





## CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

## QUALITY OF EGGS FROM LAYING HENS STORED AT DIFFERENT TEMPERATURES

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The egg is one of the most complete foods in human nutrition, and the quality of its internal components (yolk and albumen) is directly influenced by the shell quality, which makes the latter an important object of studies in order to influence its guality. Therefore, the aim of this study was to determine the quality of eggs submitted to three types of treatments and stored at two temperatures.144 eggs from laying hens were used at the end of the production (70 weeks). The experimental design was a completely randomized design, in a 3 x 2 factorial design, three treatments (eggs without washing, washed egg shell added mineral oil and washed egg shell added soybean oil) and two storage temperatures (refrigerated and ambient) with eight replicates during six storage periods (zero, five, 10, 15, 20 and 25 days). The parameters evaluated were: egg weight (g); weight loss (g) and specific gravity (g.cm<sup>-3</sup>). The weight of the egg was not observed significant difference for the different treatments and the periods of storage, since they are eggs from hens of the same age, therefore, they are eggs of uniform size and weight. Regarding weight loss, a significant difference was observed in the different treatments and temperature, from the fifth day of storage. Eggs that did not have their shell added with soybean oil or mineral oil and stored at ambient temperature suffered the greatest weight loss until the end of the experimental period. During the experimental period, mean temperatures were recorded in the refrigerator and ambient temperature of 2.0°C and 27.1°C, respectively. Regarding the values of specific gravity, it was possible to observe that the values differed between treatments and environment. The eggs without treatments and that were stored at ambient temperature, obtained the lowest values for this parameter. As a general rule, eggs that were added with oil, whether mineral or sovbean. and those under refrigeration, obtained the best results regardless of storage period. It was concluded that the eggshell treatment of washed and added mineral oil and soybean oil, and those that were stored in the refrigerator, obtained better results, since the addition of these oils and the cooling minimized the losses to the preserving internal quality of the eggs.

Keywords: internal quality, mineral oil, soybean oil

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