

Title	AI powered nutrition analyzer for fitness enthusiasts
College Name	AVS College of Technology
Team Id	PNT2022TMID42147

AI-powered Nutrition Analyzer for Fitness Enthusiasts

Literature Survey

1. Personal Nutrition:

Author: Marie A. Boyle

Become a smarter consumer with Boyle's personal nutrition, 10th Edition. Packed with the latest research, recommendations and emerging trends, this text equips you with a solid foundation in fundamental nutritional principles and the expertise to make informed, healthy choices. Lively illustrations, photographs and examples bring chapter concepts to life, while features like "The Savvy Diner" and "Eat Well, Be Well" offer practical tips you can put into immediate practice. The text is also supported by MindTap Nutrition, which helps you learn on your terms. The most engaging and customizable online solution in nutrition, MindTap combines readings, multimedia, assessments, activities and access to Diet & Wellness Plus--giving you everything you need to maximize your course success. Take charge of your own nutrition and health with Boyle's personal nutrition.

2. Nutrition for Health and Healthcare :

Author: Linda Kelly DeBruyne, Kathryn Pinna.

Nutrition for health and health care approaches the study of nutrition and diet therapy from the perspective of nursing and health science, including examples and data that can help prepare you for your future career. Learn about basic nutrition concepts, such as metabolism, vitamins, and minerals, and clinical topics organized by organ systems, linking nutrition to different disease states, such as diabetes, renal disease, and liver disorders. Apply what you have learned in Case Studies and Clinical Applications features throughout the text. Use all of the student resources to help you succeed in your course.

3. Nutrition Guide for Clinicians-Third Edition:

Physicians Committee for Responsible Medicine, Neal Barnard, MD. This new edition draws on the latest research to explain nutrition's role in the prevention and treatment of 87 different diseases and conditions. In addition, the guide contains in-depth information on general nutrition, including the roles of macronutrients and micronutrients and specific nutritional requirements for all stages of life. Compiled by a core team of physicians, registered dietitians, and medical editors, this invaluable tool for health professionals was reviewed by an additional group of 20 medical experts from a number of diverse fields, such as gastroenterology, dermatology, oncology, and nutrition.

4.Artificial Intelligence in Nutrients Science Research:

1.Chair and Department of Humanities and Social Medicine, Medical University of Lublin, 20-093 Lublin, Poland.

2.BioMolecular Resources Research Infrastructure Poland (BBMRI.pl), Poland.

3.Faculty of Medicine, Medical University of Lublin, 20-059 Lublin, Poland; magda.suchodolska.1998@interia.eu.

4. Correspondence: jaroslaw.sak@umlub.pl.

5.Precision nutrition:

Information Technology Group, Wageningen University and Research, Wageningen, the Netherlands.Department of Computer Science and Engineering, Qatar University, Doha, QatarReceived 17 January 2021, Revised 4 March 2021, Accepted 28 March 2021, Available online 7 April 2021, Version of Record 19 April 2021.

6.Nutrition Through the Life Cycle:

Author: Judith E. Brown

Packed with insight from leading experts, Brown's Nutrition Through the Life Cycle, Seventh Edition, shows how nutrition impacts healthy people as they grow, develop and function through life stages. Extremely reader friendly, the text features a vibrant full-color design and is packed with illustrations that make abstract ideas easy to visualize. Using a unique "layered approach," it progresses from preconception to the end stages of the life cycle, alternating chapters between normal and clinical nutrition to give you the complete picture.It reflects the latest research and dietary guidelines in its comprehensive coverage of nutritional needs, nutrition and health disease outcomes, model programs, healthful diets, nutrients, gene variants, nutrient-gene interactions and more. Case studies give

you further insight into clinical applications and care standards in real-world practice.

7.The Science of Nutrition:

Author: Janice Thompson, Melinda Manore, Linda Vaughan.

For introductory Nutrition courses for Majors. Move students beyond memorization with a functional approach to nutrition. The Science of Nutrition helps students master tough nutrition concepts while providing rich support to save instructors time. This best-selling, thoroughly current, research-based nutrition text is uniquely organized around the highly regarded functional approach, which organizes vitamins and minerals based on their functions within the body and is easily seen in the organization of the micronutrient (vitamin and mineral) chapters. The 5th Edition includes the most up-to-date scientific research in the field of nutrition, an increased emphasis on nutrition and disease content, and new icons in the margins directing students to Oregon State University's FoodHero.org. The text covers key concepts in nutrition with new and updated Focus Figures; updated Nutri-Case case studies; and Nutrition Concept Videos, which feature author Janice Thompson explaining difficult course concepts. Additionally, instructors can assign updated NutriTool activities and autogradable MyDietAnalysis Personalized Dietary Analysis activities in Mastering It lets students highlight, take notes, and review key vocabulary all in one place, even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it.