

## EFFECT OF STORAGE TEMPERATURE AND HOLDING PERIOD ON INTERNAL QUALITY OF CHICKEN EGG

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**Abstract:** The objective of this study was to evaluate the effects of storage temperature and holding period on internal quality of chicken eggs. A total of 108 fresh eggs were obtained from Vanaraja hens. Samples of 36 eggs each were stored in refrigerator (5°C) and at room temperature (40°C) for 5,10,15 days of holding period and 36 fresh eggs were evaluated for their internal characteristics within 2 hour of being laid. This study indicated that as the holding period increased egg weight, albumen height, yolk height, albumen index, yolk index and Haugh unit significantly ( $p < 0.01$ ) decreased. Albumen index egg quality indicator was significantly ( $p < 0.01$ ) decreased from 6.54% to 3.71% at 15 days of storage period. Storage temperature showed a significant difference ( $P < 0.01$ ) between eggs stored at room temperature with that stored in refrigeration (5°C). Refrigerated (5°C) eggs have higher albumen height (5.9 mm), yolk height (19.1 mm), albumen index (7.39 %), yolk index (43.9 %) and Haugh unit (84.6) than eggs stored at room temperature. The results suggest that eggs significantly deteriorate in their internal quality with increasing by the storage temperature and holding periods.

**Keyword:** Storage temperature, Holding period, Albumen index, Haugh unit

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