

**THE EFFECT OF ADDING CALCIUM CARBONATE IN WATER ON  
THE QUALITY OF CHICKEN EGGS  
As Chief Conseulor drh. Dharwin siswantoro., M.Kes.**

**Alfonsus Eduard Arnaz Adi Saputra**  
Poultry Bussines Management Study Program  
Animal Husbandry Department

***ABSTRACT***

*This study aims to determine the quality of broiler eggs given the addition of calcium carbonate (CaCO<sub>3</sub>) in drinking water. This research was conducted for 2 months starting from April to June on the farms of the residents of Kebonsari Village, Summersari District, Jember Regency. This study used a completely randomized design (CRD) with 4 treatments and 5 replications. P0 (control treatment), P1 (treatment with the addition of calcium carbonate 0.8 grams/liter of water), P2 (addition of calcium carbonate 0.9 grams/liter of water), and P3 (addition of calcium carbonate 1 gram/liter of water). The research data were analyzed by statistical analysis using variance and continued with the Duncan Multiple Range Test if there was a significant difference ( $P < 0.05$ ) between treatments. The results showed that statistically, the addition of calcium carbonate as much as 1 gram/liter to drinking water was able to increase the haugh value of laying hens, on average and qualitatively the addition of calcium carbonate was able to improve egg quality such as eggshell, egg color, air space, egg white index, egg yolk index, and Haugh unit. The recommended dose in this study is 1 gram/liter of drinking water to get a good external and internal quality of egg.*

***Keywords:*** Calcium Carbonate, Egg Quality, Laying Hens