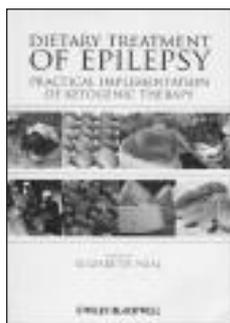


DIETARY TREATMENT OF EPILEPSY. PRACTICAL IMPLEMENTATION OF KETOGENIC THERAPY. 2012. Edited by Elizabeth Neal. Published by Wiley-Blackwell. 241 pages. C\$80 approx.

Rated ★★★★★

The ketogenic diet has been used for nearly 100 years in the treatment of epilepsy. However, it has experienced a considerable resurgence in use since the early 1990's. It is now offered as an important therapeutic option in most pediatric epilepsy centers worldwide, and its use in adults with medically intractable epilepsy is rapidly growing. More recent modifications including the modified Atkins diet and Low Glycemic Index diet offer improved tolerability, and appear to have similar efficacy to the classical ketogenic diet.

“Dietary Treatment of Epilepsy: Practical Implementation of Ketogenic Therapy” fills an essential niche both for health care providers, parents and persons with epilepsy, providing a very practical and concise overview of several aspects of dietary therapy for epilepsy. It is edited by Elizabeth Neal, a dietician and author on the first randomized controlled study of the ketogenic diet for treatment of epilepsy, who is well-recognized internationally for her expertise in ketogenic diet therapy. The chapters are written by a panel of international physician and dietician experts. This book is subdivided into three sections: (a) Introduction and Overview, (b) Clinical Implementation and (c) Broader Applications.



The Introduction and Overview section provides a brief overview of epilepsy and its treatment options, placing the ketogenic diet in context with other options for managing refractory seizures including further antiepileptic drug trials, surgery and vagal nerve stimulation. Additionally, chapters by Drs. Kossoff, Hartman and Rho succinctly summarize the most up-to-date studies on ketogenic diet efficacy (including data on the use of the modified Atkins and Low Glycemic Index variants) and postulated mechanisms of action, highlighting that ketosis alone is not the only mechanism of action.

The Clinical Implementation section addresses essential clinical issues, including factors and challenges which should be evaluated prior to dietary initiation. Chapters focused on each specific type of ketogenic diet (classical, medium-chain triglyceride, modified Atkins and Low Glycemic Index) are authored by a group of dietician experts, and provide very practical guidance on the composition of these diets, calculation of protein and calorie needs, implementation and fine-tuning of these diets to maximize seizure control. Issues of vitamin and mineral supplementation and how to deal with “sick-days” are also covered. Potential adverse effects and recommendations for monitoring are addressed. This section also includes a well-written chapter by Emma Williams, the founder of Matthew's Friends, and a very experienced “keto-parent”, who provides invaluable guidance for families living day-to-day with the ketogenic diet.

The final section “Broader Applications” includes chapters on the use of the ketogenic diet in both young infants as well as

adults, highlighting the special challenges and therapeutic recommendations in these age groups. The final two chapters review specific uses of the diet in metabolic disorders (specifically GLUT1 transporter deficiency and pyruvate dehydrogenase deficiency) and in other neurological conditions including Alzheimer's, cerebral trauma, Parkinson's and cancer.

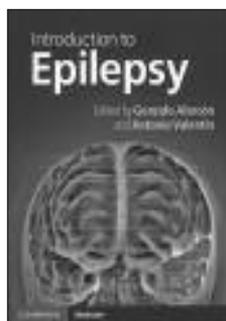
In summary, this book fills a much-needed niche by providing a concise overview of many aspects of ketogenic diet therapy, and would be an excellent resource to pediatricians, general neurologists, nurses, pharmacists and dieticians who provide care to children and adults on dietary therapy for epilepsy. Given its easy readability, and concise review of the literature on efficacy and mechanisms of action, it will also provide invaluable information to parents, caregivers and ketogenic diet patients.

*Elaine Wirrell
Mayo Clinic, Rochester, MN, USA*

INTRODUCTION TO EPILEPSY. 2012. Edited by Gonzalo Alarcón, Antonio Valentín. Published by Cambridge University Press. 605 pages. C\$90 approx.

Rated ★★★★★

The book “Introduction to Epilepsy” is the first edition by Gonzalo Alarcón and Antonio Valentín. This book is a useful study source for medical students, residents or graduates of neurology and neurosurgery, as well as epilepsy fellows. It is also a valuable concise review for board examinations that covers seizure types, epilepsy syndromes, main electroencephalography (EEG) abnormalities, advanced methods of seizure localization such as magnetic electroencephalography, various imaging modalities, and current medical and surgical epilepsy treatment options.



This book has a user-friendly format. It consists of multiple brief chapters each covering an important topic on epilepsy basics or clinical aspects in a concise manner. The book begins with basic epilepsy principles, followed by classification and diagnosis of epilepsy. The following chapters focus on epidemiology and genetics of epilepsy, and its medical and surgical management. Finally, epilepsy in specific circumstances as well as psychiatric, social and legal aspects of epilepsy are discussed.

The book contains five major elements. First, the text is clear and includes bullet points, highlighting the most important elements. Second, text boxes that clearly demonstrate epilepsy related classifications and indications of certain investigations or treatments. Third, tables, which contain useful comparisons. Fourth, electroencephalogram traces that represent normal variants, artifacts or abnormalities discussed in the text. Fifth,