

## Nutrition: A Very Short Introduction

By David A. Bender

### Questions for Reading and Discussion

- 1) What is the evidence that we should drink 1½ litres of water a day? How is it that total water loss from the body is greater than fluid intake?
- 2) What factors determine what people choose what to eat, and how much?
- 3) What is the relationship between food intake, physical activity and body weight? What are the main sources of metabolic fuel in our diet, and why is there a need for fat in the diet?
- 4) If someone consistently eats more than is needed to meet his/her energy expenditure by about 10%, why does s/he not continue to gain weight? If someone is reducing food intake to lose weight, why does s/he not lose weight at a constant rate?
- 5) Why does an adult who is not growing require protein in the diet? How do we know how much protein an adult needs?
- 6) What is the evidence that sportspeople and body builders require a high protein diet? Is there any need for protein supplements for healthy people?
- 7) Do all proteins have the same nutritional value? Why are proteins from plant foods sometimes called “second class proteins”, while animal proteins are considered to be “first class”?
- 8) Why is obesity now considered to be undesirable, when it was formerly highly regarded by society as a whole? What are the main causes of the considerable increase in obesity in most countries over the last 20 – 30 years?
- 9) How can overweight people lose weight? Why are very restricted diets unlikely to be helpful for maintenance of weight after a period of slimming?
- 10) What types of evidence do we have to link heart disease, high blood pressure and some cancers with diet? What changes in the average Western diet are considered to be desirable?
- 11) Why do food manufacturers claim with pride that their products are low in saturated fat and low in or free from *trans*-fats? What are the benefits of an increased intake of poly-unsaturated fats?
- 12) Why is an increased intake of dietary fibre considered to be desirable? What are the sources of fibre in the diet?
- 13) Why is it advised that we should eat five (or sometimes more) servings of fruit and vegetables a day?
- 14) What are the benefits and risks of taking antioxidant supplements?
- 15) What is the importance of nutritional labelling of manufactured foods? What does all the “small print” on food packages mean?
- 16) How can people be helped to convert the nutritional information on food labels and in public health publicity into appropriate choices of food on the plate?
- 17) What are the health problems of being underfed and seriously underweight?
- 18) Why are people with advanced cancer, AIDS, chronic heart and lung disease and tuberculosis severely underweight?
- 19) What are vitamins, and why are they needed in the diet? How can we determine appropriate levels of vitamin and mineral intake, and can too much be dangerous?
- 20) What do the terms “functional foods” and “superfoods” mean?

**Other books by David A Bender:**

- *Introduction to Nutrition and Metabolism* (5<sup>th</sup> edition, CRC Press, Boca Raton Florida, 2014)
- *Oxford Dictionary of Food and Nutrition* (4<sup>th</sup> edition, Oxford University Press, Oxford, 2014)
- *Amino Acid Metabolism* (3<sup>rd</sup> edition, Wiley-Blackwell, Chichester, 2012)
- *Benders' Dictionary of Nutrition and Food Technology* (8<sup>th</sup> edition, Woodhead Publishing Ltd, Cambridge, 2006)
- *Nutritional Biochemistry of the Vitamins*, (2<sup>nd</sup> edition, Cambridge University Press, Cambridge, 2003)
- *Food Tables and Labelling* (jointly with Arnold E Bender) (Oxford University Press, Oxford, 1999)

**Further reading:**

- *Introduction to Human Nutrition*, Gibney, MJ, Lanham-New, SA, Cassidy A & Vorster HH. (2<sup>nd</sup> edition, The Nutrition Society Textbook Series, Wiley-Blackwell, Chichester, 2009)
- *Nutrition, Diet and Health*, Gibney, MJ. (Cambridge University Press, Cambridge, 1986)