

Book Reviews

Childhood Obesity: Prevention and Treatment (CRC Series in Modern Nutrition). Jana Pařízková, MD, PhD, DSc, and Andrew P. Hills, PhD. Boca Raton, FL: CRC Press, 2001.

Childhood Obesity: Prevention and Treatment is a compendium of knowledge about idiopathic obesity in the context of growth. Jana Pařízková and Andrew Hills, both important researchers in the field of obesity, have produced a well-rounded and highly detailed treatment of the subject of childhood obesity, from epidemiology and etiology through practical environmental management guidelines. This useful text comprises two parts: characterization of the obese state and practical aspects of treatment and management. While the work as a whole is intended for the obesity professional, the second part could prove to be a worthwhile reference even for the well-read parent.

The first part is devoted to phenotypic characterization of the obese child. The first two chapters present a comprehensive statement of the international epidemic of obesity and provide epidemiological perspective. Etiology and assessment of obesity are covered next, followed by thorough treatments of the often-neglected topic of the roles of energy expenditure and physical activity in creating and maintaining the obese state. The authors have included a chapter reviewing clinical and research methods for assessment of functional capacity.

The discussion of food intake and behavior is marred by the absence of discourse on the myriad recent advances in brain chemistry affecting ingestive behavior. A critical review of the current animal and human data regarding roles for neuropeptide hormones such as the orexins and the pro-opiomelanocortin (POMC) products in regulating food intake and energy balance would strengthen this chapter considerably. The roles of vitamins and minerals in lipid metabolism, particularly bone metabolism, receive disappointingly scant attention as biochemical markers of childhood obesity. The chapter on hormonal facets of obesity is an adequate survey, and more detailed material is fittingly left to other sources.

The second part is devoted to practical aspects of therapeutic management of the obese child. This part is primarily targeted at the clinician, although the clinical researcher or obesity educator may find the discussions quite useful. Chapter 12 is encyclopedic in its discussion of therapeutic approaches to weight reduction and is a wonderful clinical reference resource. Drugs and surgery are not thoroughly discussed, mostly because these approaches should be used sparingly in this patient population. Similarly, application of physical activity

should be approached with care in young patients. The authors give a thorough, well-reasoned treatment of the prudent use of physical activity as a therapy. This chapter would be read to advantage by physical education instructors in every school district.

Should the authors produce a future addition, it would be essential to include a chapter discussing the use of alternative therapies such as fad diets, nutraceuticals and functional foods in managing obesity. Overall, this text is an excellent educational reference suitable for the student of obesity as well as the teacher, researcher or clinician. It is clearly, concisely and logically presented. *Childhood Obesity: Prevention and Treatment* is to be highly recommended as a cornerstone reference in an obesity library.

Nutritional Anemias (CRC Series in Modern Nutrition). Usha Ramakrishnan, ed. Boca Raton, FL: CRC Press, 2000.

Nutritional anemias are prevalent in developing countries, although nutritional anemias persist in even the most developed countries. Thus, *Nutritional Anemias* is a timely addition to the CRC Series in Modern Nutrition. The text is well organized thematically, moving from an historical background through etiologies and life cycle issues. Anemia is often difficult to define accurately, and the etiology may be indeterminate due to the multifactorial nature of the problem. This text provides good insight into the complexities of anemia, from diagnosis to impact on lifestyle. The public health policy issues of supplementation, fortification and food-based approaches to correcting nutrient deficiencies are addressed in detail.

The book is divided into three parts: epidemiology and assessment, functional consequences and therapeutic strategies. The first chapter establishes the historical backdrop for detection and treatment of anemias. The second and third chapters tackle the definition, etiologies, prevalence and assessment of nutritional anemias. Although soundly written, these chapters would be enhanced by a review of the nutritional biochemistry of erythropoiesis, including mineral-mineral interactions and flow diagrams of the assessment process for anemias. A more detailed treatment of the analyses for iron status would help the non-clinical reader understand better the clinical assessment process. A future edition would be more satisfying to the researcher or clinician were it to discuss the differential diagnosis of nutritional and pathological anemias and the interaction of anemia with generalized malnutrition secondary to hunger or disease.

