

QUALITY OF BEEF AND ITS CERTIFICATION FOR THE PUBLIC IN THE FUTURE

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Eating quality (overall palatability) of cooked beef is determined by combined effects of differences in flavor, juiciness and tenderness. For 75 years, USDA Quality Grades (Prime, Choice, Select and Standard; assigned by evaluating maturity and marbling of the carcass) have been used by retailers (supermarkets and food-service operations) and international traders to purchase beef of the desired palatability. Research reveals that, for steaks, the incidence of unpleasant eating experiences is 3% for Prime, 10% for upper two-thirds Choice, 16% for low Choice, 27% for Select and 50% for Standard. Consumers who value flavor and tenderness equally, and want beef to be juicy, can purchase Prime beef or "branded beef" (e.g., Certified Angus Beef, Sterling Silver, Chef's Exclusive, all upper two-thirds Choice and some breed-specific). Because, though, 83% of grain-fed beef grades low Choice or Select and because consumers of such beef are primarily interested in tenderness, sorting technologies (identifying carcasses that yield "tender," "intermediate" or "tough" beef) like MARC Tenderness Classification System, Hunter/CSU BeefCAM and RMS-Canadian Vision System are useful. Alliances and "supply chains" use genetics and controlled management in the production sector and technology in the packing/processing sector (e.g., electrical stimulation, postmortem aging)--integrated into Palatability Assurance Critical Control Point (PACCP) programs--and merchandising of "branded beef." There are 41 "branded beef" programs "certified" by USDA; of those, 34 name a breed of cattle, 38 have a minimum marbling score, 36 have a maximum maturity score, 32 specify a minimum muscling requirement and 34 have a maximum hump height.