



## Managing cattle for maximum beef quality and palatability

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# Management recommendations to maintain beef quality and palatability — from genetics to the meat case

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## Cow-calf

- Reduce the level of *Bos indicus* breeding to a minimum while still maintaining genetic levels consistent with heat resistance and hybrid vigor —  $\frac{3}{8}$  or less is recommended
  - Castrate male calves at the earliest practical age; prior to weaning is optimal
  - Maintain an aggressive health program, including a timely vaccination and parasite control program; follow recommended administration procedures and avoid injections in the area of the round, rump, loin and rib
  - Wean calves at the earliest practical age — 6 to 8 months is recommended
  - Maintain an adequate level of nutrition
  - Use no more than one approved pre-weaning implant, following the recommendations on the product label
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## Stocker

- Maintain an adequate level of nutrition consistent with the implant program to sustain growth
  - Maintain an aggressive health program, including a timely vaccination and parasite control programs
  - Use no more than one approved pasture implant, following the recommendations on the product label; be sure the level of nutrition is adequate to support the implant program
  - Market cattle in a timely manner
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## Feedlot

- Feed cattle to their optimum end-point as determined by in-weight and implant strategy; when possible, sort into outcome groups

- Continue to maintain an aggressive health program, including vaccinations and parasite controls; closely monitor cattle health and promptly administer effective treatment for respiratory sickness
- Use implants that will optimize the genetic potential of the cattle being fed as determined by their in-weight; do not use implants within 50 to 60 days of slaughter and follow the recommendations on the product label
- Cycling heifers tend to be prone to a high level of dark cutters; therefore, the use of a heat suppressant is recommended
- Use beta agonists to improve carcass yields and cutability; product, dosage level and duration of feeding should be matched to specific marketing targets and follow label directions with regard to dosage
- Avoid situations that increase the potential for antemortem stress and dark cutters; these include but are not limited to: mixing cattle from different feedlot pens prior to shipping, weighing up cattle more than 2 hours prior to shipping, moving cattle aggressively and standing without water, especially in very hot weather

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## Post-harvest

- Use electrical stimulation to hasten the onset of rigor mortis, thus preventing cold shortening and improving the appearance, grading and tenderness of the carcass
- Chill the carcass at temperatures low enough to diminish bacterial growth but high enough to prevent cold shortening — 32°F to 34°F is optimal
- Allow meat to age or mature a reasonable length of time prior to merchandising, which allows the inherent enzyme systems to tenderize the meat and improve its consistency; recommended aging times may vary with the cut and quality grade



*Safe, affordable beef through socially and environmentally responsible practices*

*Managing cattle for maximum beef quality and palatability* was developed by Dr. Ted Montgomery for the Sustainable Beef Resource Center. For a copy of this brochure, go to:  
**[www.SustainableBeef.org](http://www.SustainableBeef.org)**