Food for thought

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Terrors of the Table: The Curious History of Nutrition

by Walter Gratzer

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Food is one of the basic necessities of life, but its influence on the development of human-kind goes well beyond the provision of energy and essential nutrients. Nutrition research is often described as a 'broad church', because it encom-

passes many of the life sciences—from agricultural practice to human genetics—and also embraces sociology, economics and politics. The uninitiated reader will probably be surprised by the key role that food and nutrition has in our development, and those with a basic understanding of nutrition should learn a great deal from *Terrors of the Table: The Curious History of Nutrition*. Walter Gratzer has crammed the book full of interesting facts about nutrition and details of many famous scientists who were involved in developing a better understanding of the relationship between food and human health, most of which are not readily accessible in textbooks. It will appeal to a wide range of people, including non-scientists, qualified nutritionists, food scientists and health professionals.

Gratzer does not deal sequentially with the history of nutrition: the first two chapters of the book revolve around the effects of malnutrition on the first and second world wars and scurvy on military activities, respectively, and clearly illustrate the impact of nutrition on politics. Chapter 3 goes back to Roman times and provides information on physicians through the ages,

beginning with Galen—the 'Prince of Physicians' who was the first to develop the theory of nutrition, albeit misconceived—and concluding with the introduction into Europe of potatoes and maize from the Americas. The demise of Galenic doctrine and the important developments introduced through the work of chemists such as Lavoisier in the eighteenth century are described in Chapter 4, with the diverse activities of Count Rumford (né Benjamin Thompson), whose main claim to fame in nutrition was the soup he devised to provide a cheap source of nourishment—the recipe for 'Rumford soup' can still be found in some cookbooks. In Chapter 5, Gratzer recounts an unfortunate accident in which a Canadian fur-trader, Alexei Saint-Martin, received a gunshot wound that left a hole in his stomach and diaphragm (a condition known as a fistula). This allowed surgeon William Beaumont to make unique observations on digestion. The author also describes the long-standing dispute over nitrogen metabolism between Dumas and the renowned chemist, Leibig; the accusations of plagiarism might sound familiar to contemporary scientists.

The effect of Victorian social reforms is addressed in Chapter 6, and more familiar nutritional issues are introduced—food commodities (bread, milk), infant nutrition, and the effects of poverty. After the Second World War, Sir William Beveridge established the Welfare State in the UK to help address social deprivation and inequality, and Gratzer whets the reader's appetite by ending the chapter with the sentence, "As we approach our own time, affluence has begun to create its own woes, as we shall presently see." Returning mainly to Victorian times, the topic of food adulteration is covered in Chapter 7, showing the ignoble nature of manufacturers and retailers who attempted to profit at the expense of the consumer.

The 'golden era' of nutrition is covered in the next three chapters (Chapters 8–10): the discovery of vitamins, including the new paradigm that vitamin deficiency diseases such as beri beri and pellagra could be the result of something missing in the

diet and not a contagious disease; appreciation of the role of dietary fibre (including the history of Kellogg's and the development of breakfast cereals); and a description of various diets, including vegetarianism and several fad diets.

The final chapter is an animated and emotive diatribe on modern-day ills that relate to nutrition, including the drive for profits by the food industry and the growing problem of obesity and chronic diet-related diseases. Gretzer gallops through a multitude of nutritional topics much loved by the media because they are associated with controversy and/or unprincipled behaviour. A word of caution to the reader: this is not a scientific book, so statements are not referenced for verification. 'Syndrome X' (now known as metabolic syndrome) is described in relation to diabetes, but Gretzer's explanation is not strictly accurate. As with many chronic diseases, diet and lifestyle have a key role in promoting or reducing the risk, in conjunction with the effect of genotype. Finally, nutrigenomics is mentioned, with the difficulties facing individuals in relation to taking more control over what they eat; aptly explained in a quote from Mark Twain: "There are people who strictly deprive themselves of each and every eatable, drinkable and smokable which has in any way acquired a shady reputation. They pay this price for health. And health is all they get for it. How strange it is. It is like paying out your whole future for a cow that has run dry." It is clear that we have a long way to go before personalized nutrition becomes a reality. Everyone who is interested in food and health should read *Terrors of the Table*. Hopefully it will provoke much thought, debate and positive action. However, this is probably not a suitable book for bedtime reading—the reader needs to be fully alert to appreciate the wide variety and depth of information that is presented.

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