research position at the University of Oxford followed by a lectureship at Monash University, before moving in 1981 to the University of Western Australia (UWA), where he served as Director of Clinical Training and Director of the Adoptions Research and Counselling Service. He introduced professional doctoral programs at both UWA and UNE. He has served as President of the Australian Behaviour Modification Association and Director of Scientific Affairs of APS. He took up his current position in 1996. His research program has been supported by grants from the National Health and Medical Research Council. He is author/editor of the texts Handbook of Behavior Therapy and Psychological Science and Psychological Management of Chronic Headaches, and co-author/editor of Behavioural Medicine, Clinical Psychology, Psychology and Society, Treating Postnatal Depression and Health and Medical Research: Contribution of the Social and Behavioural Sciences. In addition to his research and teaching activities, since completing his training in 1977 he has engaged in continuous professional practice as a clinical and health psychologist in a broad range of hospital and community settings.

Edward P. Sarafino received his PhD from the University of Colorado and is Professor and former Chairperson of the Psychology Department at the College of New Jersey. He has published about three dozen professional articles and five books, including Behavior Modification, Behavioral Treatments for Asthma and Child and Adolescent Development. He is a fellow of the American Psychological Association, a member of the APA Divisions of Health Psychology (Division 38) and Experimental Analysis of Behavior (Division 25), and a member of the Society of Behavioral Medicine and the American Psychosomatic Society. He is a former Secretary of Division 38 and has served on and chaired the division's Committee on Education and Training.
Acknowledgements

The author and publisher would like to thank the following copyright holders, organisations and individuals for their permission to reproduce copyright material in this book.

Figures

Text

Every effort has been made to trace the ownership of copyright material. Information that will enable the publisher to rectify any error or omission in subsequent editions will be welcome. In such cases, please contact the Permissions Section of John Wiley & Sons Australia, Ltd, who will arrange for the payment of the usual fee.
References


ABS (1996b). National Health Survey 1995, First Results Australia. Canberra: AGPS.


References


References
References


References


References [623]
References


Dalbesio, D. J. (1994). Diagnosing the severe headache. Neurology, 44(Suppl. 3), S6–12.


References
References
References
References


References
References


References [639]
References


References


References


References

References


References


References [655]


References [ 657 ]


References
References
References


References [ 661 ]


References


References
References


References


Yarnold, P. R., Bryant, F. B., & Grimm, L. G. (1987). Comparing the long and short forms of the student version of the Jenkins Activity Survey. Journal of Behavioral Medicine, 10, 75-90.


Aboriginal people see indigenous Australians
absorption 59
abstinence-violation effect 282
accidental injury 343-4
acetylcholine 270
acquired immune deficiency syndrome see AIDS
acupuncture 32, 490-1
acute pain 432, 452, 466
chemical treatment 468-9
in burn patients 434-5
adaptation
to chronic health problems 507-8
to dying 574-5
to high-mortality illness 539-42
to terminal illness 570-5
addiction 261
additives (food) 307-8
adherence to medical advice 377
age, gender and sociocultural factors 380-1
and doctor-patient communication 384
and patient-practitioner relationship 384-5
extent of non-adherence problem 377-8
in diabetics 521
increasing patient adherence 383-8
medical treatments and illness characteristics 379-80
methods for enhancing compliance 386-8
non-adherence and health outcomes 385-6
psychosocial aspects of the patient 381-3
why patients do and do not adhere to medical advice 379-83
adolescents 598
and alcohol abuse 287-8
and drug use 300-1
and health-related behaviour 237
and HIV/AIDS 256-7
and smoking 266-7
diabetes in 525
terminal illness in 571-2
adoption studies 40
adrenal glands 55
adrenocorticotropic hormone (ACTH) 54
adulthood 598
and health-related behaviour 238
aerobic exercise 338
afferent neurons 50
age
and adherence to medical advice 381
and AIDS 567
and alcohol use 283-5
and cancer 557-8
and drug use 300
and heart disease 543
and smoking habits 263-4
and stroke 551
of health service users 363
AIDS 74
age, gender and sociocultural factors 567
prevention programs 253-8
psychological interventions 570
risk factors 556-7
see also HIV/AIDS
AIDS-related complex 568
alarm reaction (GAS) 93
alcohol abuse treatment 293-8
Alcoholics Anonymous 295
behavioural and cognitive methods 296-7
chemical therapies 297
goals and criteria for success 294-5
insight therapy 295-6
setting for treatment 294
treatment success and the relapse problem 297-8
alcohol use and abuse 283
drinking and health 290-1
prevention 291-3
who drinks and how much 283-6
why people use abuse alcohol 286-9
alcoholics 286
algogenic substances 433
allergies 71
alternative medicine 365, 366
alternative practitioners, usage of 363
alcohol 61
Alzheimer's disease 528-9
causes and treatment 529-30
education and support services 532
psychosocial effects 530-1
ambiguity (stress appraisals) 90-1
amino acids 59
analgesics 469, 470
Ancient Greece and Rome, approach to illness 9
anger 95, 96, 149
angina pectoris 542
anorexia nervosa 331-3
reasons for 333-4
treatments 333-4
antecedent cues 211-12, 288
anthropology 28
antibodies 75
antibody-mediated 'humoral' immunity 72, 73, 75
anticipatory nausea 560
antidepressants 471
antigens 70-2, 75
anti-inflammatories 510
anxiety 95-6
aorta 66
apathy 137
appetite suppressants 329
appraising events as stressful 88-90
determining factors 90-1
approach/approach conflict 98
approach/avoidance conflict 99
arteries 65
arteriosclerosis 69, 148
arthritis 525-6
cognitive/behavioural management approaches 536
effects and treatment 526-7
psychosocial factors 527-8
types and causes 526
assisted suicide 398
Index

