

GOING FORWARD (BY LOOKING BACK TO DIETETICS IN THE 1930S)



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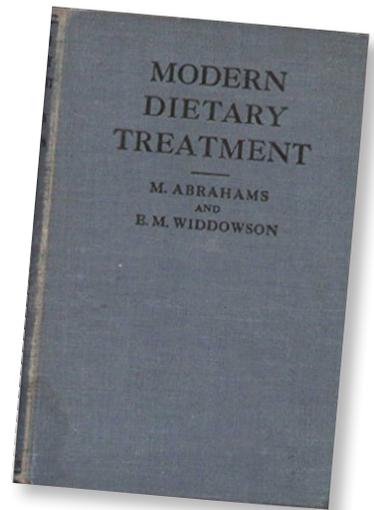
***Modern Dietary Treatment* by Elsie Widdowson and Margery Abrahams is 79 years old, but still offers a lot to think about in one of the first books on dietetics.**

The first issue of *Modern Dietary Treatment* was published pre-war in 1937, and we are most fortunate to have the original Elsie-Widdowson annotated copy that would have been given to the publisher to form the basis of a later update. Edition Two appeared in 1940 and the final third edition was published in 1951.

The introduction to the book cheers the rapid advance in the science of nutrition from about 1910. These include revolutionary developments in knowledge about vitamin and mineral metabolism and improvements in food analysis. The vitamin researchers in the first third of the last century were the intellectual heroes of the time: Frederick Gowland Hopkins could match Bill Gates-today for acclaim and the Cambridge nutrition department outputs were unrivalled for pioneering science concepts.

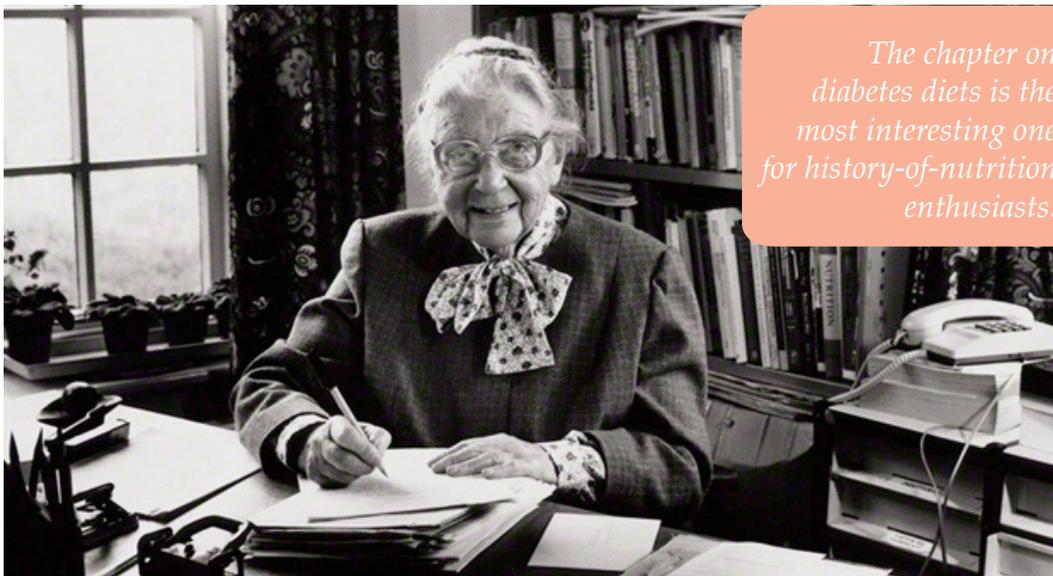
Elsie, who was a biochemist at Kings College Hospital and Margery Abrahams, who was a dietitian at St Barts Hospital, authored the first edition of *Modern Dietary Treatment*. In the first correction in the book, there is the update that Elsie was now at the Department of Medicine in Cambridge.

The first chapters cover basic dietary principles. Later chapters are more applied to discussion about diet modification in relation to disease states. High and low Calorie diets, invalid diets, diets for diabetes or diseases of kidney and alimentary systems, and diets for mineral metabolism disturbances all get



individual chapters. As does the topic of diets for Jewish patients. Large final sections of the book describe diet food lists, recipes and food composition data.

There are revealing errors, which perfectly capture the developments of our understanding of nutrients. So, for example, it is asserted that the iron in meat is mainly in a form that is unavailable to the body; today we would consider the opposite to be the case. Another example of muddle is some of the statements about the B vitamins. While many vitamin B forms had been described, Elsie and Margery stated that only B1 and B2 (described as vitamin B and vitamin G in America) were needed in humans. The name for B2 is given as lactoferrin (now riboflavin), and the American vitamin 'G for Goldberger' was actually what is now described as the anti-pellagra vitamin niacin. The vitamin B complex is, complex, and these inaccuracies show the difficulties in trying to capture the state-of-knowledge at the time. The first edition has no mention of vitamin E, but the handwritten paper insert updates this section for the next edition. Deficient status results in fetal resorption in pregnant rats, but whether vitamin E deficiency had any connection



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with habitual abortion in humans had not been satisfactorily proved. Vitamin E is still the vitamin most looking for a function (in human nutrition).

There are delightful statements in the book that would surprise dietitian readers of today. Such as the warnings about diets containing large amounts of vegetables - these are wasteful for normal people since they tend to displace more concentrated and nourishing foods. Such as comments on the challenges of giving advice to diabetic patients who are, 'elderly or stupid.' Such as snack suggestions for those with anaemia: toast with minced hog's stomach - not doubt an effective measure, but a culinary challenge today.

The chapter on diabetes diets is the most interesting one for history-of-nutrition enthusiasts. While 1921 is the search-google year for the discovery of insulin, there were fierce debates over carbohydrate control, and Elsie and Margery describe these. Pre-insulin days meant starvation and then feeding high fat diets, and then very incrementally increasing amounts of carbohydrate, until a tolerance level was achieved. However, it appeared that even in the mid-1930s 'Newburgh and his followers in America and many continental doctors' still advocated very low carbohydrate diets for blood glucose control. For dietitians and doctors who

supported greater intakes of carbohydrate, there was much confusion on diets. Thankfully, Dr RD Lawrence published the Line Ration diet scheme in 1936, which gave lists of interchangeable foods containing 10g units of carbohydrates. This dramatically simplified communication about the diabetic diet, with black line foods for carbs and red line foods for proteins and fats. Page 185 of the book is the only one printed in colour, and 'going red' must have been a debated and costly publishing decision.

Many therapies described in Modern Dietary Treatment are lost and long forgotten: Sherman, Lenhartz and Epstein diets ring no bells in nutrition discussions of today. It is also amazing that there is no single reference in the book to the terms allergy, gluten, or saturated fats. Today's demon, sugars, is only described as an attractive and useful way to add energy to the diet of a child or invalid.

There have been explosive expansions in nutrition science data available for dietetic professions to consider in optimising health in the pre- and post-diagnosed. But all of these must still be funnelled into on-the-plate choices, which for most people, of course, are mainly driven by many other factors. But Elsie and Margery's book considers just these issues, and they will be the same issues needing expert guidance in the future.