PHYSICOCHEMICAL, TEXTURAL AND SENSORY CHARACTERISATION OF SOME SMOKED CHICKEN BREAST ASSORTMENTS AVAILABLE ON THE LOCAL MARKET

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Abstract

Differences in processing and formulation can markedly shape the quality and consumer perception of commercial smoked chicken breast products. This study compared three commercial products, Caroli (CB1), Aldis (CB2), and Pikok (CB3), in terms of chemical composition, pH, water activity, instrumental colour, texture, hedonic response, QDA, and PCA. Significant differences were found for moisture, salt, protein, pH, and water activity, while colour was strongly influenced by measurement location. Texture differed in shear force, work of cutting, cohesiveness, springiness, gumminess, and chewiness. CB1 received the highest hedonic scores, including an overall acceptability of 8.60, and was characterized by stronger chicken and smoke notes and a firmer, more compact texture. PCA clearly separated the products, with F1 and F2 explaining 67.87% and 32.13% of the variance. Overall, the results revealed marked physicochemical, textural, and sensory differences among the products.

***Key words*:** *smoked chicken breast; sensory analysis; texture profile analysis; physicochemical properties; consumer acceptance*