Cornell Researchers

(Continued from Page A1)

at the American Society of Animal Sciences regional meeting at the University of Massachusetts, Amherst, Mass., on June 29, and he will present them at the society's annual meeting in Denver during the last week in July.

He and his Cornell colleagues studied 120 steers at Cornell's Teaching and Research Center in Drvden, N.Y. The other researchers were Danny G. Fox and Donald H. Beermann, professors of animal science, and Deborah J Ketchen, manager of beef research

at the Cornell Teaching and Research Center.

"Ruminant animals play a valuable role in recycling nutrients from human food processing, says Fox. "Bakery waste is one of those by-products where ruminants can play a major role in recycling."

Bread and other bakery products were mixed with regular feed. The com-based finishing diet for the beef steers was 18 percent corn silage, 63 percent corn grain, 9 percent hay, about 7 percent soybean meal and about 3 percent minerals. By comparison, the bread-based diet was 18 percent corn silage, 15 percent corn grain, 55 percent bread, 7 percent hay, about 3 percent soybean meal and about 2 percent minerals.

Guiroy says the bread-based diet does not affect quality or yield-grades of the beef, and the researchers were aiming for Choice Quality grade beef in 80 percent of the cattle. The beef was tested for tenderness with Warner-Bratzler shear force measurements, which determine how much force is needed to cut meat.

The steers fed on the bakery diet were managed according to Cornell's animal use and care guidelines, and were slaughtered at a packer in Pennsylvania

A panel of tasters reported no difference in taste of steaks from the animals fed the bread-based diet compared with meat from animals fed on a traditional cornbased diet. According to the researchers, beef producers in New England have been feeding bakery waste to some cattle for years

However the Cornell research documents for the first time the net energy value of bakery waste and its effects on meat quality

The title of Guiroy's talk at the Amherst meeting is "Effects of Feeding Bakery Waste on Performance and Meat Quality in Beef Steers. " Cornell's animal science department is part of the New York State College of Agriculture and Life Sciences.

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