



Carcass characteristics and meat quality of Holstein bulls depending on slaughter age and muscle types [

2024

text (article)

Analítica

Background: Among non-genetic factors, slaughter age is the most significant aspect influencing meat quality traits and quantity of beef. **Objective:** To compare the effects of slaughter age and muscle type on carcass traits and meat quality of Holstein bulls. **Methods:** A total of 30 Holstein Friesian bulls were slaughtered at different age, as follows: Young group (YG) at 18 months (n=14 animals); and Old group (OG) at 24 months of age (n=16 animals). Carcass and meat quality traits of longissimus dorsi (LD) and gluteus medius (GM) muscles were evaluated. **Results:** Carcass traits were not significantly affected over time. Although carcass fat measurements -such as marbling score, back fat thickness, European Beef Carcass Classification System (SEUROP) fatness score- increased numerically with greater slaughter age, only the increase in percentage of kidney, pelvic, and heart (KPH) fat contents were significant ($p<0.05$). Bulls slaughtered at 24 months had 13.4% greater ($p<0.01$) LD area than those in the YG group. Bulls in the OG group had significantly ($p<0.01$) higher slaughter weight as well as hot and cold carcass weights. However, percentages of hot and cold carcass dressing were not significantly affected by slaughter age. The L^* (lightness), a^* (redness), b^* (yellowness), chroma (color intensity), and hue values of meat in the OG group did not differ from those in the YG group. However, L^* , a^* and chroma values of GM muscle were higher than those of LD muscle, while the pH₂₄ value of GM muscle was significantly ($p<0.01$) higher than that of LD. **Conclusion:** It seems more advantageous to slaughter bulls at 24 months of age to get heavier, more marbled, and muscled carcasses better suited to current consumer expectations

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Tipo Audiovisual: beef quality carcass traits cattle color parameters Holstein Friesian non-casing components slaughter age slaughter characteristics características de abate características de carcaça componentes não invólucros gado Holstein Friesian idade de abate parâmetros de cor qualidade da carne bovina tipos de músculo types of muscle calidad de la carne características de la canal características del sacrificio componentes que no son de carcasa edad de sacrificio ganado Holstein Friesian parámetros de color tipos de músculo

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Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es