ABSTRACT

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CHARACTERISTICS OF NUGGET WITH ADDITION OF HIGH FIBER FOODS AND FILLERS

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Nugget is a meat product made from seasoned minced meat which is molded, coated with flour and bread crumbs, fried and frozen to increase its shelf life. Chicken nugget is lack of dietary fiber. Low intake of dietary fiber could lead to several health problems such as colon cancer, cardiovascular disease and obesity. Hence, the addition of high fiber foods is needed to enhance the dietary fiber content of chicken nugget. Furthermore, filler which is a non-meat ingredient is needed in nugget production to increase the water holding capacity, form a compact texture and reduce the production cost. Therefore, the effect of the addition of fillers in nugget production must be studied. The general objective of literature review was to study the physicochemical and organoleptic properties of chicken and fish nuggets with the addition of different high fiber foods and fillers. The addition of high fiber foods increased the fiber content of chicken nuggets. Chicken nugget with 12% of pea hull flour showed the best characteristics, with 61.1% of moisture, 8.96% of fat, 6.9% of dietary fiber and hardness value of 35.76 N/ cm^2. It has the highest dietary fiber content, and good flavor and texture scores. Based on BPOM regulation, this chicken nugget could be claimed as high in fiber. Chicken nuggets with the addition of high fiber foods up to 20% are acceptable in terms of flavor and texture. Chicken nugget with 10% of provit-A1 corn flour showed the best characteristics with smooth texture, delicious taste, and dominant chicken meat aroma. While fish nugget with wikau maombo and tapioca flour (3:1) showed the best organoleptic properties, in terms of texture, taste and aroma. The addition of 5 - 30% of filler gives an acceptable organoleptic properties. Taken altogether, wheat flour as a commercial filler showed a good performance, although some fillers (gembili flour, wikau maombo flour, tapioca flour and *Eucheuma cottonii*) also exhibited a comparable performance that could be utilized to potentially replace wheat flour in commercial nugget production.

Keywords : Nugget, high fiber foods, fillers
References : 133 (2008-2021)