drugs, types and effects 299
Duchenne’s muscular dystrophy 80
duodenum 58
dying, Kübler-Ross stages of adjustment to 574
dying patients
  home care 578
  hospice care 578-9
medical and psychological care 575-7
dynamic approach (reactions to disaster) 115
dyspnoea 160-1

E
early cultures, approach to illness 8-9
early intervention, to prevent alcohol abuse 292-3
eczema 161
education and support services for chronically ill people 532-3
efferent neurons 50, 51
efficacy of a health program 246-8, 588, 589
elasticity (blood vessels) 67
elderly see old age
electroencephalograph (EEG) 460
electromyograph (EMG) 495
emetic drugs 296, 297
emotion-focused coping 171-2
emotional factors
  in beliefs 233-4
  in seeking medical care 366
emotional state, affecting health-related behaviours 221
emotional support 125, 130, 133
emotions 23
  affect on pain 450-1
  and blood pressure 67
  and immune function 155-6
  and stress 93-6
emphysema 61, 271
encephalopathy 568
endocrine system 53
  and nervous system working together 54-5
endocrine system reactivity and illness 153-4
endogenous opioids 444-6
endorphins 444
endoscopy 411
endorphins 444
environment, health and psychology 593
environmental hazards 345-7
environmental stress 105
enzymes 56, 57, 58
epidemic 27
epidemiology 27
epidural block 460
epilepsy 50, 512-13
  medical treatments 513
  psychosocial factors 513-14
epinephrine 55
Ericsson Australia 250
essential hypertension 161, 200
esteem support 125
ethical decisions in medical care 594-6, 597
ethnic minorities, death rates 8
ethylene oxide 395
euthanasia 395-6
exercise
  and asthma 511
  and blood pressure 67
  and diabetes 524
  and dieting 327
  health effects 336-40
  links to stress and health 183-4
types and amounts of 338

diabetes 518
  and problems of non-compliance 521
  diet and exercise 524
  health implications 519-20
  in children and adolescents 524-5
  medical treatments 521
  psychosocial factors in treatment 522-3
  self-assessment 520
  self-management 523-4
  types and causes 518-19
  diabetes mellitus 54, 518-19
  diagnostic related group 356, 397
  diaphragm 62
  diastolic pressure 66
  diencephalon 47, 48
diet
  and atherosclerosis 311-13
  and cancer 313-15
  and diabetes 524
  and hypertension 313
  and weight control 315-35
dietary disease 5-6
dieting 324-6
  and exercise 327
  commercial and ‘fad diet’ plans 326
  medically supervised approaches 329-30
  relapse after weight loss 330-1
  self-help groups 328-9
  work-site weight-loss programs 329
dietitians 30

