Book review

Nutrition Throughout the Lifecycle by Professor T. W. Wikramanayake
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'Nutrition Throughout the Lifecycle' is the second part of Prof. T. W. Wikramanayake's magnum opus on nutrition. It complements his previous book 'Food & Nutrition' published in 1996. Although there is some overlap in content between the two, the focus of this book is on community nutrition.

Prof. Wikramanayake is undoubtedly the most senior and distinguished nutritional scientist in Sri Lanka. Having commenced his career in 1947 as a co-worker of Prof. Harry Collumbine at the Colombo Medical School in his seminal studies on diet and nutritional status of Ceylonese, he has continued his journey over the last sixty years as biochemist, nutritionist, teacher, researcher and policy maker. It is his vast accumulated experience that gives the credibility and authority to this book. As a medical doctor trained in biochemistry Prof. Wikramanayake has acquired over the years a truly catholic grasp of all the scientific aspects pertaining to clinical and community nutrition ranging from molecular genetics to health economics. He is equally at home discussing the complexities of identifying the candidate genes for obesity or cost benefit of a nutritional intervention.

In this book he has adopted the lifecycle approach to nutrition popularized by the World Nutrition Report 2000 of United Nations Sub-Committee on Nutrition (UN-SCN). It is based on the premise that nutrition impacts every stage of the life cycle and that its effects are long lasting and inter-connected, as so clearly demonstrated by the line diagram on page 2.

In the first six chapters the author deals with the six stages of the life cycle from the fetus to the elderly. He deals with the physiological considerations pertaining to nutrition such as the nutritional requirements and their scientific basis. The nutritional problems specific to the age group, their indicators and sequelae and the interventions targeted to this age group are also discussed in depth.

The seventh chapter deals with the nutritional deficiency disorders and the food allergies and intolerances. The next five chapters deal with all the major chronic diet related disorders viz the metabolic syndrome, obesity, diabetes mellitus, dyslipidemia, atherosclerosis and cancer.

In these chapters the author covers not only their clinical manifestations and laboratory indicators but the patho physiological basis and the current theories and hypotheses for their causation. Their management and prevention are also addressed.

The hypotheses pertaining to diet related chronic diseases such as the thrifty gene hypothesis, thrifty phenotype hypothesis, are discussed in depth. The relationship between malnutrition, cognitive development and behaviour, ageing and the hypotheses for its causation, the link between nutrition, exercise, and fatigue are
some other examples of special topics that have been described exceptionally well.

The scope of this book, its breadth and depth has not been paralleled in the South Asian context. Prof. Shetty of the London School of Tropical Medicine, writing the foreword to his first book, lamented that it was not made available to a wider Asian audience. I would say the same of this book.

On all these topics the author writes with authority and scientific precision. He presents the scientific evidence clearly and analytically. The book is replete with tables and diagrams providing a vast array of information.

The author is not shy of controversy. Contentious topics such as the optimal duration of exclusive breast feeding, the use of international growth standards and the role of coconut in atherogenesis are dealt with in a balanced manner, with evidence for both contentions being presented. Even though the author reveals his own bias in the discussion there is room for the discerning reader to come to his own conclusion. In this instance, I would like to echo the sentiments of Prof. V. Basnayake, who in the foreword to the author's first book "Food & Diets" wrote "Authority in science is not the same as gospel. There must be some parts in this book at which Prof. Wikramanayake would hope that the reader will chew before swallowing".

There are several reasons which give this book a special character. The Sri Lankan data relevant to all the topics discussed are presented in context and are well referenced. It is interspersed with historical snippets of interest. Where ever necessary the author also refers to the local beliefs and ayurvedic concepts on the subject. The language is clear and style of writing is easy to read. However, as it is heavy with scientific data, it needs careful reflection to digest and assimilate. To make this easy the information is in small paragraphs with appropriate headings. The key words are highlighted in bold print.

There is a comprehensive index where the acronyms used have been explained. The book has been edited carefully to keep out the printer’s devil.

One of the most valuable features of this book is that author has made maximum use of all the UN/WH/FAO/UNICEF/SCN reviews, reports, monographs and other publications to which he has access. This enhances the scientific validity and the relevance of the book to the developing world. The data thus obtained are presented critically and analytically with the author laying emphasis on the relevant aspects.

If there is one weakness in the book, it is that in some of the tables which provide valuable information, the source of this information is not clearly indicated. Very often on reading the accompanying text one can deduce the source, but not always. Of course it would be impossible to give a complete bibliography of all the sources of information in a book of this size. In the preface to his previous book the author has acknowledged his intellectual debt to many sources, and I have no doubt that he would do the same of this book.

This book is essential reading for all serious students of nutrition in Sri Lanka irrespective of their background. It can be considered as a text book for postgraduates and undergraduates studying for B.Sc or M.Sc in nutrition. It would serve as a reference book for medical and para medical students and postgraduates in community medicine, agriculture and food technology.
It will be a useful reference for all those who are interested in nutrition, including policy makers, doctors, teachers, journalists and the lay public. It should be made available in all university libraries, libraries of scientific institutes and in the departmental libraries in a medical school. It would also be a valuable addition to school libraries in schools with advanced level classes in biological science. It is certainly not a book that can be read in a single sitting. It needs to be delved into at leisure and digested thoughtfully. This is what I have done for the last two months. I will continue to use it as an authoritative reference in the future. It is very reasonably priced at Rs. 500/-. 

Prof. T. W. Wikramanayake has dedicated his first book partly to his students and this book partly to his colleagues in the Nutrition Society. I am fortunate to be in both categories. He is a man of science who has made a lasting impact on the specialty of his choice, Nutrition. While wishing Prof. T. W. Wikramanayake many more years of quality life I assure him that his name would be known to many generations of students of nutrition because of this book.

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