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| Nota di contenuto | Sweeteners and Sugar Alternatives in Food Technology; Contents; Preface; Contributors; PART ONE: NUTRITION AND HEALTH CONSIDERATIONS; 1 Glycaemic Responses and Toleration; 1.1 Introduction; 1.2 Glycaemic response in ancient times; 1.3 Glycaemic response approaching the millennium; 1.4 The Glycaemic response now and in future nutrition; 1.5 Measurement and expression of the glycaemic response; 1.6 The acute glycaemic response to sugars and sweeteners; 1.7 Long-term glycaemic control with sweeteners and bulking agents; 1.8 Gastrointestinal tolerance in relation to the glycaemic response 1.9 Finally2 Dental Health; 2.1 Introduction; 2.2 Dental caries; 2.2.1 The problem; 2.2.2 Aetiology; 2.2.3 Control and prevention; 2.2.4 Determining cariogenicity; 2.3 Reduced calorie bulk sweeteners; 2.3.1 Erythritol; 2.3.2 Isomalt; 2.3.3 Lactitol; 2.3.4 Maltitol; 2.3.5 Sorbital; 2.3.6 Mannitol; 2.3.7 D-tagatose; 2.3.8 Xylitol; 2.3.9 Key points from the dental evidence for reducedcalorie sweeteners and their use; 2.4 High-potency (high-intensity) sweeteners; 2.4.1 Acesulfame K; 2.4.2 |

Aspartame and neotame; 2.4.3 Cyclamate and saccharin; 2.4.4 Sucralose; 2.4.5 Other sweeteners
2.4.6 Key points from the dental evidence for high-potency (high-intensity) sweeteners and their use
2.5 Bulking agents; 2.5.1 Polydextrose; 2.5.2 Fructose and glucose polymers; 2.5.3 Key points from the dental evidence for bulking agents; 2.6 Summary; 3 Digestive Health; 3.1 Introduction; 3.1.1 Prebiotics, sweeteners and digestive health; 3.1.2 Intestinal microbiota; 3.1.3 Gut health; 3.2 Prebiotics versus fibre; 3.2.1 Endogenous prebiotics; 3.2.2 Milk oligosaccharides; 3.2.3 Secreted substrates in the gut; 3.3 Prebiotics; 3.3.1 Current prebiotics; 3.4 Health benefits; 3.5 Synbiotics
3.6 Safety considerations
3.7 Conclusion; 4 Calorie Control and Weight Management; 4.1 Caloric contribution of sugars in our diet; 4.2 Calorie control and its importance in weight management; 4.3 Satiety: role of intense and bulk sweeteners; 4.4 Legislation relevant to reduced-calorie foods; 4.5 Conclusions; PART TWO: HIGH-POTENCY (HIGH-INTENSITY) SWEETENERS; 5 Acesulfame K; 5.1 Introduction and history; 5.2 Organoleptic properties; 5.2.1 Acesulfame K as the single sweetener; 5.2.2 Blends of acesulfame K with other sweetening agents; 5.2.3 Compatibility with flavours
5.3 Physical and chemical properties
5.3.1 Appearance; 5.3.2 Solubility; 5.3.3 Stability; 5.4 Physiological properties; 5.5 Applications; 5.5.1 Beverages; 5.5.2 Dairy products and edible ices; 5.5.3 Bakery products and cereals; 5.5.4 Sweets and chewing gum; 5.5.5 Jams, marmalades, preserves and tinned fruit; 5.5.6 Delicatessen products; 5.5.7 Table-top sweeteners; 5.5.8 Pharmaceuticals; 5.5.9 Cosmetics; 5.5.10 Tobacco products; 5.5.11 Technical applications; 5.6 Safety and analytical methods; 5.6.1 Pharmacology; 5.6.2 Toxicology; 5.6.3 Safety assessments and acceptable daily intake
5.6.4 Analytical methods

Sommario/riassunto

Sugar replacement in food and beverage manufacture no longer has just an economic benefit. The use of ingredients to improve the nutritional status of a food product is now one of the major driving forces in new product development. It is therefore important, as options for sugar replacement continue to increase, that expert knowledge and information in this area is readily available. Sweeteners and Sugar Alternatives in Food Technology provides the information required for sweetening and functional solutions, enabling manufacturers to produce processed foods that not only taste and p
