1. Record Nr. UNINA9910825559003321

Autore	Feiner Gerhard
Titolo	Meat products handbook : practical science and technology / / Gerhard Feiner
Pubbl/distr/stampa	Cambridge, England ; ; Boca Raton, Florida : , : Woodhead Publishing Limited : , : CRC Press, , 2006 ©2006
ISBN	1-62870-387-3 1-84569-172-5
Descrizione fisica	1 online resource (671 p.)
Collana	Woodhead Publishing Series in Food Science, Technology and Nutrition Woodhead Publishing in food science, technology, and nutrition
Disciplina	664.9
Soggetti	Meat - Composition Meat industry and trade Meat
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Meat products handbook: Practical science and technology; Copyright; Contents; Preface; Acknowledgements; Disclaimer; Abbreviations; Part I Meat composition and additives; 1 The protein and fat content of meat; 1.1 Amino acids; 1.2 Proteins; 1.3 Collagen; 1.4 Muscle physiology; 1.5 Flavour of meat; 1.6 Principles of muscle contraction and relaxation; 1.7 Enzymes in meat; 1.8 Fat; 1.9 Rancidity of fat; 1.10 Low-density lipoprotein and high-density lipoprotein cholesterol; 1.11 Nutritional value of meat and other protein-rich food; 2 The biochemistry of meat 2.1 Biochemical processes in meat pre-slaughter2.2 Biochemical processes in meat post-slaughter (rigor mortis); 3 The tenderness of fresh meat; 3.1 Ageing of meat for enhancing tenderness; 3.2 Enzymes used for enhancing the tenderness of meat; 4 Definitions of terms used in meat science and technology; 4.1 Pale soft exudative (PSE) meat, red soft exudative (RSE) meat, dry firm dark (DFD) meat and 'normal' meat; 4.2 Mechanically deboned meat and mechanically separated meat; 4.3 Hot boning of meat: 'warm-meat effect'; 4.4 Thaw rigor; 4.5 Cold

shortening; 4.6 Electrical stimulation
4.7 Freezing and thawing of meat4.8 Freezer burning; 4.9 pH value; 4.10 Aw value (water activity); 4.11 Eh value (redox potential); 4.12 Condensation water; 4.13 Maillard reaction; 4.14 Caramelization; 4.15 Conductivity of meat; 5 Additives: phosphates, salts (sodium chloride and potassium chloride, citrate, lactate) and hydrocolloids; 5.1 Phosphates; 5.2 Salts (sodium chloride and potassium chloride, citrate, lactate); 5.3 Hydrocolloids; 6 Additives: proteins, carbohydrates, fillers and other additives; 6.1 Proteins; 6.2 Carbohydrates
6.3 Fillers: maltodextrin, flour, wheat fibre, konjac, cereal binder and rusk6.4 Preservatives in meat products; 6.5 Monosodium glutamate; 6.6 Ribonucleotide and other flavour enhancers; 6.7 Water; 6.8 Spices and spice extracts; 6.9 Hydrolysed vegetable protein; 6.10 Antioxidants; 6.11 Natural smoke; 6.12 Liquid smoke; 6.13 Colours in meat products; 6.14 Whitening (bleaching) of meat; 6.15 Glucono--lactone; 6.16 Citric acid; 6.17 Emulsifiers in meat products; 6.18 Alginate for re-formed meat; 6.19 Enzymes for re-formed meat and other meat products
6.20 Blood-derived products for re-formed meat6.21 Allergens in meat products; 7 Colour in fresh meat and in cured meat products; 7.1 Retention of colour in fresh meat and uncured meat products; 7.2 Nitrite and nitrate; 7.3 Mechanism of colour development in cured meat products; 7.4 Colour enhancers; 7.5 Measuring colour: the L*-a*-b* system; Part II Technologies for particular meat products; 8 Whole-muscle brine-injected products; 8.1 Selection and preparation of raw materials; 8.2 Selection of additives; 8.3 Calculating brine composition and injection levels; 8.4 Manufacturing technology
8.5 Summary of critical production issues

Sommario/riassunto

There has long been a need for a comprehensive one-volume reference on the main types of processed meat products and their methods of manufacture. Based on over twenty years' experience in the industry, Meat products handbook is designed to meet that need. It combines a detailed practical knowledge of processing and ingredients with the scientific underpinning to understand the effect of particular process steps and ingredients on product safety and quality.The first part of the book reviews meat composition and its effect on quality together with the role of additives. There are chapt