



RESEARCH BRIEF PRODUCT QUALITY

BEEF RESEARCH

National Beef Quality Audit–2016: In-plant survey of carcass characteristics related to quality, quantity, and value of fed steers and heifers

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Abstract

The National Beef Quality Audit (NBQA)–2016 used in-plant cooler assessments to benchmark the current status of the fed steer and heifer beef industry in the United States. In-plant cooler assessments ($n = 9,106$ carcasses) were conducted at 30 facilities, where approximately 10% of a single day's production were evaluated for USDA quality grade (QG) and yield grade (YG) factors. Frequencies of evaluated traits were 66.5% steer and 33.4% heifer sex classes and 82.9% native, 15.9% dairy-type, and 1.2% *Bos indicus* estimated breed types. Mean USDA YG factors were 1.42 cm for adjusted fat thickness, 89.5 cm² for LM area, 390.3 kg for HCW, and 1.9% for KPH. Mean USDA YG was 3.1, with a frequency distribution of 9.6% YG 1, 36.7% YG 2, 39.2% YG 3, 12.0% YG 4, and 2.5% YG 5. Mean USDA QG traits were Small⁷⁰ for marbling score, A⁶⁴ for overall maturity, A⁵⁵ for lean maturity, and A⁶⁹ for skeletal maturity. Mean USDA QG was Select⁹⁶ with a frequency distribution of QG of 3.8% Prime, 67.3% Choice, 23.2% Select, and 5.6% lower score. Lower score included dark cutter (1.9%), blood splash (0.1%), and hard bone, which are USDA overall maturity scores of C or older (1.8%). Marbling score distributions were 0.85% Slightly Abundant or greater, 7.63% Moderate, 23.54% Modest, 39.63% Small, 23.62% Slight, and 0.83% Traces or less. Carcasses that were Choice or Select and USDA YG 2 or 3 accounted for 70.7% of the carcasses evaluated. Compared with the previous NBQA, we found a numerical increase in mean USDA YG, USDA QG, adjusted fat thickness, HCW, LM area, and marbling score with an increase in dairy-type carcasses and percentage of carcasses grading USDA Prime and Choice as well as frequency of USDA YG 4 and 5. The findings from this study will be used by all segments of the industry to understand and improve the quality of fed steer and heifer beef that is being produced.

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