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DETERMINATION OF QUALITY CHARACTERISTICS OF CHICKEN BURGERS PRODUCED BY THE ADDITION OF TRANSGLUTAMINASE

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Transglutaminases are enzyme capable of catalizing cross-links between peptides or proteins. They are widely used in many foods, because of their activity in a wide range of pH and temperatute. They catalize inter- or intramoleculer cross-linking throught the formation of isopeptide bonds between aminoacids or peptides to improve functional properties of proteins. They play an important role in heat stability, gel-formation capability, water-holding capacity, emulsification and nutritional properties of proteins. Although there are many products produced by the addition of transglutaminase in recent years, especially in the production of meat products were used more. They are preferred in the use of a variety of meat products due to the binding properties. From this point, because of consumption of chicken meat more and more increased in our country chicken burger was preferred for our research. Our study is based on the addition of the enzyme transglutaminase that make up this topic and chicken burgers made with the addition of other additives. Enzyme added at 5 different concentrations (0.2%, 0.4, 0.6, 0.8 and 1) and followed by other operations applied in the production of burger. After the product created, cold soaked for a while and then analysis was started. According to the results, the contribution of the enzyme did not cause a change in the nutrients (ash, fat, protein) of the product groups ($P>0.05$). However, the transglutaminase treatments were significantly ($P<0.05$) affected in reducing the cooking loss and significantly improved the textural properties of the burger samples ($P<0.01$).

Keywords: Transglutaminase, chicken burger, quality.

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