

Book Review

The CRC Desk Reference for Nutrition, Carolyn D. Berdanier, with contributions by Anne Dattilo and Wilhelmine P.H.G. Verboeket-van de Venne, CRC Press, Boca Raton, 1998, 358 pp.

The CRC Desk Reference for Nutrition is designed as an index with topics arranged in alphabetical order from abetalipoproteinemia (incorrectly defined as due to a mutation in the gene for apolipoprotein b) to zymogens (defined as "an inactive enzyme" [sic]). In addition to very brief definitions of medical, biochemical, behavioral, nutritional, and statistical terms, the book includes chemical structures for vitamins and metabolites, a variety of tables, and long textual passages outlining steps in complex pathways such as glycogenolysis and protein synthesis.

Some tables include information that is useful to have in a single source (e.g., sugar substitutes, common food additives); other tables are routinely available in medical texts (e.g., normal clinical values for blood chemistries); and some tables include data that are not obviously relevant to nutrition (e.g., poisonous plants of North America). The biochemical pathways are probably best left to a biochemistry text that can highlight critical regulatory steps. Several pathways contain significant errors or omissions (see below). Lack of cross-referencing is a major problem. For example, the toxic effects of metals that may be found in food are described in an entry entitled "Contamination," but there are no individual entries for either "metal" or "mercury," and the individual entries under "cadmium" and "lead" do not refer the reader to the "Contamination" entry, which contains most of the information on these metals.

When I focused on the biochemical diseases that were described and the sections relating to lipids, I found a large number of errors and inaccuracies. Some of the mis-

statements may have arisen because of the brevity of the descriptions (e.g., in Tay-Sachs disease the brain is said to "disintegrate"), but many definitions contain incorrect important details: McArdle's disease is a deficiency of muscle, not hepatic, phosphorylase and does not cause hepatomegaly or lipemia. Fanconi syndrome does not refer to the abnormal metabolism of cystine. In von Gierke's disease, glycogen is excessive in liver, not muscle. Debrancher deficiency, incorrectly called "Forbes disease," does not result in an enlarged heart. Starch is not a useful treatment for McArdle's disease. Apolipoproteins are incorrectly defined as transport proteins and 1,2-diacylglycerol is not a precursor for phosphatidylinositol or cardiolipin. Figure 28 is also incorrect on this point. An incorrect pathway is shown taking stearate to arachidonate and the accompanying text states that oleic acid has an ω -6 double bond. Insulin is not required for fatty acid oxidation (p. 116), and the low density lipoprotein (LDL) receptor is incorrectly described as being primarily responsible for transporting lipids into adipose tissue for storage (p. 174). Obesity-related insulin resistance is hypothesized to result from the distortion of the insulin receptor by the enlarged fat cell (p. 223).

It is difficult to decide who would use this book. The Preface recommends it to dietitians, physicians, nurses, and other health care workers, as well as students in these professions. I do not believe that professionals in any of these groups would find *The CRC Desk Reference for Nutrition* wholly satisfactory.

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