

Book Review

Rosalind S. Gibson. *Principles of Nutritional Assessment*, 2nd ed. Oxford: Oxford University Press 2005 £58 (hardback), pp. 908. ISBN: 0 19 517169 1

The first edition of this important volume, published in 1990, lies battered and worn on my bookshelf, and although it remains largely relevant and frequently used, I have been keenly awaiting the arrival of an updated version. I was therefore delighted to find that the newly published, larger and bright orange(!) second edition remains equally encyclopaedic in its breadth and is wonderfully up to date.

During the 15 years between editions, much has happened in the field of nutrition, with the development of ever more specific and highly technological methods of nutritional assessment. Indeed, it is notable and rather lamentable that we appear to have a much more advanced arsenal of tools devised to identify nutritional problems than to combat them. The new volume provides the reader with clear and accessible descriptions of all of the main methods, outlining their strengths and weaknesses as well as frequently providing detailed information on their validity, reliability, specificity and sensitivity.

The book opens with a very useful introduction to nutritional epidemiological studies, which is followed by seven chapters on methods for the assessment of dietary intake in individuals and populations. These chapters are essential reading for researchers planning to conduct any sort of dietary survey. The chapters also discuss what to do with the dietary intake data that have been collected, and specifically what the data can and cannot tell you – an often overlooked area.

Chapters 9–14 focus on the other side of the energy balance equation, namely the measurement of growth and body composition. After a discussion on error and how to reduce and quantify it in anthropometric surveys, Gibson explains in detail the various methods available for anthropometric assessment from the simple, such as weight and height, to the complex, such as air-displacement plethysmography and computerised tomography. I was particularly pleased to see that the lovely and clear line drawings have been kept in the new edition, but was disappointed that the measurement of sitting height, which allows the calculation of subischial leg length, has been omitted. Leg length has recently been shown to be a powerful marker of growth in early childhood

and will, I am sure, be the focus of increased future attention in nutritional surveys given the current interest in life-course epidemiology.

I was also surprised that the book does not contain a section on the difficulties of collecting data, specifically dietary intake and anthropometric data among older people. Furthermore, the recent findings that a slightly elevated BMI may confer survival advantage in older age receives only passing mention, which is a shame given the importance this has for the classification of healthy body weight in older adults, and the likely lengthy wait before the production of a third edition!

Detailed accounts of the various laboratory methods for the assessment of protein and micronutrient status are provided in Chapters 15–25. These chapters are designed to be accessible to all levels of researcher, beginning with simple introductions and then moving on to increasingly more complex reviews. Chapters 26 and 27 describe how to conduct clinical assessments and the methods available for assessing the nutritional status of hospitalised individuals.

Particularly welcomed inclusions in the new edition are a large number of website links throughout the book, which provide the reader with, for example, databases on the nutrient composition of foods, and anthropometric growth reference data. Finally, the clear tables and figures, substantial reference lists at the end of each chapter and detailed appendices are invaluable and make the book such a wonderful resource.

There is no question that this excellent update of Gibson's *Principles of Nutritional Assessment* will remain the essential reference book for nutrition students and researchers alike for many years to come.

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