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Book Review
The Ketogenic Diet: A Treatment for Children and Others with Epilepsy, 4th Edition

John M. Freeman, Eric H. Kossoff, Jennifer B. Freeman, and Millicent T. Kelly. New York, NY: Demos Medical Publishing, 2007. 312 pp. ISBN 1-932603-18-2

It can be difficult for authors when, in a single publication, they attempt to approach a very diverse audience with technical material. Unfortunately, such is the case when Dr. Freeman and his colleagues approach the topic of the ketogenic diet in the fourth edition of their book, *The Ketogenic Diet.* Writing to physicians, dietitians, and parents of children with epilepsy, in a meaningful fashion, may be too much to expect.

As one begins to read the text, one gets the feeling that, prior to 1994, only Johns Hopkins used and knew how to use the ketogenic diet in the treatment of refractory epilepsy or in cases where seizures might be controlled but with significant drug side effect. Although the Charlie Foundation has certainly increased the awareness of the diet, it was a known treatment used at epilepsy centers well prior to 1994. This misrepresentation lessens the stature of the text by giving it the quality of an advertisement for Johns Hopkins Hospital and Medical Center.

The book is also diminished by making claims of efficacy that do not seem to be supported by well-controlled, large-scale, blinded (masked) clinical trials [1]. Statements that the diet is more effective than the newer antiepileptic drugs represent an example of this. There is no head-to-head properly controlled trial of the ketogenic diet and the newer antiepileptic drugs. Similarly, it is stated that the diet is effective in reducing infantile spasms in some patients by up to 90%. There is no study of new-onset infantile spasms in a blinded, placebo-controlled fashion with the ketogenic diet. The frequency of infantile spasms varies from day to day, so it is hard to understand the significance of a 90% reduction. The standard for infantile spasms is spasm freedom. Furthermore, given the spontaneous remission rate of infantile spasms, reduction in spasms or spasm freedom is of dubious significance in the absence of a control group. Statements that the ketogenic diet may sometimes "cure" children with epilepsy are unfounded. Children on the diet may stop seizuring and may eventually come off the diet. The same is true for children on antiepileptic drugs. This author is unaware of any evidence that the ketogenic diet or antiepileptic drugs cure epilepsy. Patients who outgrow epilepsy seem to do it on their own.

Despite these initial shortcomings, as one moves into the body of the text there is a transition to the nuts and bolts of the diet. Chapters on starting the diet, calculating the ketogenic diet, and tube feeding and the ketogenic diet are presented, along with cooking for the diet and concomitant medication. These chapters are very readable, and would, I suspect, be of greatest value to parents and dietitians.

In summary, like most monographs, this book has its strengths and weakness. I do recommend it for families considering the diet. Typically, I will discuss my concerns with the book to families prior to their reading it. The book would be of significantly greater value to all concerned if the authors removed the Johns Hopkins advertisement. Further benefit could be achieved by identifying other centers in the United States that actively use the ketogenic diet for the treatment of epilepsy. Lastly, the validity of the text would be substantially enhanced by providing genuine explanations of the weaknesses of the response data presented.

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Reference

[1] Levy R, Cooper P. Ketogenic diet for epilepsy. Cochrane Database Syst Rev 2003;(3):CD001903.

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