EFFECT OF ADDING VITAMIN E WITH NON-VACUUM TUMBLING ON QUALITY OF PRECOOKED ROAST BEEF

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ABSTRACT

The purpose of this study was to explore the effect of adding exogenous vitamin E into meat system with tumbling on lipid oxidation, physical properties and microbiological growth in precooked roast beef. According to measured TBARS, adding α-tocopherol into meat with tumbling maintained oxidative stability compared to the non-tocopherol treatment. All samples had the same cooking yield for tumbled or non-tumbled samples and α-tocopherol levels. There were no significant three-way and two-way interaction of moisture, pH, shear values, total iron, heme iron and nonheme iron contents of precooked roast beef. Also, the factors of α-tocopherol and tumbling did not influence microbial growth in precooked roast beef. Moreover, one of the various forms of Vitamin E with tumbling was more effective process of lipid stability than control which is non-adding antioxidant in precooked roast beef.

Keywords: Vitamin E, Tumbling, Lipid oxidation, Roast beef

REFERENCES


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