EFFECT OF AGING IN TOTAL COLLAGEN, INSOLUBLE AND SOLUBILITY OF COLLAGEN (MM. Supraspinatus and Infraspinatus) FROM COWS OF FOUR GENETIC GROUPS

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Aging beef is a process where the meat is kept under temperatures above the freezing point, ie, around 2°C for an extended period of storage, in order to improve the tenderness. The aim of this research was to analyze the effect of aging for 14 days in total and insoluble collagen content and collagen solubility of Supraspinatus and Infraspinatus muscles of crossbred cows ½ Simmental ½ Nellore, ½ Angus ½ Nellore, ½ Canchim ½ Nelore and Nelore breed around ten years old. Total collagen average values ranged from 5.01 to 5.14 g/100g (24h) and 5.04 to 5.14 g/100g (14 days) in the M. Supraspinatus. In M. Infraspinatus the total collagen average ranged from 5.93 to 6.09 g/100g (24h) and 5.95 to 6.11 g/100g (14 days). The insoluble collagen content ranged from 4.36 to 4.44 g/100g (24h) and 4.29 to 4.42 g/100g (14 days) in the M. Supraspinatus and ranged from 5.20 to 5.93 g/100g (24h) and from 5.02 to 5.18 g/100g (14 days) in M. Infraspinatus. The soluble collagen percentage ranged from 11.27 to 14.58% (24h) and from 12.40 to 16.25% (14 days) in M. Supraspinatus whereas the M. Infraspinatus the solubility of collagen ranged from 12.13 to 14.48% (24h) and from 13.10 to 16.58% (14 days). Aging for 14 days did not affect (P>0.05) total collagen content and insoluble collagen in the Supraspinatus and Infraspinatus muscles. However the collagen solubility was higher (P<0.001) in 14 days for the four genetic groups in both muscles studied.