

Holstein Market Cow Feeding Project

Mike Baker, Bill Henning, Celie Meyers, Drew Wilkins
Cornell Department of Animal Science
Penn State University Department of Dairy and Animal Science
Taylor/Excel
NCBA, NY and PA Beef Industry Councils

According to the 1994 National Non-Fed Beef Audit, nearly \$70/head is lost in value from cull cows. The majority of the cull cows marketed in the northeast are from dairy farms and are relatively young. Fed to a proper body condition, beef from these cows would be acceptable for the “white cow” beef market. Increasing carcass quality of beef cows has been demonstrated, but few studies have been reported using cull dairy cows. The purpose of this study was to examine the effect of management and nutrition on carcass composition and quality of cull dairy cows.

Non-pregnant dairy cows (n=65) were selected from cows purchased at three sale barns and sent to Cornell’s Beef Teaching and Research Unit in Dryden, NY (fed) and fed a high energy diet for 70 days. At about the same time another group of cows (n=19) was purchased to be similar in body type, condition score and age and sent immediately to slaughter (non-fed). Cows were randomly assigned to a diet with no supplement or one containing Optaflexx[®]. One half of the cows in each treatment were implanted with Revalor H[®]. Complete carcass data including primal weights were collected on both groups of cows. Implanted cows fed Optaflexx[®], tended to have a larger ADG and REA than other treatments. Implanted cows fed Optaflexx[®] had larger primal cuts whether expressed as absolute weight or as a percent of hot carcass weight (HCW). In comparing the non-fed and fed cows, feeding increased carcass quality of Holstein cows. The carcasses from the fed cows were heavier, contained more external and intramuscular fat, the fat color was whiter, and a higher percentage were of the desired quality grade of Boning utility and White cow. In addition all the primal cuts measured were heavier and represented a higher proportion of the HCW in fed vs. non-fed cows. At arrival 9.4% (n=5) of the fed cows tested positive for antibiotics. At slaughter, 0% tested positive.

The combination of Optaflexx[®] and Revalor H[®] increased carcass quality of cull dairy cows. Feeding also increased weight gain and carcass quality compared to cows sent directly to slaughter.