

RESEARCH PAPER

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## Study on effect on water activity, TBA number and protein of dried chicken meat during storage

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### SUMMARY :

The present experiment was envisaged to evaluate the effect of packaging methods and treatments and storage time on protein content, TBA number and water activity of dried chicken meat throughout storage period. Dehydrated chicken meat with sodium nitrite treatment was prepared by high velocity hot air drying at temperature of 55°C and air velocity of 5.5 m/s. Protein content, TBA number and water activity were determined after 15 days interval during storage of 150 days. Effect of packaging methods and treatments and storage time of dried chicken meat observed significant ( $P < 0.05$ ) in all cases. Protein, TBA number and water activity of vacuum packaged sample were found significantly higher ( $P < 0.05$ ) than conventional packaged and sodium chloride plus sodium nitrite treated chicken meat (treated sample) were detected significantly higher ( $P < 0.05$ ) than sodium chloride treated only (raw sample). Protein content were found decreased both in vacuum as well as conventional packaged sample throughout storage but TBA number and water activity were found increased significantly ( $P < 0.05$ ) during storage in all cases. The dried chicken meat was acceptable at the 150 days of storage period.

**KEY WORDS :** Dried chicken meat, Water activity, TBA number, Protein content, Packaging methods

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