

Nutrition Interventions in Disease Prevention

An Applied Perspective



SHRADDHA VYAS

Nutritionist, Certified Health and Wellness Coach



Nutrition Interventions in Disease Prevention: An Applied Perspective

First Edition

Author

Shraddha Vyas

Nutritionist, Certified Health and Wellness Coach



Title of the Book: Nutrition Interventions in Disease Prevention: An Applied Perspective

First Edition - 2024

Copyright 2024 © **Shraddha Vyas**, Nutritionist, Certified Health and Wellness Coach.

No part of this book may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission in writing from the copyright owners.

Disclaimer

The author is solely responsible for the contents published in this book. The publishers don't take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the editors or publishers to avoid discrepancies in future.

E-ISBN: 978-93-6252-002-9

MRP Rs. 150/-

Publisher, Printed at & Distribution by:

Selfypage Developers Pvt Ltd.,
Pushpagiri Complex,
Beside SBI Housing Board,
K.M. Road Chikkamagaluru, Karnataka.
Tel.: +91-8861518868
E-mail: publish@iiponline.org

IMPRINT: I I P Iterative International Publishers

For Sales Enquiries:

Contact: +91- 8861511583
E-mail: sales@iipbooks.com

Preface

Welcome to the world of Applied nutrition!!

It is an old saying “We are what we eat”, and post pandemic we all have realized the importance of health and wellness in our lives. Keeping us updated with the ever-changing Nutrition research will help us in bringing good health and wellness to the society. This textbook is designed to guide you through the dynamic and multifaceted field of Applied Nutrition. Whether you are M.Sc. Applied Nutrition student or a Nutrition professional aiming to update knowledge in nutrition, this book will provide you with in-depth wealth of knowledge, Practical insights and latest research developments in the nutrition field. Case studies and discussions in the book will be of immense help to the practicing professionals in adding to their knowledge.

Why Study Applied Nutrition?

Nutrition is not just about food, but the essential aspect of nutrition is its application in solving the day-to-day health problems faced by individuals and society as a whole.

Applied Nutrition helps us apply all the nutrition principles in bringing positive healthy changes in the individuals, society, community, populations and ultimately nation.

This textbook will cover huge range of topics related to applied nutrition starting from fundamentals of nutrition, physiology, human nutrition, clinical nutrition, nutritional intervention and latest advancements in personalized nutrition. It also gives insight into emerging trends in applied nutrition, nutrigenomics and wellness.

Each chapter of this textbook is carefully crafted to provide you with comprehensive understanding of nutrition and practical applications in disease prevention.

This book will prove to be your valuable companion in your wonderful journey in the field of nutrition. Whether you are a student, researcher, practicing nutritionist this book will aid you in understanding the ever- changing dynamic field of nutrition with a practical solution -based approach.

We encourage you to read each chapter with interest and enthusiasm and also with a critical mindset. Your valuable feedback for this book will keep my journey in field of nutrition always updated.

All the Best
Happy Reading

Regards,
Shraddha Vyas
Nutritionist
Certified Health and Wellness Coach

Acknowledgement

This textbook wouldn't have been possible without contribution of numerous experts, researchers, educators and practitioners in field of nutrition. We extend our gratitude to them for sharing their valuable knowledge and experience to benefit aspiring nutrition students and professionals like you.

In compiling this book, I have extensively referred and presented information from various standard textbooks, journals, research articles, proceedings from different seminars, webinars, workshops and conferences. Various Standard textbooks, publications from National Institute of Nutrition (NIN) and Indian Council of Medical Research (ICMR) have been used in this textbook for valuable information related to Nutrition and food contents. I have provided with essential details of references, source of information used in this book at appropriate location.

I express my deep sense of indebtedness to all these scientists, researchers, academicians and publishers.

Students, during my 15 years Teaching experience have contributed a lot with their doubts and feedback and pushing me towards more reading and updating of my knowledge in nutrition. Discussions with colleagues, seniors and Teachers also added immensely to my knowledge about various aspects of nutrition field.

I am thankful to my dear Father. **Dr. Manohar Lal Vyas**, for always encouraging me towards working hard and setting up higher goals in life. I am also thankful my mother **Mrs. Urmila Vyas**, for giving me love and encouragement to rise higher in life.

I am extremely grateful to my sister, **Dr. Swati Vyas**, for her valuable inputs in solving my queries in clinical aspect of nutrition. I am really thankful to my sisters, nephews and nieces for all the love and affection.

I am indebted to Iterative International Publication for their cooperation in bringing out this textbook.

Regards,
Shraddha Vyas
Nutritionist
Certified Health and Wellness Coach

Contents

Chapters No.	Chapters Name	Page No.
Chapter 1	Nutritional Intervention	1-17
1.1	Introduction about Applied Nutrition	1
1.2	Diet Planning and Meal Management	4
1.3	Dietary Modifications for Specific Health Conditions	14
Chapter 2	Nutrigenomics and Personalised Nutrition	18-28
2.1	Genetics and Nutrition	18
2.2	Nutrigenomics Applications	20
2.3	Personalized Nutrition Recommendations	25
Chapter 3	Emerging Trends in Nutrition	29-43
3.1	Functional Foods and Nutraceuticals	30
3.2	Types of Diet	33
3.3	Integrating Technology in to Nutrition	36
Chapter 4	Nutrition and Lifestyle	44-53
4.1	Integration of Nutrition in Healthier Lifestyle	44
4.2	Behavior Strategies towards Health and Wellness	46
4.3	Physical Activity, Exercise and Sports Role in Wellness	49
Chapter 5	Case Discussion	54-63
5.1	Case Study 1 and Discussion	54
5.2	Case Study 2 and Discussion	56
5.3	Case Study 3 and Discussion	59

ABOUT THE AUTHOR



Ms. Shraddha Vyas, M.Sc. in Biochemistry from Osmania University and CSIR-NET qualified, is the founder of "APPEDIET," an online Nutrition and Wellness consultation firm. With a CPD certification in "Nutrition and Weight Management Essentials" from the College of Contemporary Health, London. Ms. Vyas actively engages with clients dealing with diverse health challenges such as Weight-loss, Diabetes, PCOD, Thyroid, Menopause, and more. She advocates for an integrated holistic approach, incorporating sustainable dietary and lifestyle modifications, and emphasizes the importance of emotional well-being in her clients' health and wellness journeys. Recipient of the **Global Award for Women Entrepreneurs and Educators, Icons of Asia Award, and the National Award for Best Dietitian of the Year in 2023**, Ms. Vyas emphasizes an integrated holistic approach. In addition to her extensive clinical work, Ms. Vyas has dedicated over 15 years to teaching and guiding research projects in Biochemistry and Clinical Nutrition to both PG and UG students. She conducts nutrition workshops, certificate courses, and contributes to media platforms through webinars, TV, and (AIR) All India Radio on health-related topics. Certified in Health and Wellness coaching from Weljii institute in collaboration with Health care sector and skill Council (HSSC) under Ministry of AYUSH. Furthermore, she holds certification as a Diabetes Educator from NDEP. Ms. Vyas's journey reflects a commitment to excellence, promoting sustainable dietary and lifestyle modifications while prioritizing emotional well-being in her clients' health and wellness journeys.



Selfypage Developers Pvt Ltd

E-ISBN:978-93-6252-002-9



9 789362 520029

MRP Rs. 150/-