

The Effect Of Nano Calcium Lactate Addition Of Eggshell To The Physical Quality Of Super Native Chicken Meat Marinated

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ABSTRACT

This study aims to determine the effect of adding nano calcium lactate eggshell to the physical quality of super native chicken meat marinated with local spices and herbs. The research material consisted of super native chicken meat, sugar, salt, pepper, chili powder, garlic, cinnamon, palm oil, lime juice, monosodium glutamate, ginger powder, and nano calcium lactate eggshell (NCaL). NCAL addition treatment includes P0 (0%), P1 (0.15%), P2 (0.3%), P3 (0.45%), and P4 (0.6%) of the total marinade. Super native chicken meat marinated with marinade ingredients as much as 20% of the weight of the meat for 60 minutes at room temperature and then store cold at a temperature of 4°C to 6°C for 20 hours. Parameters observed were pH value, cooking shrinkage, water binding capacity, tenderness, and drip loss. Each treatment consists of 3 repetitions. Physical quality test results data were analyzed using unidirectional pattern variance analysis and if there is a difference in the average further tested with Duncan's Multiple Range Test. The results showed the addition of nano calcium in super chicken meat marinated local spices and herbs affect the pH value and cooking shrinkage of meat but does not affect the binding capacity of water, tenderness, and drip loss of meat. The addition of nano calcium lactate eggshell in Super marinated chicken meat does not affect the tenderness of the meat, but affects the value of cooked meat shrinkage to the lowest value in the treatment of 0.6% (28.89%).

Key words: *Local herbs and spices, super native chicken, marinade, physical quality, eggshell nano calcium lactate.*