different effects hypothesis 132
digestive system 56-9
digestive system diseases 158
digestive system disorders 59-60
disability, and family stress 101
disaster and traumatic events 114-15
  psychosocial responses 115-17
distraction 480-1
distress 95
disulfiram 297
divorce, and stress 100, 133, 134
dizygotic twins 40
dominant genes 78
double-blind procedure 34
drink-driving rehabilitation programs 344
drinking and health 290-1
drug use and abuse 298
  and health 301
  prevention and stopping 301-3
  who uses drugs and why? 298-301

delayed-hypersensitivity T cells 72
delaying medical care, stages in 367-8
dementia 528
dendrites 45
deoxyribonucleic acid (DNA) 77-8
dependent variable 33
depersonalisation (hospitals) 399-400
depressants 299, 471
depression 96, 137, 451, 596
desirability (stress appraisal) 91
detoxification 293-4
development
  and health-related behaviour 234-8
  and Type A behaviour 150
developmental approaches 38-9
diabetes 518
  and problems of non-compliance 521
diet and exercise 524
  health implications 519-20
  in children and adolescents 524-5
  medical treatments 521
  psychosocial factors in treatment 522-3
  self-assessment 520
  self-management 523-4
  types and causes 518-19
diabetes mellitus 54, 518-19
  diagnostic related group 356, 397
  diaphragm 62
  diastolic pressure 66
  diencephalon 47, 48
diet
  and atherosclerosis 311-13
  and cancer 313-15
  and diabetes 524
  and hypertension 313
  and weight control 315-35
dietary disease 5-6
dieting 324-6
  and exercise 327
  commercial and ‘fad diet’ plans 326
  medically supervised approaches 329-30
  relapse after weight loss 330-1
  self-help groups 328-9
  work-site weight-loss programs 329
dietitians 30

different effects hypothesis 132
digestive system 56-9
digestive system diseases 158
digestive system disorders 59-60
disability, and family stress 101
disaster and traumatic events 114-15
  psychosocial responses 115-17
distraction 480-1
distress 95
disulfiram 297
divorce, and stress 100, 133, 134
dizygotic twins 40
dominant genes 78
double-blind procedure 34
drink-driving rehabilitation programs 344
drinking and health 290-1
drug use and abuse 298
  and health 301
  prevention and stopping 301-3
  who uses drugs and why? 298-301
Index
McGill Pain Questionnaire (MPQ) 456-8
macrophages 72
mantra 195
marriage, and social support 133-4
masochists 437
mass media 244
Matthews Youth Test for Health 146
medical anthropology 28
medical care
- social and emotional factors in seeking 366
- stages in delaying 367-8
- medical care practitioners 353
- medical jargon 373
- medical patients see patients
- medical services, funding 396-8
- medical sociology 27-8
- medical treatments
  - for asthma 510-11
  - for diabetes 521
  - for epilepsy 513
  - for pain 467
    - chemical methods 468-73
    - surgical methods 468
Medicare 354-5
medication for stress management 187
meditation 195
medulla 50, 63
memory B cells 75
memory T cells 72, 75
meta-analysis 164
metabolism 60-1
methadone 302
midbrain 50
Middle Ages, approach to illness 9-10
middle-aged adults, and terminal illness 572
migraine headaches 159, 160
Millon Behavioral Health Inventory (MBHI) 422
mind/body problem 9, 10
minerals 307
Minnesota Multiphasic Personality Inventory (MMPI) 451-2
minority group background 240
misusing health services 368-70
mitral stenosis 80
modelling 191-2, 220
monocytes 72
monozygotic twins 40
morbidty 27
mortality 27
and social support 129
motivated reasoning 232
motivation 23

Index [ 683 ]
motivational factors in beliefs 232-3
motivational interviewing 293
mourning process 580-1
mucociliary escalator 63
Multidimensional Health Locus of Control Scales 139
multidisciplinary pain clinics 492-3
multiple sclerosis 45, 76
muscle-ischaemia procedure 440-1
mutations 78
myasthenia gravis 51
myelin 45
myocardial infarction 69, 148, 542
initial treatment 544-5
rehabilitation 545-6
myocardium 64
myotonic dystrophy 80

