THE EFFECT OF CHILLED AND FROZEN STORAGE ON SOUS VIDE TREATED PORK CHOPS

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Abstract

Sous vide is a minimal processing technology used to cook meat at strictly monitored time and temperature under vacuum packaged conditions. The quality of sous vide treated meat during storage differs depending on temperature conditions. In the present study, we analysed the effect of chilled storage at 4 °C for two weeks and frozen storage at -20 °C for four weeks on weight loss, pH, hardness, lipid oxidation and color attributes (lightness, redness and yellowness) of sous vide treated pork chops. Weight loss, pH and TBARS values (lipid oxidation) of sous vide treated pork chops were increased during the chilled storage at 4°C for 14 days. On the other hand, redness values of sous vide treated pork chops were decreased during chilled storage. Frozen storage increased weight loss, TBARS, lightness and yellowness values of cooked pork chops. In contrast, frozen storage (-20°C) had a significant effect on decreasing hardness values of sous vide treated pork chops.