



## **Chemical and Physical Evaluation of Native Chicken Nuggets that using Several Types and the Proportion of Corn Flour**

**Wahidah Maruf<sup>1\*</sup>, DjalalRosyidi<sup>2</sup>, LilikEkaRadiati<sup>2</sup> and Purwadi<sup>2</sup>**

<sup>1</sup>Faculty of Animal Husbandry, University of Sam Ratulangi, Indonesia  
and Postgraduate student of Animal Husbandry Faculty, University of Brawijaya,  
Indonesia

<sup>2</sup>Faculty of Animal Husbandry, University of Brawijaya, Indonesia

**Abstract :** This study has analyzed chemically and physically the type and proportion of corn flour used in making native chicken nuggets. The main materials used in the study were native chicken meat and various types of corn flour (yellow corn, purple corn, pulen corn, provit A1 corn and provit A2 corn). While the supporting materials used are bread flour, skim milk powder, ice cubes, cooking oil, corn oil, and spices included: salt, garlic, and pepper. Research has been carried out using the proximate analysis and a completely randomized design (CRD), where in this research consisting of 2 factors, the first factor is the type of corn flour and the second factor is the percentage of corn flour to the weight of local chicken meat that is used. The first factor is the type of corn starch that consists of 5 levels and the second factor is the percentage of corn flour to the weight of meat consisting of 4 levels. From these two factors, 20 treatment combinations were obtained, in which each treatment combination was repeated 3 times. The data collected were analyzed using analysis of variance (ANOVA). The results showed that the interaction between the type and the level of corn flour, influenced the physical-chemical condition, and the quality characteristics of native or local chicken nugget. The use of provit A1 corn flour 40 g gives the best characteristic of native chicken nugget quality, because with maximum moisture content 60,147%, protein 15,92%, starch level 11,28% which fulfill Indonesian national standard, with  $\beta$ - sufficient carotene with water holding capacity of 53.69% and cooking shrinkage of 1.48%. The treatment that gives the nuggets almost as good as the use of provit A2 corn for 40 g.

**Keywords :** *Native Chicken, Corn Flour, Nuggets.*

**Wahidah Maruf *et al*** /International Journal of ChemTech Research, 2018,11(09): 135-141

DOI= <http://dx.doi.org/10.20902/IJCTR.2018.110917>

\*\*\*\*\*