N
narcotics 299, 302
National Tobacco Campaign 253
nervous system 44-6
and endocrine system working together 54-5
central nervous system 46-51
peripheral nervous system 51-2
nervous system injuries 514-18
network resolution processing 117
network support 125
neuralgia 436
neurochemical transmission and inhibition of pain 444-6
neurons 44-5, 50
neuroticism 368-9
neurotransmitters 45
new baby, and stress 99-100
nicotine 269-70
nicotine-containing gum 278
nicotine fading 279
nicotine regulation model 270
nociceptors 433
non-experimental methods 35-6
non-insulin-dependent diabetes mellitus (NIDDM) 519
non-pain imagery 481-2
non-rational processes, role in health-related behaviour 232-4
non-specific immunity 72
norepinephrine 55, 270
nosocomial infection 396
NSW Ambulance Service, cardiovascular risk reduction trial 250-1
nurses 30
nursing homes and hostels 353-4
nutrient use in metabolism 60-1
nutrition 306
and health 311-15
components of food 307-8
what people eat 308-11

O
obesity 317, 318
prevention 322-4
occipital lobe 48
occupational therapists 31
oesophagus 58
oestrogens 54
old age 598-9
and health-related behaviour 238
and terminal illness 572
hardiness in 144
health and personal control 140-1

Oncogenes 80
operator approach to treating pain 473-4
operator conditioning 16, 219, 288, 448
opiates and opioids, function 444-6
organic pain 431, 432
organising one's world 182-3
osteoarthritis 526
outcome evaluation 247
out-patient health services 354
overweight 316-17
and health 322
prevention 322-4
why people come overly fat 318
oxygen 61, 65

