

The Quality of Physical of Ungkep Super Native Chicken Meat Fortified with Nano Calcium Lactate of Egg Shell

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ABSTRACT

This study aims to determine the effect of nano calcium lactate in egg shells on the physical characteristics of super native ungkep chicken meat enriched with nano calcium lactate in egg shells. The research materials are included super native chicken breast meat fillet skinless 500 g per sample so the total meat used is 7.5 kg, nano calcium lactate, shallots, garlic, turmeric, ginger, galangal, candlenut, coriander, sugar, salt, palm oil, monosodium glutamate, water, nano calcium lactate in egg shell. This study used a completely randomized design (CRD) with 5 treatments and 3 replications. The treatment of fortification nano calcium lactate in egg shells, treatments P1 (0%), P2 (0.15%), P3 (0.30%), P4 (0.45%), and P5 (0.60%) of the total meat. Super native chicken meat was braised at temperature 70°C for 90 minutes. Parameters tested were pH value, water holding capacity, tenderness, cooking loss, and yield. Data from the physical test results of super native braised chicken meat were analyzed by unidirectional pattern variance analysis and if there was a significant difference ($P < 0.05$) further tested by Duncan's New Multiple Range Test. The results showed that fortification of nano calcium lactate of chicken egg shells as much as 0.30% was the treatment with the best physical quality with the lowest cooking loss value (5.52%) and the highest cooking yield value (94.48%) as well as pH value, water holding capacity, and tenderness respectively 5.74; 21.27%; and 87.79 N.

Keywords: *super native chicken, braised chicken, physical quality, nano calcium*