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Titolo Physicochemical, Sensory and Nutritional Properties of Foods Affected

by Processing and Storage

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Sommario/riassunto

Processing and storage can cause changes and interactions in food components that have effects on nutritional value, organoleptic characteristics or even food safety. This book includes 19 research works showing important and interesting advances, as well as new approaches, in this research topic. Four articles are dedicated to studying the effect of canning conditions (filling media and some ingredients) on the diverse parameters of quality for fish and pet foods. Three articles are devoted to studying the effects of dehydration (pretreatments and drying procedures). One article is dedicated to monitoring the elaboration of a fermented and dehydrated product (sausage) using a portable NIRS device. The ninth article of this book studies the effect of low-dose electron beam irradiation on cooking quality, moisture migration, and thermodynamics, as well as the digestion properties of the isolated starches in newly harvested and dried rice. The next contribution studies the use of different preservatives to avoid the formation of undesirable volatile organic compounds in stracciatella cheese. Another article examines the impact of source material, kibble size, temperature, and duration on the efficiency of the aqueous extraction of sugars and phenolics from carob kibbles by conventional heat-assisted (HAE) and ultrasoundassisted (UAE) methods. In two articles, marinating with different extracts, alone or combined with other seasoning/conditioning

methods, was essayed to tenderize beef or to improve the sensory quality of chicken leg and breast meat. The effect of various cooking methods on the quality, structure, pasting, water distribution and protein oxidation of fish and meat-based snacks is studied in the fourteenth article. The last five articles are dedicated to the study of the effects of storage on several foods (olive oil, blueberry, beetroot and Atlantic mackerel).