P
pain
acute versus chronic pain 432-3, 451-2, 466-7
and emotion 450-1
and learning 446-8
and placebos 447
and social processes 448-9
biopsychosocial aspects 444-53
clinical 465-7
coping with 451-3
gender and sociocultural factors 449
in children 460-2
organic versus psychogenic pain 431-2
perceiving 433-7
qualities and dimensions 431-3
role of the 'meaning' of pain 437
theories of 438-43
what is it? 430-1
pain assessment 453
behavioural assessment approaches 458-9
in children 461-2
psychophysiological measures 459-60
self-report methods 453-8
pain behaviours 448
assessment in everyday activities 458-9
assessment in structured clinical sessions 458
pain clinics 492
evaluating success of 494-5
multidisciplinary programs 492-3
pain fibres 441, 443
pain inhibition 444-6
pain perception
physiology 433-6
without physical basis 436-7
pain questionnaires 455-8
pain rating index 456
pain rating scales and diaries 454-5
pain redefinition 482-3
pain-relieving chemicals 470-1
pain research 439
and ethical standards 441
pain induction
cold-pressor procedure 439-40
muscle-ischaemia procedure 440-1
pain treatment
behavioural and cognitive methods 473-84
hypnosis and insight-oriented psychotherapy 484-9
medical methods 467-73
physiotherapy and stimulation therapies 489-92
self-management 485
pancreas 54, 58
paraplegia 50, 515
parasympathetic nervous system 52, 53
<table>
<thead>
<tr>
<th>topic</th>
<th>page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>parent, death of</td>
<td>580-1</td>
</tr>
<tr>
<td>parietal lobe</td>
<td>48</td>
</tr>
<tr>
<td>Parkinson's disease</td>
<td>50</td>
</tr>
<tr>
<td>passive smoking</td>
<td>273</td>
</tr>
<tr>
<td>patient-centred style</td>
<td>373</td>
</tr>
<tr>
<td>patient-controlled analgesia</td>
<td>469</td>
</tr>
<tr>
<td>patient–practitioner relationship</td>
<td>370-1, 383-4 and adherence 384-5</td>
</tr>
<tr>
<td>communicating with patients</td>
<td>384</td>
</tr>
<tr>
<td>patient's behaviour and style</td>
<td>374-6</td>
</tr>
<tr>
<td>practitioner's behaviour and style</td>
<td>372-4</td>
</tr>
<tr>
<td>patients</td>
<td></td>
</tr>
<tr>
<td>adherence to medical advice</td>
<td>381-3</td>
</tr>
<tr>
<td>coping styles and psychological preparation</td>
<td>411-15</td>
</tr>
<tr>
<td>emotional adjustment in the hospital</td>
<td>404-20</td>
</tr>
<tr>
<td>health psychologists assistance with hospitalised patients</td>
<td>420-4</td>
</tr>
<tr>
<td>preferences for participation in medical care</td>
<td>371</td>
</tr>
<tr>
<td>preparation for stressful medical procedures</td>
<td>408-15</td>
</tr>
<tr>
<td>psychological preparation for non-surgical procedures</td>
<td>410-11</td>
</tr>
<tr>
<td>psychological preparation for surgery</td>
<td>408-10</td>
</tr>
<tr>
<td>psychological tests, medical patients</td>
<td>422-3</td>
</tr>
<tr>
<td>relations with hospital staff</td>
<td>398-400</td>
</tr>
<tr>
<td>satisfaction with hospitals</td>
<td>403-4</td>
</tr>
<tr>
<td>sick-role behaviour in hospital</td>
<td>400-3</td>
</tr>
<tr>
<td>pattern theory of pain</td>
<td>438</td>
</tr>
<tr>
<td>pepsin</td>
<td>58</td>
</tr>
<tr>
<td>peptic ulcers</td>
<td>59</td>
</tr>
<tr>
<td>perceived symptoms, and health-related behaviour</td>
<td>221</td>
</tr>
<tr>
<td>perceiving pain</td>
<td>433-7</td>
</tr>
<tr>
<td>perceiving symptoms of illness</td>
<td>356-7</td>
</tr>
<tr>
<td>competing environmental stimuli</td>
<td>337-8</td>
</tr>
<tr>
<td>individual differences</td>
<td>357</td>
</tr>
<tr>
<td>psychological influences</td>
<td>358-9</td>
</tr>
<tr>
<td>sociocultural differences</td>
<td>359-60</td>
</tr>
<tr>
<td>PERI Life Events Scale</td>
<td>111</td>
</tr>
<tr>
<td>periaqueductal grey area of the brainstem</td>
<td>443</td>
</tr>
<tr>
<td>electrical stimulation</td>
<td>444</td>
</tr>
<tr>
<td>peripheral fibres</td>
<td>441, 442</td>
</tr>
<tr>
<td>peripheral nervous system</td>
<td>51-2</td>
</tr>
<tr>
<td>peripheral resistance</td>
<td>67</td>
</tr>
<tr>
<td>peripherally active analgesics</td>
<td>470</td>
</tr>
<tr>
<td>peristalsis</td>
<td>58</td>
</tr>
<tr>
<td>person</td>
<td></td>
</tr>
<tr>
<td>in health and illness</td>
<td>12-14</td>
</tr>
<tr>
<td>sources of stress within the</td>
<td>98-9</td>
</tr>
<tr>
<td>personal control</td>
<td></td>
</tr>
<tr>
<td>and health</td>
<td>139-40</td>
</tr>
<tr>
<td>and health in old age</td>
<td>140-1</td>
</tr>
<tr>
<td>beliefs about oneself and control</td>
<td>135-6</td>
</tr>
<tr>
<td>beliefs in</td>
<td>228-9</td>
</tr>
<tr>
<td>determinants and development</td>
<td>136-7</td>
</tr>
<tr>
<td>gender and sociocultural differences</td>
<td>137</td>
</tr>
<tr>
<td>improving 181-2</td>
<td></td>
</tr>
<tr>
<td>sense of 134-41</td>
