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This book has had a very long gestation period and I have probably spent more time researching and writing it than any of my other books, including my 600-page nutrition textbook. I started to make periodic efforts towards researching the book in 2011 and I have had an almost complete draft in my files for over 5 years. I have had difficulty in finding a publisher willing to take the risk of publishing it as it seemed to fall into the gap between an academic text and a popular science book that is often perceived to have limited sales potential. I seriously considered moving to self-publishing so that my efforts were accessible to readers and not wasted. I am therefore particularly grateful to my commissioning editor, Emma Koster, for persuading Taylor & Francis Group to agree to publish this book. My daughter Kate also helped in the dissemination of my ideas and research by setting up a blog site for me (<https://drgeoffnutrition.wordpress.com/>) which I have used to post many articles relating to scientific error and research fraud including many detailed accounts of the fraud and error case studies that are summarised in Chapters 7 and 8. This blog also contains many opinion pieces and educational articles. I have cited these blog articles many times in this book as fuller accounts of issues and cases summarised here and as a route to find the many and varied original sources that are too numerous to list here.

The first half of this book is concerned with the flaws and limitations of the research methods used by biomedical scientists and some of the scientific errors that have resulted from misuse or misinterpretation of these methods. I have been writing about research methodology and research errors in my articles and books for over 30 years. My interest in scientific mistakes was first triggered by finding out that the *Avicenna* gap that was so prominent in nutrition teaching and research during the 1950s and 1960s was an illusion (see case study in Chapter 2). The problem of meeting human protein needs was a major topic on my undergraduate course and was a key element of the rationale for my PhD thesis. During my undergraduate and postgraduate studies at Southampton University (1967–1973), my department was heavily involved in work on a potential new protein source known locally as the ‘Rank mold’ being developed by the company then called Rank Hovis McDougal. This research eventually led to the marketing of a mycoprotein preparation as a meat replacement product for affluent Western vegetarians. This research was one of many expensive projects