

Dietary Fiber Enriched Chicken Sausages Incorporating Dried Carrot Pomace

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Presently the meat processing industry focuses on reformulation of the traditional processed meat products considering the demand of consumers on healthy and balanced diets. However, raw meat and processed meat products inherently lack dietary fiber. Fiber enrichment in meat products has been reported in the industry. Therefore, the objective of this study was to evaluate the effect of incorporation of dried carrot pomace (Moisture% in wet basis), and to (Carrot pomace is a byproduct obtained from carrot juice processing, was the pomace prepared by the authors). Determine physico-chemical properties, proximate composition, sensory attributes and textural characteristics of chicken sausages. Three levels of dried carrot pomace (3%, 6%, and 9% in wet basis) were incorporated during formulation replacing lean chicken meat, with the control without carrot pomace. The data were analyzed using ANOVA and the Tukey's mean separation. Moisture, fat, and protein contents were reported significantly lower ($p < 0.05$) values compared to the control sample. However, there was no significant difference ($p > 0.05$) in ash content among the developed sausages. Crude fiber content was significantly higher in 3%, 6%, and 9% dried carrot pomace added samples with 3.37%, 9.89%, and 14.78% respectively. Fiber content of the control was 0.39%. A higher lightness (b^*) value than in the control ($p < 0.05$) was measured in fiber enriched chicken sausages with 6% dried carrot pomace. Sensory acceptability of 6% fiber-incorporated sausages was comparable with control and further increase in fiber level resulted in a decrease in sensory acceptability. In conclusion, incorporation of 6% dried carrot pomace has resulted in fiber enrichment without altering the meat sensory quality parameters.

Keywords: *Dietary fiber, Chicken sausage, Dried carrot pomace, Meat products, Physicochemical properties*