

Book Reviews

Evidence-based research in pediatric nutrition, H. Szajewska, R. Shamir, editors (Karger, Basel, Switzerland) 2013. 112 pages. Price: US\$ 174.00 / CHF 148.00
ISBN 978-3-318-02456-2 (hard cover)

This is an interesting book with three distinct sections, “Methodological Considerations”, “Impact of Early Nutrition on Later Outcomes”, and “Issues in Infant Feeding”. In the first section, there is extensive discussion on what a simple review is versus a systematic review and a meta-analysis. There is an overview of methods for conducting observational studies as well as human intervention trials in nutrition and the strengths and weaknesses of evidence generated by them. It has been put forth that both are important. While the clinical trials can give evidence on effectiveness, the observational studies, especially those with prolonged follow up, can assess long-term safety, hence both are pertinent in paediatric nutrition arena and complement each other. A section has been devoted on designing, analysing and interpreting the results of clinical trials. The importance of meta-analysis has been put forth along with the importance of forest plots in understanding the effect of heterogeneity due to clinical as well as methodological issues. There is a note of caution while conducting trials with vulnerable population of young infants and pregnant women.

In the second section, discussions are revolved around evidence generated by animal and human nutrition studies. In addition, Barker’s hypothesis has been explained which promulgates that foetal malnutrition resulting in lower birth weight is associated with increasing mortality due to ischaemic heart disease in adults. The short as well as long term benefits of breastfeeding have been enumerated along with the risks associated with accelerated growth. Evidence has been put forth for short as well as long term risks of undernutrition like propensity to infections and lower

cognition. The importance of iron and long-chain polyunsaturated fatty acids has also been discussed.

In the third section there are nine chapters, covering most of the contemporary issues and myths. The value of probiotics, prebiotics and dietary fibre in the management of functional intestinal disorders has been discussed. Based on the evidence available, the possible role of specific probiotics in infantile colic and constipation has been highlighted.

A relatively new type of food product is being marketed as Growing-up milk (GUM). This concept is most prevalent in developed countries and is relatively new in the Indian scenario. GUM products are not a necessity and are being marketed for compensating the nutritional deficiencies, which may occur during transition from infant nutrition to family food. These products are commercially available, fortified, and nutritionally balanced but can lead to disinterest in food on part of the infant and feeding on part of the parent.

The book has lucidly continued the debate on relative merits and demerits of cow’s and goat’s milk with the latter having no clear advantage over the former. It has put forth evidence to support that cow’s milk should be given along with complementary foods and not alone. In the next chapter the paucity of evidence on the relationship of the timing of introduction of complementary foods to the risk of disease in later life has been discussed.

A chapter is devoted to the discussion of evidence for dietary prevention of primary allergy. It is stated that a large proportion of allergic disorders in children have genetic basis. There is, however, inconsistent data on prevention of primary allergy with breastfeeding. If breastfeeding is not possible, it is relatively safe to use cow’s milk protein hydrolysate infant formulae. It

is discussed that there is no evidence for any dietary restriction during pregnancy.

Another chapter is on the mineral (iodine, iron and calcium) and vitamin (B12 and Vitamin D) supplementation and states that none of the infant milk formulae have recommended amounts of these. Also, perhaps the recommended dietary allowances are an overestimation of the real requirements in infants. This chapter is adequate only for the nutritionists, however, for paediatricians, further information on preterm supplementation would have been beneficial. The next chapter is devoted to strategies for the prevention of celiac disease through early infant nutrition. The most critical issue revolves around the correct timing of introduction of gluten in the complementary feeding schedule and protective effect of breastfeeding when gluten is introduced.

There is a global endemic of obesity in children and the last chapter has taken up this issue very aptly and succinctly. In children, during diet therapy for obesity, care has to be taken to ensure adequate growth and development with the target to only cause fat loss. This has to be combined with psychological interventions and lifestyle modifications. There is evidence supporting drug therapy also. Hence the fight against childhood obesity is multi-component and a multi-pronged approach is hence required.

Overall, the book has comprehensive and recent information and is of scientific value. It is easy to read and understand. Tables and diagrams further add to the understanding. Each chapter puts forth scientific evidence for or against a topic in an unbiased manner and does not end up simply with the writing of recommendations and guidelines. This book will benefit postgraduates and practitioners of paediatrics and paediatric nutrition.

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