## **Book reviews**

## Meat processing. Improving quality

J. KERRY, J. KERRY and D. LEDWARD (Eds)

CRC Press, Boca Raton, Boston, New York, Washington, DC, Woodhead Publishing Limited, Cambridge, England, ISBN 1 85573 583 0, 464 pages

Publications on meat meet intensive interest because of the unique importance of that basic food, be it consumed as culinary enjoyment or in form of meats product to favour the palate. This new book of CRC promises stimulating topics on meat processing, at least by its title. In three parts (part I: Analysing meat quality, Part II: Measuring quality, Part III: New techniques for improving quality) consisting of 28 + 2 chapters an international team of contributors reviews interesting topics on meat quality, how it can be improved, how it can be preserved and how it can be measured.

At first quality definition(s) is (are) given referring to requirements set by consumers, suppliers and law-makers, then details are given on raw meat quality, nutritional quality, on quality traits like flavour, colour and fat content.

In chapter II raw meat quality indicators, sensory analysis, on-line monitoring and microbiological hazard identification are dealt with.

Authors in chapter III try to give a review on new techniques one might expect to serve quality improving (modelling of beef cattle production, carcass decontamination, automation, chilling and freezing, high pressure processing, restructuring, fermented meats, raw meat analysis, packaging).

Already from the topics listed one would think, there is not much said on what the title promises, on processing of meat. Reading the book this first impression is confirmed. As a general remark it could be mentioned that in most of the chapters general knowledge is summed up with scarce data on practice, i.e. on processing. Basic knowledge is in most chapters well-documented based on literature data, unfortunately almost exclusively on English references.

The few misprints and strange statements (..."cultures in the exponential growth phase have been shown to be far more sensitive than cultures in the logarithmic growth phase"; "PET = polyester terephtalate", etc.) could have been eliminated yet they are not disturbing.

It is more disturbing that meat processing as such is dealt with almost exclusively with raw meat, and if some topic on processing is discussed (e.g. restructuring) a technology is given that is applied nowhere else but in England: salt, rusk, phosphate, onion, wheat gluten, caseinate, dextrose, sulphite, soya flours, concentrate, isolate, MSG, pepper, spices are added to the meat during mixing. This above statement is true, even if evidently not all the additives listed are added at the same time.

Summing up briefly: basic knowledge on quality aspects of mainly raw meat is dealt with thoroughly, quality aspects of meat products are dealt with rather exceptionally (the question arises, could we expect

0139-3006/2003/\$ 20.00 © 2003 Akadémiai Kiadó, Budapest

#### BOOK REVIEWS

scientists to write about meat processing other than raw meat if they are hardly confronted with the immense variety of cooked sausages, cooked cured meats, dry fermented products: sausages and hams, and lots of other meat products English do not even have names for. Reading German literature certainly would have helped).

Whoever is reading the book hoping to learn much about meat processing will be disillusioned, those who like surprises and are also happy with topics they did not expect to read about will find the book useful and in most parts of high standard.

K. INCZE

# Extrusion cooking. Technologies and applications

C. ROBIN (Ed.)

## CRC Press Boca Raton, 2001, ISBN 0-8493-1207-8; Woodhead Publishing Ltd, 2001, ISBN 1 85573 559 8, 206 pages

The extrusion cooking is one of the most important technologies for cereal and protein manufacturing in food, petfoods and feeds processing sectors. This is a complex multivariate process that requires a strict control to maintain product's quality. The technology and the application have been well presented in the book by a distinguished international team contributors. This book is the latest available review that gives wideranging survey of key factors affecting quality of extruded products.

The book consists of two parts. The first, "General influences on quality", gives review in five chapters about the raw materials, the type of extruders, the optimisation of thermal performance, the effective process control and the relation between process and nutritional quality. In the second, "Specific extruded products", part of the book the reader can get information about three significant extruded products such as breakfast cereals, snack and baby foods. Each chapter gives review about the range of products, main unit operations and technologies and future trends.

Extrusion cooking is a very useful guidebook for breakfast cereal, snack and baby food manufacturers. This book is also recommended for people who work in science and education to get further information about extrusion technology and application.

ZS. CSERHALMI

Acta Alimentaria 32, 2003