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## IMPROVEMENT OF THE TENDERNESS OF HEN'S MEAT : A REVIEW LITERATURE

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#### ABSTRACT

*The massive breeding of the laying hen's industry leads to the availability of large quantities of their meat at the end of their economically productive life. Chicken produces a sufficient amount of breast and thigh meat. Moreover, their meat is cheap and healthy. It is a rich source of protein and omega-3 fatty acids, containing a low percentage of cholesterol without religious or cultural restrictions. However, the meat of laying hens is challenging due to the age-related increase in cross-linking of refractory connective tissue, which has banned its use, thus reducing its market value. Chickens are slaughtered after their production cycle, and their meat is used for food and pet food production. In this sense, different means must be found to improve the softness and flavor of these meats. Therefore, this review article is designed to focus on the meat of aged laying hens at the end of its economic production life and identify ways to improve its tenderness and flavor to facilitate its marketing and sale to the consumer. The classical methodology was used to analyze appropriate literature retrieved from Scopus, PubMed, and ScienceDirect using relevant key terms in November 2022. Studies showed that the weight of the muscles and the ratio of their parts to each other depends on the hen's age, sex, type, production aspect, survival, and feeding conditions. Some studies have referred to the many methods used to improve the tenderness of laying chicken meat, including enzymes, salts, phosphates, and calcium chloride. Moreover, other studies described some physical methods to tenderize the meat, such as pressure treatment, ultrasonic waves, and electrical stimulation. In conclusion, this review study showed that the published research focused on developing methods for improving the tenderness of hen's meat by reducing the amount of connective tissue without a breakdown of meat proteins.*

**Keywords:** Laying hens, aged, meat, meat tenderness, enzyme methods.

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