<td></td>
</tr>
<tr>
<td>types of 134-5</td>
<td></td>
</tr>
<tr>
<td>when people lack 137-9</td>
<td></td>
</tr>
<tr>
<td>personality</td>
<td></td>
</tr>
<tr>
<td>affecting health-related behaviours</td>
<td>221</td>
</tr>
<tr>
<td>and illness</td>
<td>13-14</td>
</tr>
<tr>
<td>perspectives on health and illness</td>
<td>33</td>
</tr>
<tr>
<td>biopsychosocial perspective</td>
<td>22-6</td>
</tr>
<tr>
<td>life-span perspective</td>
<td>26</td>
</tr>
<tr>
<td>Peter Principle</td>
<td>104</td>
</tr>
<tr>
<td>petit mal attack</td>
<td>512</td>
</tr>
<tr>
<td>phagocytes</td>
<td>72, 73</td>
</tr>
<tr>
<td>phantom limb pain</td>
<td>436-7</td>
</tr>
<tr>
<td>phenotype</td>
<td>78</td>
</tr>
<tr>
<td>phenylketonuria (PKU)</td>
<td>80</td>
</tr>
<tr>
<td>physical activity</td>
<td>336</td>
</tr>
<tr>
<td>and back pain</td>
<td>493-4</td>
</tr>
<tr>
<td>health effects of exercise</td>
<td>336-40</td>
</tr>
<tr>
<td>promoting 342, 343</td>
<td></td>
</tr>
<tr>
<td>who gets enough and why?</td>
<td>340-1</td>
</tr>
<tr>
<td>see also exercise</td>
<td></td>
</tr>
<tr>
<td>physical dependence</td>
<td>261</td>
</tr>
<tr>
<td>physical rehabilitation</td>
<td>516</td>
</tr>
<tr>
<td>physiological arousal</td>
<td>105-7</td>
</tr>
<tr>
<td>physiological individuality</td>
<td>57-8</td>
</tr>
<tr>
<td>physiology, stress, and illness</td>
<td>153-5</td>
</tr>
<tr>
<td>physiotherapists</td>
<td>30-1</td>
</tr>
<tr>
<td>physiotherapy</td>
<td>491-2</td>
</tr>
<tr>
<td>pituitary gland</td>
<td>54</td>
</tr>
<tr>
<td>placebo effect</td>
<td>34</td>
</tr>
<tr>
<td>placebos and pain</td>
<td>447</td>
</tr>
<tr>
<td>planned behaviour, theory of</td>
<td>229-30</td>
</tr>
<tr>
<td>plasma</td>
<td>69</td>
</tr>
<tr>
<td>plasma proteins</td>
<td>69</td>
</tr>
<tr>
<td>platelets</td>
<td>68</td>
</tr>
<tr>
<td>Pneumocystis carinii pneumonia</td>
<td>567</td>
</tr>
<tr>
<td>pneumonia</td>
<td>64</td>
</tr>
<tr>
<td>polio</td>
<td>50</td>
</tr>
<tr>
<td>polygenic inheritance</td>
<td>78</td>
</tr>
<tr>
<td>polygraph</td>
<td>105, 107</td>
</tr>
<tr>
<td>polyunsaturated fatty acids</td>
<td>69</td>
</tr>
<tr>
<td>pons</td>
<td>50</td>
</tr>
<tr>
<td>post-traumatic stress disorder (PTSD)</td>
<td>116-17</td>
</tr>
<tr>
<td>practitioners</td>
<td>353, 363</td>
</tr>
<tr>
<td>behaviour and style</td>
<td>372-4</td>
</tr>
<tr>
<td>communicating with patients</td>
<td>384, 386</td>
</tr>
<tr>
<td>depersonalisation in hospitals</td>
<td>399</td>
</tr>
<tr>
<td>see also patient–practitioner relationship</td>
<td></td>
</tr>
<tr>
<td>PRECEDE/PROCED model</td>
<td>246-8</td>
</tr>
<tr>
<td>preferred provider organisation (PPO)</td>
<td>355</td>
</tr>
<tr>
<td>pregnancy, and health-related behaviour</td>
<td>234-6</td>
</tr>
<tr>
<td>prenatal development</td>
<td>77</td>
</tr>
<tr>
<td>preschoolers</td>
<td>415-17</td>
</tr>
<tr>
<td>present pain intensity</td>
<td>456</td>
</tr>
<tr>
<td>prevalence</td>
<td>27</td>
</tr>
<tr>
<td>preventing alcohol abuse</td>
<td>291-3</td>
</tr>
<tr>
<td>preventing drug use</td>
<td>301-3</td>
</tr>
<tr>
<td>preventing overweight</td>
<td>322-4</td>
</tr>
<tr>
<td>preventing smoking</td>
<td>274-6</td>
</tr>
<tr>
<td>primary appraisal</td>
<td>88-9</td>
</tr>
<tr>
<td>primary prevention</td>
<td>215-16</td>
</tr>
<tr>
<td>Private Health Insurance Incentive Scheme</td>
<td>354</td>
</tr>
<tr>
<td>problem drinking</td>
<td>285-6</td>
</tr>
<tr>
<td>problem-focused coping</td>
<td>172-3, 176</td>
</tr>
<tr>
<td>process evaluation</td>
<td>247</td>
</tr>
<tr>
<td>progressive muscle relaxation</td>
<td>187-9, 475-8, 533</td>
</tr>
<tr>
<td>prospective approach</td>
<td>37-8</td>
</tr>
<tr>
<td>prostate cancer</td>
<td>538</td>
</tr>
<tr>
<td>proteins</td>
<td>58, 59, 307</td>
</tr>
<tr>
<td>protozoa</td>
<td>70</td>
</tr>
<tr>
<td>pseudobulbar liability of affect</td>
<td>553-4</td>
</tr>
<tr>
<td>psoriasis</td>
<td>161</td>
</tr>
<tr>
<td>psychogenic pain</td>
<td>431, 432</td>
</tr>
<tr>
<td>Psychological Adjustment to Illness Scale (PAIS)</td>
<td>422-3</td>
</tr>
<tr>
<td>psychological assessment tests for medical patients</td>
<td>421-3</td>
</tr>
<tr>
<td>psychological dependence</td>
<td>262</td>
</tr>
<tr>
<td>psychological factors</td>
<td>22-3</td>
</tr>
<tr>
<td>psychological impact</td>
<td></td>
</tr>
<tr>
<td>of AIDS</td>
<td>569-70</td>
</tr>
<tr>
<td>of cancer</td>
<td>561-3</td>
</tr>
<tr>
<td>psychology</td>
<td></td>
</tr>
<tr>
<td>emergence in the health field</td>
<td>14-18</td>
</tr>
<tr>
<td>role in health</td>
<td>11-18</td>
</tr>
<tr>
<td>psychoneuroimmunology</td>
<td>155-8</td>
</tr>
<tr>
<td>psychophysiological disorders</td>
<td>158-61</td>
</tr>
</tbody>
</table>

