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ABSTRACT

Changes in beef sensory traits as somatic-cell-cloned Japanese black steers increased in age from 20 to 30 months.

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Changes in sensory traits of longissimus muscle (LM) from 20-30-month-old cattle were investigated using somatic cell clones of Japanese black steers slaughtered at 20-, 25- and 30-months-old (n=3, 4 and 4 respectively). The fat content of LM samples at 20, 25 and 30 months were 23.7, 38.7 and 41.1%, respectively. Soluble collagen content and collagen solubility at 20 months was greater than at 25 and 30 months. In terms of sensory traits, initial tenderness and juiciness at 25 months was greater than at 20 months, and fattiness at 25 and 30 months was greater than at 20 months. These results demonstrate that the changes in physicochemical traits of beef accompanying the differences in slaughter age affect the sensory traits although the desirable effects of the sensory traits do not continue throughout the entire fattening period.

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