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TITULO: Incorporation of fruit pomace into food products

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The growing volume of residues from fruit and vegetable processing, estimated at approximately 1.3 billion tons annually—nearly half of which consists of seeds, peels, and pomace—represents a global environmental and economic challenge. Traditionally discarded, these by-products have proven to be relevant sources of bioactive compounds, vitamins, minerals, and proteins, thus attracting scientific interest for their use in functional foods. In this context, the present work discusses the incorporation of fruit pomaces into food formulations, exploring their effects on the physicochemical, sensory, and technological properties of products, with a focus on cookies enriched with flours obtained from strawberry, red currant, and raspberry pomaces. The analyses carried out included pH, instrumental color, texture profile, and sensory evaluation, which allowed the identification of significant differences among the types of pomace. It was observed that raspberry pomace presented the highest lipid content, while red currant pomace was characterized by greater acidity and higher protein content. Cookies formulated with strawberry pomace showed a darker, more reddish, and less yellow coloration, with those containing 20% of this flour receiving the highest scores from the sensory panel. These results confirm that the addition of pomace not only enhances the nutritional value of products but also modifies their sensory attributes, potentially increasing consumer acceptance. Therefore, the use of fruit pomaces as ingredients in food products represents a sustainable and promising strategy, aligned with waste reduction and the development of products with greater added value and functional appeal, contributing simultaneously to technological innovation, environmental preservation, and health promotion.

Referências bibliográficas:

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