

## Physical changes of spent hen meat tenderized with different levels of bromelain enzyme

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**Corresponding author:****Saad KJ Al-Waeli****ABSTRACT:**

This study was conducted to determine the effect of bromelain enzyme tenderization on the physical parameters of spent hen meat from October 2017 to December 2017 at agriculture college laboratory-Al-Muthanna University. 45 spent hen (ISA brown) were used for the experiment and meat was taken from the main cut of carcass (breast, thigh and drumstick). Solutions were formulated with different concentrations of bromelain enzyme (0.05%, 0.1%, 0.15%) for the treatments (T<sub>5</sub>, T<sub>4</sub>, T<sub>3</sub>), respectively. Other samples were submerged in the negative control treatment of distilled water (T<sub>1</sub>) and positive control of 1% vinegar (T<sub>2</sub>). This study compared the effect of different solutions on physical traits of spent hen. The bromelain enzyme was purchased from Maple Life sciences company of India. The results of the experiment have shown a significant decrease (P<0.05) on the physical properties (water holding capacity, drip loss, thawing loss). Significant decrease (P<0.05) was seen in the shear force values in all samples submerged in bromelain enzyme solution compared with the controls treatments.

**Keywords:**

Bromelain, Spent hen, Tenderization, Physical traits.