

Nutritional, Physicochemical and Sensorial Characteristics of Chicken Sausages Incorporated with a Mixture of Selected Vegetables

"Impact of Selected Vegetables Mixture Incorporation on physicochemical, Nutritional and Organoleptic Properties of Chicken Sausages"; because research has targeting to determine the feasibility to incorporating selected vegetable mix into chicken sausage.

The present study was conducted to evaluate the effect of different inclusion levels (0, 6, 12 and 18%) of **pre-formulated vegetable mixture** containing **pumpkin, carrot and drumstick leave powder** on the nutritional, physicochemical and sensorial quality characteristics of chicken sausages. (No evidence for vegetable% in the pre-formulated vegetable mixture)

The experimental design was completely randomized design evaluating four treatments (Control: 0%, VM6: 6%, VM 12: 12% and VM18: 18% vegetable mixture). Each treatment had four replicates and 4-sausage links per replicate (n=4). (what does mean as 4-sausage links? Better to give its weight or dimensions)

Treatments were analysed for the proximate composition and gross energy. The treatments were tested for cooking loss, cooking yield, pH, water holding capacity (WHC), moisture retention, texture profiles, juiciness, external and internal colour (CIE L*, a* and b*), folding test qualities and the extract release volume.

Sensory attributes were evaluated using 30-untrained panellists for toughness, aroma, taste, texture, **juiciness appearance**, surface colour and overall acceptability in a 7-point hedonic scale. (better to used five point hedonic scale for untrained panelists and what does mean by juiciness appearance)

The moisture, and the crude fiber contents of sausages were found to be increased with increasing levels of vegetable mixture while crude fat, crude protein and ash contents were found to be declined. All the physicochemical attributes except the internal colour measurements (L*, a* and b*) were affected by the inclusion level ($P < 0.05$). (lack of evidences for statistical application and numeric values of the results)

Among the inclusion levels tested VM18% yielded the most desirable physicochemical properties. Inclusion of the vegetable mixture at a rate of 6% and 12% attracted panellists the most.

The present study concluded that the inclusion of prescribed minced vegetable mixture could be used successfully and effectively for the development of physicochemical and sensory properties of chicken sausages. In overall the present study concluded that inclusion of minced vegetable mixture in the sausage formulation from 6% to 12 % can be used successfully without deteriorating major physicochemical and sensory attributes of the product. According to the results, VM18% yielded the most desirable physicochemical properties but concluded as 6% to 12 % can be used successfully without deteriorating major physicochemical and sensory attributes of the product. Thus, need to give more evidences

carrot, chicken, drumstick leaves, pumpkin, sausages

suggested keywords

Chicken sausages, Emulsified sausages, herbs for sausages, sausage extenders