

ABSTRACT

Comparison of sensory characteristics and fatty acid composition between Wagyu crossbred and Angus steers

S.G. May, C.A. Sturdivant, D.K. Lunt, R.K. Miller, S.B. Smith

Department of Animal Science, Texas Agricultural Experiment Station, Texas A&M University, College Station, TX 77843, USA

Angus ($n = 10$) and crossbred (34 and 78) Wagyu ($n = 10$) steers were fed a diet according to typical Japanese standards for 552 days. The steers were fed to gain approximately 0.90 kg/head/day. Fatty acid composition was determined for subcutaneous and intramuscular adipose tissue, and *M. longissimus dorsi* muscle. Trained sensory evaluation and a consumer triangle test were performed on *M. longissimus dorsi* muscle steaks. For subcutaneous and intramuscular tissue. Wagyu adipose tissue possessed higher ($P < 0.05$) percentages of 14:1, 16:1 and 18:1 and a lower ($P < 0.05$) percentage of 16:0 and 18:0 than corresponding tissues from Angus steers. Trained sensory panel analysis revealed no differences ($P < 0.05$) in any of the sensory traits between steaks from Wagyu crossbred and Angus steers. However, a consumer triangle test indicated that consumers can detect a difference between breeds.