

Book Reviews

She is also good on changing attitudes (notably towards sexual intercourse) and their relation to a sense of what might be constitutive of a healthy life. Occasionally she lets orthodox medicine set the agenda and when she does so the meanings and measurement of health are perceived unilaterally. Smoking, for example, is described solely in terms of the virtues of preventing it, calculating politicians and the tobacco interest. By any clinical medical definition smoking is unhealthy. A casuistical examination of the proposition that smoking might be a relative good is not entertained. A discussion of boxing could have raised similar, equally interesting questions about what it means for a society or an individual to be healthy. These are scarcely major criticisms, though the question of the relation between individual health medically defined versus the issue of what health is *for* never gets straightforwardly asked. None the less, I enjoyed this work and recommend it. I enjoyed too the appearance of the sociologist/historian, Anthony Scull. Perhaps somewhere there is a psychiatrist called Andrew Clare.

Christopher Lawrence, Wellcome Institute

Kenneth J Carpenter, *Protein and energy: a study of changing ideas in nutrition*, Cambridge University Press, 1994, pp. xiii, 280, illus., £30.00, \$39.95 (0521-45209-0).

“Nutrition”, observed François Magendie, “remains one of the most obscure questions in science”. It remains so today, despite the efforts of thousands of laboratory researchers, and a vast output of scientific and popular literature over the past fifty years. A significant proportion of this modern literature has been devoted to the subject of protein, especially to the relationship between dietary protein and malnutrition. Ever since Cecily Williams published her account of kwashiorkor in 1933, this relationship has been a matter of research and controversy for both laboratory scientists and those working in applied nutrition. It was this episode of recent nutrition history, more

especially the United Nations’ 1965 endorsement of belief in a world-wide protein shortage and its subsequent sudden abandonment of the idea, that drew Kenneth J Carpenter to write this lucid, scholarly and thoughtful book. The politics, personalities and research philosophies of the “great protein fiasco” offer a rich field of inquiry to historians; Carpenter, wisely, has chosen not to embroil himself too deeply in these details. His object is to trace the origins of, and changing ideas about, the role of protein in human diet, and the quantities needed for optimal health; he takes the long historical perspective, beginning with the work of Sanctorius in 1614, and ending with the current controversy over adult amino acid requirements.

Protein and energy is a welcome development in the neglected field of nutrition history. Traditional accounts have described accumulating scientific certainties, as in Elmer McCollum’s classic *History of nutrition*, or the social history of food, as in the work of Jack Drummond and Anne Wilbraham, John Burnett, and Derek Oddy. Carpenter himself has contributed studies of the nutritional deficiency diseases of scurvy and pellagra. This volume takes a novel approach, focusing on ideas about just one dietary component. This perspective enables Carpenter to chart not just scientific progress, but the back-casts, red herrings and confusions which mark the course of scientific research. The word protein was first coined in 1838, and Justus Liebig’s subsequent conclusion that protein was the only true nutrient entered deep into human consciousness, although the scientific basis for the idea was soon discredited. It remains an almost universal assumption today.

Protein is linked to two central nutritional concerns: the material used for growth and tissue replacement, and the provision of energy. The latter association, as Carpenter shows, has generated repeated disputes about whether human diets contain too much or too little protein. The first of these controversies was sparked by the conviction of Sylvester Graham (of Graham crackers) and John Harvey Kellogg (cornflakes) that disease and excessive

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sexual activity both resulted from meat-eating. In the early days of this century, a similar debate turned on human dietary standards and the relative importance of protein and as yet unidentified trace nutrients. Finally, of course, the troubled post-war episode of the world-wide protein shortage shifted the level of controversy from the laboratory into the realms of application and policy. Expensive, complex, and largely futile in terms of improved nutrition for the poorest people of the world, the impact of nutritional theory was maximized by the post-war emergence of nutrition and planning experts, international agencies and committees, and international commercial interests.

Carpenter's avowed aim is to link the past to the present, but throughout he discusses problems and questions in their contemporary context: wider themes and conclusions are considered in the final, retrospective, chapter. The issues considered here are suggestive, and deserve more extensive exploration, perhaps within a broader treatment of nutrition history. Complexity, falsifying hypotheses, over-extended generalizations, the "great man" syndrome, the contribution of women, and the conduct of controversy are recognized themes in the history of science; committees and their consequences, the responsibilities of applied scientists and the dangers of enthusiasm perhaps apply more particularly to nutrition. A side-swipe at popular "alternative" nutritionists, who pontificate from a position of complete ignorance of the elementary chemistry and physiology of digestion, together with Carpenter's final, personal assessment of human dietary needs, remind the reader that nutrition remains perhaps the only science that speaks directly and personally to the preferences and practices of the individual.

Anne Hardy, Wellcome Institute

Marcos Cueto (ed.), *Missionaries of science: the Rockefeller Foundation and Latin America*, Bloomington and Indianapolis, Indiana University Press, 1994, pp. xx, 171, £22.50 (0-253-31583-2).

This valuable new book explores the role of the Rockefeller Foundation in the evolution of

health and agriculture in Latin America from the 1910s to the 1960s. Five of the chapters look at public health, medicine and scientific education and research, two at agriculture. The Foundation provided assistance with campaigns against selected epidemic and endemic diseases, developed public health institutions (especially laboratories), played a part in modernizing public education in medicine and nursing, and stimulated investigations of themes of general interest that ranged from yellow fever studies to high-altitude research in Andean Peru. Contributors to the volume range from Thomas F Glick, well-known for his writings on the history of science in Latin America, to two doctoral candidates, Joseph Cotter and Steven C Williams. The editor, Marcos Cueto, contributes valuable chapters that examine the ways in which the Foundation used national surveys as the basis of policy and promoted physiological research.

Using probably the richest archives in the United States for the study of international philanthropy, the book identifies questions of collaboration and resistance encountered by Foundation employees. Revolutionary socialists in the Mexican peninsula of Yucatán during the 1920s co-operated eagerly with Foundation officials to "eradicate" foci of yellow fever infection that threatened trade and commerce as far as Cuba and New Orleans. By contrast, a Foundation presence was resisted in parts of Brazil by "conservative modernizers" on the grounds that it formed an "advance guard" for other forms of imperialist penetration. In some respects the institutional environment was ready for the Foundation. In Mexico effective co-operation with President Alvaro Obregón against yellow fever consolidated his shaky central government against local particularisms; and in Brazil Rockefeller assistance conferred on the federal health authorities a public credibility which strengthened the federal government at the expense of state authorities. But in numerous respects the institutional community was unresponsive. Outside the unique environment of São Paulo, Latin American scientists