

MODIFIED MEASURES OF MEAT TENDERNESS

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This experiment was conducted to investigate the effect of collagen on physical and chemical methods of meat tenderness. The proximate composition, collagen content, and Warner-Bratzler(W-B) shear test were determined on cooked pork chops while myofibrillar fragmentation index(MFI) and fragmentation index(FI) were determined on the raw chops. Right and left side of pork carcasses did not differ significantly in hydroxyproline content or proximate composition. The W-B triangle blade test measures did not differ significantly between pork carcass sides. On the other hand, some significant differences in W-B rectangle blade measures were observed between pork carcass sides. No significant differences in MFI or FI were found between left and right sides of pork carcasses. Most of the W-B triangle and rectangle blade measures correlated significantly with each other and with adhesion values, and hydroxyproline content. Myofibrillar fragmentation index did not correlate significantly with any of the W-B shear forces. FI correlated significantly with most of the W-B shear forces. MFI had low and significant($P < 0.05$) correlation with FI($r = -0.16$).

MANUSCRIPT NOT AVAILABLE