## Effect of Nano Calcium Citrate Fortification of Broiler Bones on The Sensory Quality of Broiler Meat Sausages

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## ABSTRACT

This study aims to determine the effect of nano fortification of broiler bone calcium citrate on the sensory quality of broiler meat sausage. The materials included broiler meat, tapioca flour, soy protein isolate, oil, salt, garlic, onion, onion, coriander, nutmeg, sodium tripolyphosphate, monosodium glutamate, pepper, egg white, ice water, broiler bones, lime juice, distilled water, and ethanol. Broiler bone nano calcium citrate fortification treatments include: P0 (0%), P1 (0.15%), P2 (0.30%), P3 (0.45%), and P4 (0.60%) of the total sausage dough. The research parameters observed included color, aroma, taste, texture, chewiness, and acceptability. Sensory quality testing with hedonic test using Likert scale, namely 1 (very dislike), 2 (dislike), 3 (somewhat like), 4 (like), and 5 (very like). Sensory quality testing was conducted by 40 untrained panelists on cooked broiler meat sausages. Sensory test data were analyzed by non-parametric analysis through Hedonic Kruskal Wallis test and if there were differences, Duncan's New Multiple Range Test was used. The study can be concluded that nano calcium citrate fortification of broiler bones affects the color, aroma, texture, but does not affect the taste, chewiness and acceptability of sausages. Broiler bone calcium citrate nano fortification of 0.45% of total dough was the most preferred by panelists.

*Key words:* broiler meat, fortification, sensory quality, nano calcium citrate, sausage.