Food Proteins

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Processing Applications

EDITED BY

Shuryo Nakai
Food Science
University of British Columbia
Vancouver, British Columbia, Canada

and

H. Wayne Modler
Consultant, Dairy Specialist
Kemptville, Ontario, Canada

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This book is dedicated to the late Drs. Y. Pomeranz and E. Doi

Preface

In a preceding volume, *Food Proteins: Properties and Characterization*, which was part of the Food Science and Technology VCH series, we stated that a subsequent book would be published addressing applications to food processing covering the main commodity food proteins. Initially our intention was to obtain significant input from the industrial sector toward that end; however, that proved difficult, owing to the proprietary nature of many of the commercial processes involved. This in turn led to some delay in publishing the present volume. In the end, contributions were, however, forthcoming from both the private and the public sectors, and the efforts of all the authors are greatly appreciated.

Recent trends in food manufacture include the production of functional foods, which are promoted on the basis that they impart improved health to the consumer. In many cases the products contain protein and have become specialized to the point where specific proteins or bioactive peptides are targeted to selected fermentations. Although permeation of these new techniques throughout food manufacturing is very slow, it could help to revolutionize food production in the twenty-first century.

Introduction of new technology tends to be viewed cautiously by the food processing industry owing to the potential for adverse effects on the health of consumers. Despite this fact, genetic evolution of food proteins will continue to grow and will play an important role in food product development. New compounds should indeed be explored to promote human health as chemopreventive ingredients. Modern medicine is now recognizing the importance of diet to health, as evidenced by recent trends in the development of neutraceuticals and medicinal foods. Peptides and proteins are again playing ex-

tremely important roles in new protein ingredient technology. To respond to this trend, this book provides an in-depth review of recent progress in food protein processing, while touching on its historical context as well.

We hope this book will be a useful reference both for the food processor in the effort to modernize processing technology, as well as for food researchers, to assist the latter in attaining a better understanding of technological advances in modern protein chemistry that now seem promised for the twenty-first century.

The Food Science and Technology VCH series was initiated by Dr. Y. H. Hui of the American Food and Nutrition Center, and we have continued to receive much encouragement from Dr. Hui while preparing this work. The authors and editors alike are deeply indebted to him.

SHURYO NAKAI
H. WAYNE MODLER

Contents

Contributors

ROBERT F. BOUTIN, Knechtel Research Sciences Inc., 7341 North Hamlin Avenue, Skokie, IL 60076 USA

OKKYUNG KIM CHUNG, U.S. Department of Agriculture-ARS, 1515 College Avenue, Manhattan, KS 66502 USA

ETSUSHIRO DOI,* Research Institute for Food Science, Kyoto University, Uji, Kyoto 611 Japan

DANJI FUKUSHIMA, Noda Institute for Scientific Research, 399 Noda, Noda-shi, Chiba-ken 278-0037 Japan

H. WAYNE MODLER, Consultant, 1253 River Road, Kemptville, ON K0G 1J0 Canada

SHURYO NAKAI, Food Science, Faculty of Agricultural Sciences, University of British Columbia, 6650 N.W. Marine Drive, Vancouver, BC V6T 1Z4 Canada.

RYO NAKAMURA, Department of Food Science and Technology, College of Bio-Resource Sciences, Nihon University, 3-34-1 Simouma, Setagaya-ku, Tokyo 154-8513 Japan

JULIE K. NORTHCUTT, Department of Poultry Science, University of Georgia, Athens, GA 30602-4356 USA

YESHAJAHU POMERANZ,* Department of Food Science and Human Nutrition, Washington State University, Pullman, WA 99164 USA

PHILIP LEE WING, The Food Development Group, 135 West Beaver Creek Road, Richmond Hill, ON L4G 1C6 Canada

*Deceased.

YOULING L. XIONG, Department of Animal Sciences, University of Kentucky, Lexington, KY 40546 USA

LOUIS L. YOUNG, Poultry Processing and Meat Quality Research Unit, Richard B. Russell Agricultural Research Center, U.S. Department of Agriculture-ARS, Athens, GA 30604-5677 USA