

The Effect of Nano Calcium Fortification from Broiler Bones on the Sensory Quality of Broiler Meatballs

Ana Maghfiratu Akmalia
Poultry Agribusiness Study Program
Department of Animal Science

ABSTRACT

This research aims to determine the effect of nano calcium oxide on the sensory quality of broiler meatballs. The research materials consisted of broiler meat, nano calcium oxide powder of broiler bone, tapioca flour, garlic, onion, red onion, pepper, monosodium glutamate, isolate protein, sodium tripolyphosphate. This research uses a complete randomized design (CRD) with 5 treatments, namely: P0 (0%), P1 (0.15%), P2 (0.30%), P3 (0.45%), and P4 (0.60%) from the total dough. The data from the sensory quality test were analyzed by non-parametric analysis through the parametric analysis through the Hedonic Kruskal-Wallis test and if there is a difference in the mean, it is further tested with the Duncan's Multiple Range Test. Quality sensory quality was tested using hedonic test by 40 untrained panelists to broiler meatballs. The parameters observed were aroma, color, taste, texture, chewiness, and acceptability. The hedonic scale used was 1 (strongly dislike), 2 (dislike), 3 (somewhat like), 4 (like), and 5 (strongly like). The results showed that the addition of nano calcium up to the highest level of 0.60% did not affect the color, aroma, taste, texture, and taste. color, aroma, taste, texture, chewiness, and acceptability of broiler meatballs. Nano calcium can be added to broiler meatballs up to 0.60% of the total dough without affecting panelists' acceptability.

Keywords : *Meatballs, Broiler, Acceptance, Sensory Quality, Nano Calcium.*

