

Reformulation as a Strategy for Developing Healthier Food Products

Vassilios Raikos • Viren Ranawana
Editors

Reformulation as a Strategy for Developing Healthier Food Products

Challenges, Recent Developments
and Future Prospects

 Springer

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Preface

Food reformulation is a relatively new strategy aiming to develop foods with beneficial properties for human health. Recent developments in the field remain unknown to the public. Literature is not only limited but largely focuses on the conventional reformulation approach of reducing ingredients perceived as ‘unhealthy’. Most of the published research are on salt reduction and some on reducing saturated fats and trans fats. So far, there are no comprehensive studies exploring the benefits of reformulation for foods with altered energy, fruit and vegetable, fibre and wholegrains levels. The use of technologically advanced ingredients or processes for food production also remains largely underexploited with respect to food reformulation and the associated benefits on human health.

This book, which comprises 12 chapters, aims to introduce the wider concept of reformulation as shaped by the trends and needs of modern society. The book highlights the efforts to reformulate processed foods from a nutritional perspective with the potential effects on human health. The aspects of food reformulation are discussed from the angles of the main stakeholders, namely, industry, academia and consumers. Several case studies, including meat and bakery products, are presented to set the objective and provide insights into the challenges encountered in the process of developing a new product. Food technology and ingredient science are two rapidly evolving fields that drive effective food reformulation strategies, and therefore, a chapter is included on their state of the art. The book then contains a number of chapters discussing reformulation for health from some topical food, nutrient, health outcome and ingredient perspectives with detailed content on the state of the science. Using underutilised ingredients and valorising waste products are two novel and emerging areas within food reformulation for health, and we have one chapter discussing this. Furthermore, reformulation is rising in importance also in emerging economies as changing demographics lead to nutrition transitions favouring higher chronic disease incidence. Therefore, the book includes a chapter on the opportunities and challenges related to reformulation in these countries. This book also identifies emerging and future trends in the food product development based on environmental and social strains which are dictated by three main goals: to increase food security, to improve nutrition and health and to promote sustainable production.

Despite the rising importance of food reformulation for health, there are no books that have yet addressed this topic, and we hope this publication will fill a critical gap and serve to advance this topical and important area. The book is intended for students and professionals working in academia, in industry and in public health related to nutrition, food science and technology, and health care. We hope that it would also be a useful reference for policy-makers as well as all those with an interest in food and health.

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