Index [685]
psychophysiological measures of pain 459-60
psychosocial adjustments in terminal illness 573-5
psychosocial aspects
of Alzheimer's disease 530-1
of heart disease 547-8
of spinal cord injury 516-18
of stress 94-7
of stroke 554-5
psychosocial factors
in arthritis 527-8
in asthma 513-12
in diabetes treatment 522-3
in epilepsy 513-14
in weight control 320-2
psychosocial influences in perceiving symptoms 358-9
psychosocial interventions
for AIDS 570
for cancer 564-5
for heart disease 549-50
for people with chronic conditions 531-2
cognitive approaches 534
education and support services 532-3
family therapy 535
insight therapy 535
relaxation and biofeedback techniques 533-4
psychosocial modifiers
of immune system reactivity 156
of stress 124-52
psychosocial responses to disaster and trauma 115-17
psychosomatic illnesses 158-61
psychosomatic medicine 16
psychotherapy 185
for pain 487-9
public health 27
public policy to prevent alcohol abuse 291-2
pulmonary circulation 65, 66
punishment 220

Q
quadriplegia 50, 515
quality-adjusted life years 594
quality of life 508, 593-4
in death 575-9
quasi-experimental studies 37
developmental approaches 38-9
retrospective and prospective approaches 37-8
single-subject approaches 39-40
quitting drinking 296
quitting smoking 276
stopping on one's own 276-8
succeeding at quitting and abstaining for good 280-2
treatment for stopping smoking 278-80