The second part of the book addresses the functional consequences of nutritional anemias throughout the life cycle, from pre-natal issues to adulthood. However, because the prevalence of anemia in some elderly populations approaches that of type 2 diabetes, the reader is regrettably left to wonder if there are additional or exacerbated functional consequences for the geriatric population. Apart from this minor omission, the chapters on functional consequences are valuable.

The last part of the book addresses the pros and cons of public policy implementation to reduce the prevalence of nutritional anemias. Three excellent chapters present the benefits and pitfalls of supplementation, fortification and food-based approaches to improving the nutrition of a population, and one addresses the role of preventing intestinal infections in improving anemias. The main problem with this part is the omission of recent experiences with folate fortification of grain products around the world, any of which would make an important case study. However, given the length of the publishing cycle, the authors cannot be faulted for this, as results of long-term studies have only begun to be published in the last few years.

Nutritional Anemias is a significant source of information about anemias throughout the life cycle, although there is some repetition and there are some issues which might have been considered. The book is compiled with a definite slant towards public health issues—the last two-thirds of the book address functional life issues and therapeutic measures mainly from the policy and public health perspective. Although this text is intended as a resource for researchers and clinicians as well as public health professionals, it is better suited in its current form to the public health practitioner and policymaker.

Gregg W. Van Citters, PhD

Department of Human Nutrition and Food Science
California State Polytechnic University
and

Department of Molecular Medicine
City of Hope National Medical Center &
Beckman Research Institute
Pomona, California

Lifestyle Nutrition. Johanna T. Dwyer and James M. Rippe, eds. Malden MA: Blackwell Science, 2001.

This book is written by nutrition and health professionals involved in providing daily dietary advice to patients. Importantly, the two editors are well recognized health professionals who merge material on dietary guidelines, the ten year goals set for the nation, specific applications to disease therapy and lifestyle management. The tables are useful and well integrated within the chapters. The references are a little dated with most through 1996–1997 and a few into 1998. The “Introduction” is referenced into 2000.

The opening two chapters on general nutrition concepts

highlight the beginning of the Healthy People 2010 guidelines and emphasize both the Dietary Guidelines for 2000 and the dietary pyramid. Interesting points for thought and discussion are presented as an overview, including brief topics such as human genetics, food and nutrition science, health and disease, communication, demographics and governance including globalization. The reference values of the RDA and the RDI are discussed as they should be used in evaluation of nutritional status. Application of these principles occurs in the Healthy People 2000 plan for the nation. The tables provided in both of these chapters are useful in establishing the principles for lifestyle change in nutrition.

Active adolescence and the associated growth spurts in this age group require adequate nutrition to provide energy needs, protein and essential nutrients for development. Specific diets that restrict calories may not provide sufficient fiber and essential nutrients. Recent concerns include low intakes of fruits and vegetables, calcium-containing foods and total calories. Diet challenges at this age include snack foods, decreased family meals, sports ads to build muscles (boys) and low calorie diets to remain thin (girls). Metabolic changes impact on the transformation from adolescence into young adulthood.

Diet throughout the life cycle appears to be related to the onset of many degenerative diseases that are expressed in the mature adult. With aging there is a progressive decline in organ function and a steady change in body composition. The recommendations identified for this group focus on maintenance of optimal general health and function for as long as possible in an effort to delay the onset of chronic disease. Recurring results indicate that nutrition is essential for continued long-term active and productive lives.

Dietary management of obese individuals is discussed, including many of the diets used in meeting restricted calorie intake. A table discussing modification of the food guide pyramid to achieve a 1200 Kcal diet while achieving nutrient balance is included. An excellent discussion of resting energy expenditure is presented, indicating the need to convert REE units to BMI units by age. Using new tools, a seven-step process prior to initiating a low calorie diet is recommended. These steps assure a more accurate dietary management program for obese and overweight individuals. Changing behavioral approaches to weight loss are recognized as well: individualized expectations, rate of weight loss, previous histories, medical complications and psychiatric evaluation. Unfortunately, little research has been completed on treatment matching models.

