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Chemical Characteristics of Tilapia (*Oreochromis niloticus*) Sausage using Yellow Pumpkin (*Cucurbita moschata* Durch) as Substitute Flour

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Abstract : Pumpkin is a plant that is efficacious as good anti-oxidants due to its chemical contents, such as beta carotene, vitamin A, vitamin C, zinc, and selenium. It can be processed into flour, which is then substitutedin fish sausage processing to improve the nutritional value. This study was aimed to get the right percentage substitution of pumpkin flour, to know the effect of pumpkin flour substitution on the content of proximate and beta carotene of tilapia sausage product. The pumpkin was dried on sunlight for 2-3 days, and then continued with flour production. The flour was used as substitute material in tilapia sausage production at the concentration of 0%, 10%, 15% and 20% of the total fish sausage batter. The study employed a completely randomized design (CRD) with 4 treatments and 3 replications. Results showed that tilapia fish sausage using pumpkin flour as substitute loweredthe water content andcarbohydrates but increased ash content, protein, fat, and beta carotene. Tilapia fish sausage with 20% of substitute pumpkin flour was the best treatment of chemical tests, yieldingwater content of 59.75%, ash of3.64%, protein of8.02%, fat of3.02%, carbohydrate of 25.57%, and beta carotene of 3.075µg/g. The percentsubstitute pumpkin flour could increase beta carotene content in tilapia fish sausage ranged between 1,965 µg/g up to 3,075 µg/g and reduce the water content and carbohydrate.
Keywords : Tilapia Fish Sausage, Pumpkin Flour, Chemical Characteristics.

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