

Handbook of Vegetables and Vegetable Processing

Nirmal K. Sinha, Ph.D.

EDITOR

Y.H. Hui, Ph.D.

ADMINISTRATIVE EDITOR

E. Özgül Evranuz, Ph.D.

Muhammad Siddiq, Ph.D.

Jasim Ahmed, Ph.D.

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 **WILEY-BLACKWELL**

A John Wiley & Sons, Ltd., Publication

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Preface

Fresh and processed vegetables are a fast-growing segment of the food industry and occupy an important place in the global commerce and economy of many countries. Various studies have demonstrated the importance of vegetables to human health, contributing fiber, vitamins, minerals, bioactive phytochemicals, and other nutrients in our diet. Botanically and organoleptically diverse vegetables are primarily grown on regional and seasonal basis. Because of their highly perishable nature, search for efficient and better methods of preservation has been continuing along side the developments in production, postharvest handling, processing, and quality improvements. This handbook with 37 chapters contributed by more than 50 authors from North America, Europe, Australia, Asia, and Middle East is organized in five parts, which review and discuss important developments in vegetables and vegetable processing.

Part I of the handbook has 7 chapters on physiology, biochemistry, sensory and flavor properties, nutrition, phytochemical properties, genetic engineering, and microbiology.

Part II has 2 chapters on postharvest physiology and technology.

Part III has 12 chapters covering various aspects of vegetable processing including fresh-cut vegetables, vegetable parts, herbs and essential oils, vegetable juices, minimal processing and new technologies, refrigeration and freezing, drying, computer applications, packaging, and waste management.

Part IV includes 3 chapters on product and plant safety, including microbial safety, GAP and GMP, and HACCP.

Part V covers processing of important vegetables including green, leafy, tuber and root, and other vegetables. It also includes chapters on dry beans, olives, and avocados which are used as vegetables.

This handbook is intended as a contemporary source book on vegetable and vegetable processing for the industry, students, academia, libraries, research institutes, laboratories, and other interested professionals. To our knowledge, there are few books on vegetables and vegetable processing with associated coverage of scientific aspects and industrial practices. Although the readers are the final judge, we hope this handbook would meet the growing need for a quality book in this field. The editorial team acknowledges many individuals for their supports during the conception and development of this book. Our sincere thanks and gratitude to all authors for their contributions and for bearing with us during the review process. We would like to thank the publishing and copy editing departments, especially, Mark Barrett, Susan Engelken and Ronald D'souza for their supports to this project. We are grateful to the institutions we are associated with and to our families for their supports.

Nirmal K. Sinha
Y.H. Hui
E. Özgül Evranuz
Muhammad Siddiq
Jasim Ahmed