Preface

There are a variety of theoretical and practical definitions of anthropometry, but in its simplest form anthropometry is the physical measurement of the human body and its parts. Methods can be very simple. On the other hand, advances in technology and computing have given rise to the development of more sophisticated apparatus which can be used to measure and characterise individual tissues and organs. Thus, anthropometric devices can range from a simple tape to measure head circumference to expensive electromagnetic image-capturing systems for characterising limb shapes. These methods can be used to obtain information on normal people at various life stages. Alternatively, anthropometry can be used and applied to understanding disease, including the responses to treatments, or to generate reference data. Understanding and applying concepts and techniques of anthropometry require a good source of written material that covers not only the theoretical basics but the practical applications in health and disease. Hitherto such sources on human anthropometry have been fragmentary, covering single facets without any cross-fertilisation between disciplines or sciences or between different intellectual divides. These deficiencies are, however, addressed in *Handbook of Anthropometry: Physical Measures of Human Form in Health and Disease*, where all facets and features of anthropometry are described. The book is divided into 26 different parts as follows:

- Part I: Tools and Techniques in Anthropometry: General Methods
- Part II: Tools and Techniques in Anthropometry: Water, Hydration and Surface Area
- Part III: Tools and Techniques in Anthropometry: Muscle
- Part IV: Tools and Techniques in Anthropometry: Adipose Tissue, Other Compartments and Relationships
- Part V: Regions and Anatomical Areas of the Body: Head and Face
- Part VI: Regions and Anatomical Areas of the Body: Limbs, Extremities and Bones
- Part VII: Regions and Anatomical Areas of the Body: Joints and Digits
- Part VIII: Regions and Anatomical Areas of the Body: Abdominal and Trunk Regions
- Part IX: Regions and Anatomical Areas of the Body: Sensory Organs
- Part X: Regions and Anatomical Areas of the Body: Internal Organs, Other Tissues and Regions
- Part XI: Anthropometry of Pregnancy: Prenatal and Postnatal Aspects
- Part XII: Anthropometry of Infants and Children
Preface

Part XIII: Anthropometry of Puberty and Adolescence in Health and Disease
Part XIV: Anthropometry of Middle-Aged and Aged in Health and Disease
Part XV: Anthropometry in Genetic Disease and Polymorphisms
Part XVI: Anthropometry in Cancer
Part XVII: Anthropometry in Exercise and Sport Activities
Part XVIII: Anthropometry in Metabolic Disease and Obesity
Part XIX: Anthropometry in Diabetes
Part XX: Anthropometry in Cardiovascular Disease
Part XXI: Anthropometry in Organ Disease
Part XXII: Anthropometry in Special Conditions and Circumstances
Part XXIII: Anthropometry in Ethnic Groups and Cultural and Geographical Diversity
Part XXIV: Anthropometry and Nutrition: General Aspects
Part XXV: Anthropometry and Nutrition: Micro- and Macro-Nutrients
Part XXVI: Biomechanical and Ergonomic Aspects

The chapters are written by national and international experts who are specialists in their field. Each chapter is self-contained. Sometimes experts in one field are novices in another. To bridge this intellectual divide, the authors have incorporated sections on applications to other areas of health and disease, practical methods and techniques, guidelines, and key points or features. The summary points presented in bullet form are designed for easier intellectual digestion. This book is for health scientists, doctors, nurses, physiologists, nutritionists and dietitians, public health scientists, epidemiologists, health workers and practitioners, exercise physiologists, physiotherapists, university faculty, undergraduates and graduates. It is also designed for policy makers, designers and ergonomists.