**Incorporation of Jack Fruit (*Artocarpus heterophyllus)* Seeds Flour and Bread Fruits *(Artocarpus altilis)* Flour as Substitutes of Bread Crumbs in Manufacturing of Chicken Sausages**

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Sausage filler is used to increase the yield of sausages. Bread crumbs is one of the commonly used sausage fillers in the industry. The ever-increasing price of bread crumbs and higher cooking loss in sausages with bread crumbs lead this study to determine the potential of two cheaper, locally available ingredients (jack fruit seed and bread fruit flour) to be used as alternative fillers in sausages production. It was also expected to value addition of jack fruits and bread fruits. Three types of chicken sausages were prepared including the control. Jack fruit seed flour and bread fruit flour were used to prepare the treatments with totally replacing filler (bread crumbs) in the control. Flour was obtained after drying (sun drying and oven drying) and grinding process of jack fruit seeds and bread fruit slices. Filler incorporation was 15%(w/w) in the recipe. Chicken sausages were manufactured by using standard sausages manufacturing process. Vacuum packed sausages were stored at -32 $℃$ of temperature. Proximate analysis, determination of physiochemical parameters and sensory evaluation (hedonic scale) were conducted for the products. One way analysis of variance (ANOVA) was used to compare the properties of products. There was no significant (p> 0.05) difference in the cooking loss, ash, protein contents among the three products. There was a significant different (p<0.05) in the moisture, fiber, fat, pH and Water Holding Capacity (WHC) among three products. The highest value of moisture and fiber were observed in Bread Fruit flour incorporated Sausages (BFS). The highest mean value of fat and pH were observed in Jack fruit seeds Flour incorporated Sausages (JFS). The highest mean value of WHC was observed in the control. Sensory data suggested that incorporation of jack fruit seeds flour and bread fruit flour influences the aroma and flavor of sausages. In sensory evaluation, flavor in the control product was the most acceptable attribute and JFS showed higher overall acceptability than BFS. The study revealed that the most suitable substitute for bread crumbs in manufacturing chicken sausages is jack fruit seed flour according to the organoleptic properties, proximate composition and WHC.

**Key Words:** *Bread crumbs, Bread fruit flour, Filler, Jack fruit seed flour, Sausages*