## Nutrition for a Healthy Mouth

Authored by R Sroda Lippincott Williams & Wilkins, Baltimore. MA 21210-2436 USA 2006. 260 pages, softcover ISBN 0-7817-5155-1

This book is appropriate for undergraduate dental hygiene students and a good reference source for practicing dental hygienists. More often, clients regularly visit a dental hygienist than any other healthcare professional. This provides dental hygienists with the opportunity to educate clients about the relationship between nutrition and oral and overall health. Dental hygienists can also be the health professional to refer a client to a registered dietician when more extensive nutritional counselling is required.

The book uses the United States (US) Department of Agriculture Food Pyramid as the standard nutritional guideline; however, there are samples of dietary guidelines from various parts of the world. The book is reported in the metric unit of measurement rather than the imperial system.

This book is written simplistically, but provides reasonable comprehensive coverage of the content. The author promotes the book as being an ideal reference for both dental hygiene and dental assisting students. The book is organized into six sections and includes seventeen chapters and three appendices. The six sections are titled: (I) Introduction, (II) Major nutrients, (III) Relationship of nutrition to oral disease, (IV) Food guidelines, (V) Food for growth and (VI) Nutritional counselling. The content in each chapter is organized using paragraphs, point-form bullets, figures and tables. Highlighted boxes alert the reader to important points. At the end of each chapter is an activity for the reader to apply the content to practice. A short multiple choice quiz is also provided. A selection of web resources, references and suggested readings are listed at the end of each chapter.

Section I provides a brief introduction to nutrition. It includes a review of nutrients, the United States Department of Agriculture Food Pyramid and a review of the digestive system.

Section II includes seven chapters; each of which address the major nutrients (carbohydrates, protein, lipids, vitamins, minerals and water) as well as a chapter on dietary and herbal supplements. Each chapter provides an overview of the major nutrients. Diagrams and figures provide visual learning aids for the reader. The chapters on vitamins and minerals provide excellent examples of food sources for each vitamin and mineral, and signs and symptoms of specific vitamin and mineral deficiencies. If specific vitamins and minerals are excessively absorbed, these physical signs and symptoms are also addressed. The chapter on water provides pertinent information on the benefits of water consumption. I found the chapter on dietary and herbal supplements to be of particular interest because of the apparent increase in the use of herbal supplements which create significant drug, disease and food interactions. Details of the consequences of these interactions are listed in reader-friendly table.

Section III includes two chapters on the relationship between nutrition and oral disease. The first chapter focuses on the link between diet and dental caries. It is comprehensive and is highlighted by a section on the cariogenic properties of carbohydrates. The chapter discusses early childhood caries (ECC) and provides a few black and white photos to illustrate the magnitude of this problem. The illustrations would have a bigger impact on the seriousness of the problem of ECC if they were represented in colour. The chapter provides information for counselling clients regarding food choices to help reduce the amount of sugar in a person's diet. The second chapter briefly discusses the relationship between diet, nutrition and periodontal disease.

Section IV presents guidelines for making appropriate food choices and reading food labels. Chapter eleven is informative as it summarizes the dietary guidelines from the following countries: Australia, Canada, Germany, Great Britain, India, Ireland, Korea, Philippines and the United States of America. This enhances the understanding for dental hygienists in regards to how the guidelines and food practices may differ for people from different countries. This is important to understand when providing nutritional counselling with clients from other cultures and countries. The chapter discusses diet and its' relationship to physical activity as well as a section on safely managing and preparing food. Chapter 12 emphasizes the importance of reading and understanding nutritional labels

on food products. A brief explanation is provided that would help the reader better understand information provided on food labels. The chapter also explains how to calculate the calorie value of a nutrient when it is reported in gram units.

Section V, Food for Growth, includes two chapters. The first chapter provides a brief overview in regards to the nutrients needed for normal growth, development and maintenance of the oral structures. The second chapter broadly considers dietary needs for the lifecycle. Although brief, a synopsis of each stage of the lifecycle is well presented. There are key tips for the dental hygienist that could be easily incorporated into clinical practice counselling sessions with a client.

Section VI includes three chapters that discuss eating disorders, nutritional counselling techniques and lastly, nutritional needs for people who have some very specific needs. The chapter on eating disorders addresses anorexia nervosa, bulimia nervosa, binge eating and other less common eating disorders. The chapter on the process for completing nutritional counselling encourages nutritional counselling as a preventative component during oral hygiene instruction in conjunction with dental hygiene and dental treatment. Suggestions for counselling techniques to be used by the dental hygienist with clients are provided. The reader is also alerted to the fact that dental hygienists are health practitioners who may provide general nutritional counselling for clients, but state practice laws for dental hygienists usually differ when it comes to providing nutritional counselling for specific health situations. The client needs to be referred to a registered dietician for more specific nutritional counselling in regards to the client's specific health situation. The final chapter addresses nutritional needs for very specific situations. For example, it provides dietary suggestions for clients with temporomandibular joint disorders, orthodontic appliances, periodontal diseases, post-operative oral surgery and diabetes. Many very relevant and practical dietary suggestions are included for each specific situation.

Appendix I provides the answers to the multiple choice quizzes. Appendix II defines a number of semantic terms or abbreviations commonly used in discussions related to diet and nutrition. Appendix III includes examples of forms that could be used for nutritional analysis sessions with clients. An index is provided.

A laminated double-sided reference card is included with each book. Colour photographs enhance the appearance. It could be used with a client to help illustrate and emphasize the importance of good nutrition for a healthy mouth.

I would recommend this book for dental hygiene students. It provides concise information including the relevant and pertinent content needed to conduct a nutritional counselling session with a client. Overall, the book will enhance the students understanding of the relationship between nutrition and oral health.

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