

The Effect of Adding Nano Curcumin Turmeric on the Sensory Quality of Layer Afkir Chicken Sausage

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ABSTRACT

This study aims to determine the effect of adding nano curcumin turmeric on the sensory quality of layer chicken sausage. The research materials consisted of layer chicken meat, tapioca, soy protein isolate (SPI), oil, sodium tripolyphosphate (STPP), monosodium glutamate (MSG), salt, garlic, onion, ice, egg, onion, coriander, nutmeg, sugar, frankfurter, collagen casing, turmeric, citric acid, chitosan, and distilled water. The treatment of adding nano curcumin turmeric consisted of: P0 (0%), P1 (0.15%), P2 (0.3%), P3 (0.45%), and P4 (0.6%) of the total meat. The parameters observed included color, aroma, taste, texture, firmness, and acceptability. Sensory quality testing using a hedonic test employed a Likert scale: 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 layer chicken meat sausages. The sensory test data were analyzed using non-parametric analysis through the Kruskal-Wallis hedonic test, and if there were differences, they were further tested using Duncan's New Multiple Range Test. The results of the study showed that the addition of nano-curcumin from turmeric up to 0.60% was found to have a significant effect on the hedonic evaluation of color, texture, tenderness, and acceptability of sausages made from culled layer chickens; however, the hedonic quality evaluation revealed no significant effects on the parameters of color, aroma, taste, and texture. The addition of 0.15% nano-curcumin was the most optimal level because it produced a product with a sensory profile closest to the control (0%), ensuring that these sausages remained well-accepted by consumers, who rated them in the "like" category.

Keywords : *Chicken sausage, Addition, Sensory quality, Layer chicken, Nano curcumin turmeric*