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

W.A.K.Darshanie 1 ,T.S.P.Jayaweera 1\*, M.P.Senanayeka2

*1Department of Livestock Production, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka*

*2 JP Poultry Products (Pvt)Ltd, Walovitawatta, Badalgama, Sri Lanka*

*sanjeewapj@agri.sab.ac.lk*

Sausage filler is used to increase the yield of sausages. Bread crumbs is the 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 minimize the post-harvesting losses 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 and grinding process of jack fruit seeds and bread fruit slices. Chicken sausages were manufactured by using common sausages manufacturing process. Proximate analysis, determination of physiochemical parameters and sensory evaluation was conducted for the products. One way analysis of variance (ANOVA) was used to compare the properties of products. There was no a 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 heights 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. The control was showed high accessibility level than other two products. In sensory evaluation, flavor in the control product was the most acceptable attributes and JFS showed higher acceptability than BFS. The study revealed that the most suitable substitute for bread crumb in manufacturing chicken sausages is jack fruit seed flour.

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