R
radiation therapy 559-60
rational-emotive therapy (RET) 192-3
rational non-adherence 382
reactance 403
reactivity
and behaviour patterns 147-8
and hypertension 164
reasoned action theory of 225-8, 229-30
recessive genes 78
red blood cells 68
redefinition 482-3
reducing the potential for stress 179-86
referred pain 435
rehabilitation
cardiac patients 545-6
spinal cord injuries 516
stroke patients 551-4
reinforcement 219
relapse 281
relaxation 187-9
for chronic illness 533-4
for treating pain 474-8, 479-80
Renaissance and after approach to illness 9-10
reproductive system 77
research methods 32-3
correlational studies 36
experimental methods 33-5
genetics research 40-1
non-experimental methods 35-6
quasi-experimental studies 37-40
resilience 142-3
respiratory circulation 65
respiratory function and disorders 63-4
respiratory system 61-4
respiratory tract 61-3
respite centres 532
response substitution 280
restraint theory 321
Restricted Environmental Stimulation Therapy (REST) 279
reticular system 50
retrospective approach 37
reverse conditioning 189
rheumatic diseases 525-6
rheumatoid arthritis 76, 160, 526
right hemisphere 47
risk factors 12-13
lifestyles and health 209-17
role ambiguity 90
safety training 342-3
sarcomas 556
saturated fatty acids 69
school-age children as hospital patients 417
school heart health 249
schools, health promotion in 248-9
secondary appraisal 89
secondary prevention 216-17
sedatives 471
self-efficacy 136, 228
self-help groups for weight control 328-9
self-management strategies
for diabetes 523-4
for pain 485
for quitting drinking 296
for stopping smoking 279, 280
self-monitoring 280
blood glucose 523
sensory development, and pain in children 461
separation distress 415-16
serum hepatitis 60
set-point theory 319-20
sex chromosomes 78
sex-linked disorders 80
sick-role behaviour 211, 212, 586
in hospital 400-3
sickle-cell anaemia 80
single-subject designs 39-40
skin 75
skin cancer 558
prevention 345
small intestine 59
Index
suppressor T cells 73, 75
sympathetic nervous system 51-2; 53

**s**

symptoms
   interpreting and responding to 360-1
   perceiving 356-60
synapse 45
synaptic knobs 45
systematic desensitisation 189-90, 279, 534
systemic circulation 63
systems concept 24-5
systolic pressure 66

**t**

T cells 72, 73
tangible support 125
tars 269
technology and medical decisions 595
techostress 104
telencephalon 46-7, 48
temperaments 99, 100
temperature, and blood pressure 67
temporal lobe 48
tension-type headaches 159, 160
terminal illness
   adapting to 570-5
   adapting to dying 574-5
   and patient's age 571-2
   coping with 573
   in adolescents or young adults 571-2
   in children 571
   in middle-aged and older adults 572
   psychosocial adjustments to 573-5
tertiary prevention 217
testicular self-examination 213-14
testosterone 54
thalamus 48
theories 32-3
theory of planned behaviour 229
   applications 229-30
theory of reasoned action 225-8
   applications 229-30
threat (stress) 89
thrombosis 70
thymus gland 54, 71
thyroid gland 53
time management 183
tolerance 261
trachea 61
training programs in health psychology 592
tranquilisers 471
transactions 87, 88
transcendental meditation 195
transcutaneous electrical nerve stimulation (TENS) 489-90
transmission cells 441
transtheoretical model 231
trauma, psychosocial responses 115-17
treatment delay 367-8
trigeminal neuralgia 436
triglycerides 69
twin studies 40
Type I diabetes 518-19
Type II diabetes 519
Type A behaviour 144-5
   and development 150
   and health 148-9
   and heart disease 544
   and stress 146-7
   anger/hostility component 149-50
   biopsychosocial factors in 151-2

**g**
gender and sociocultural differences in reactivity 147-8
measurement 145-6
modification to reduce coronary risk 196-200

**u**
unions 158
ultraviolet radiation 345
uncontrollable negative events 138
uncontrollable stressful events 133
unemployment, and stress 104
United States health care system 355
unrealistic optimism about health 226-7
unsaturated fatty acids 69
Uplifts Scale 112
uterine cancer 558

**v**
vaccines 76
vagus nerve 52
variables 33
veins 65
ventricles 65-6
very-low-calorie diets 329-30
very-low-density lipoprotein 311
vigilant coping 233
viruses 70-1
viscosity (blood) 67
vitamins 307

**w**
weight control
   and diet 315-35
biological factors 318-20
psychosocial factors 320-2
see also dieting
Weight Watchers 328
wellness programs
   community-wide 251-3
   in the workplace 249-51
wellness promotion problems 217
community factors 218-19
   individual factors 217-18
   interpersonal factors 218
white blood cells 72
whole person 24
withdrawal 261
women's health 600
work-site weight-loss programs 329
work-site wellness programs 249-51
Worksafe Australia 344

**x**
X chromosomes 78, 80

**y**
Y chromosomes 78

**z**
zidovudine 568