Communication of health problems and the need to achieve compliance with dietary intervention are discussed. Aspects of dietary behavior must be determined to establish clinical nutrition intervention, to decrease risk and to enhance motivation. Dietary advice, personal counseling and creative education materials are essential. Lifestyle management is the ultimate challenge.

The book could have been developed more thoroughly,

expanding some of the material in greater detail. However, it can be used by teachers in nutrition discussion activities for dietetic, medical and other health professional students, especially if original reference materials are included as assigned reading for the discussions. Both physicians and nutritionists can use the book in their efforts to guide their patients through disease prevention, better health and changing habits to increased long-term health.

Understanding Alternative Medicine: New Health Paths in America. Lawrence Tyler. New York: The Haworth Herbal Press, 2000.

Professor Tyler, a sociologist interested in the study of Indian and Chinese medicine, has produced a useful book examining alternative health care in the United States. An important aspect is the book's discussion of the different philosophies on which today's alternative medical treatments are based. The general bibliography lists many high-quality references.

The growth in acceptance of traditional Chinese medicine results in part from the rapid increase of the Asian population in the United States, but other population groups with non-traditional therapies have made their mark as well. Alternative approaches are due also to an increased interest in health and fitness and the desire for miracle cures, which Western science cannot offer. Further, Western medicine has become impersonal and expensive. Natural medicines have thus taken on health-benefit connotations in the American health culture prompting increased use of herbal medicines and alternative therapies. The book provides a source of discourse on these health alternatives.

Philosophically, alternative therapies do not meet the standards of therapy sanctioned by the AMA. On the other hand, alternative therapeutic regimens incorporate nutrition, and Western medicine has done so in recent years as well. The major difference currently is the former's treatment of the whole person, rather than the latter's tendency to focus on a single disease or ailment.

Several different philosophies that alternative treatments are based on, such as shamanism, Indian Ayurvedic medicine and traditional Chinese medicine, are discussed with comparisons of each to the others, as well as to traditional American medicine. Traditional Chinese medicine and Indian Ayurvedic medicine emphasize creating harmony in the body, while shamanism relies on healing of spirits; none are specifically targeted in curing an illness.

There are negative consequences to these practices in their

extensive animal and plant harvesting practices, for example of bears for their organs and other parts and ginseng for tea, thereby endangering them as species.

The AMA has made a critical review of existing alternative therapies based on proven efficacy. The organization has cautioned health professionals to remain skeptical, but not to be critical of patients' decisions until complete determination has been made of the health problem and the needed treatment. Economic growth and social acceptance of alternative/herbal medicine is growing rapidly. Many health insurance plans now include coverage for alternative therapies.

Eighty percent of the world's population uses herbal medicines as natural remedies, while in the US herbal remedies are sold as dietary supplements. Safety and efficacy remain a primary concern. The FDA is apprehensive of undeclared drug substances, inadequate labeling for content and use, undeclared metals, potentially toxic ingredients and specifically regulated ingredients (e.g., narcotics), and the making of unproven treatment claims for serious medical conditions. Currently imported products are of primary concern; however, the growth of the herbal market is huge, and many major pharmaceutical and food companies are becoming involved in the marketing and distribution of natural remedies.

Although there is a growing need for regulation, the USFDA has no financial support to expand its investigative powers into the safety and efficacy of phytomedicines. By classifying them as supplements, rather than as drugs, regardless of potency or possible side effects, the labeling laws would produce some regulation. Unfortunately, needed oversight is not present, even though potential health problems exist. The critical requirement for drug evaluations is the comparison of the therapeutic agent to a placebo. These tests are expensive and not always conclusive. The results are confounded by spontaneous remissions and non-specific factors in healing. To minimize side effects, single, purified agents are normally evaluated at different doses, while herbal remedies may work best as complex formulations.

This guide encourages an increased awareness of philosophies related to alternative therapies. It provides an educational experience for all health professionals, as well as a means to understand patients' need to use alternative therapies in the self-treatment of their ailments.

Wei Wang, PhD

Department of Animal and Veterinary Science
California State Polytechnic University
Pomona, California