

Fine-tuning beef cattle feeding

BELTSVILLE, Md. — By better understanding the effect of various feeding regimes on cattle of different body types (conformation), producers may one day be able to adjust their feeding practices to produce cattle of a desirable weight and grade, says Gordon L. Haaland, a research nutritionist with USDA's Science and Education Administration.

Haaland presented the results of a feeding study using Holstein and Angus steers at the annual meeting of the American Society of Animal Science held recently at Ithaca, N.Y. The study showed marked differences in how cattle of different body conformation utilize energy.

Haaland and his colleagues in SEA's Ruminant Nutrition Laboratory, Beltsville, Md., fed Holstein and Angus

steers diets containing either 12 or 15 percent protein. Steers weighed 225 to 350 kilograms at the start of the experiment. The diets consisted of a cracked-corn-based concentrate and corn silage.

Rations were adjusted to either 12 or 15 percent crude protein using soybean meal, and were fed either near body maintenance or free-choice.

When comparing the diets, the digestibility of feed was increased for Holstein steers when the protein was increased from 12 to 15 percent.

However, the Angus, increasing the protein content of the diet from 12 to 15 percent did not increase the digestibility of the ration. Consequently, breed difference is of significance in formulating diets.

The study also showed that the more cattle ate (whether

Angus or Holstein), the less efficiently they digested their food. However, with increased levels of intake, digestibility was lower with the 12 percent protein diet than with the 15 percent protein diet.

In comparing breeds, Haaland found that Holstein

steers required 20 percent more energy for body maintenance than Angus steers. Therefore, when fed a percentage of their live weight, Angus had more energy available for tissue growth.

However, Angus also had a high percentage of tissue

growth in the form of fat. At equal intakes, Holsteins deposited slightly more lean tissue than Angus, and Angus deposited nearly twice as much fat.

"This study emphasizes the importance of fine-tuning feeding regimes to fit the body type of the cattle being fed. By tailoring the

type of feeding program to the conformation of the animal, the producer can save money while producing a better product," Haaland said.

Food variety aids nutrition

LITITZ — Variety is the spice of life, especially when it comes to good nutrition. Eating a variety of foods is one of the seven dietary guidelines Pennsylvania 4-H'ers are studying in their 4-H food-nutrition program.

An adequate diet should contain a variety of foods daily, including selections of fruits and vegetables; whole grain, enriched breads and cereals; milk, cheese and yogurt; meats, poultry, fish, eggs and legumes (dry peas and beans).

The greater the variety of foods, the less likely a person may develop a single nutrient deficiency. While food alone does not assure a healthy body, good eating habits based on moderation and food variety contribute to improving nutrition and health.

The Pennsylvania 4-H food-nutrition program helps young people develop skills in planning, purchasing, preparing and serving tasty, attractive and nutritious meals and snacks. The program urges boys and

girls, eight to 19 to learn by doing, and become familiar with the principles of nutrition as they relate to health, physical fitness and an attractive appearance.

As an added incentive, Pennsylvania 4-H'ers who excel in their 4-H food-nutrition projects are eligible for awards donated by General Foods and arranged by National 4-H Council.

Four members from each county receive medals of honor.

Survey

(Continued from Page A32) for local governments and interest groups to become familiar with the Citizen's Viewpoint as a source for a great deal of information. He pointed out copies of individual county survey results can be obtained at local Extension offices.

"After local people take a look at the survey information, we will be glad to go over the survey with them and help them pull out pertinent issues. Then if there is specific information desired, the computer at the University will be able to sort it and organize it by sex, age, and county," Fox said.

Fox concluded by encouraging planning groups to make use of the survey. He noted the first request for data using the University's computers is free. However there may be a charge after the initial request, he said.

For more information, contact him at the Dauphin County Cooperative Extension Office, 75 South Houcks Road, Harrisburg, PA 17109, or contact your local Extension office.-SM

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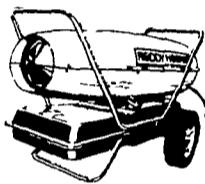
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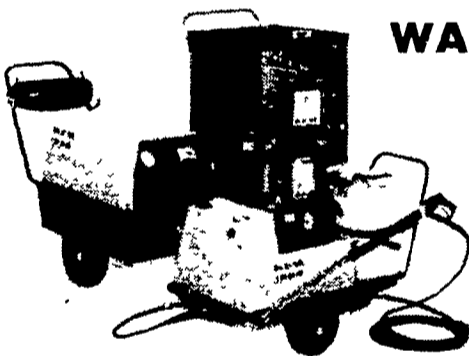
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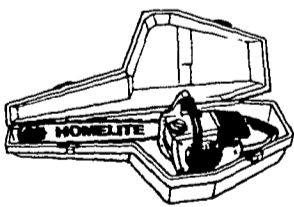
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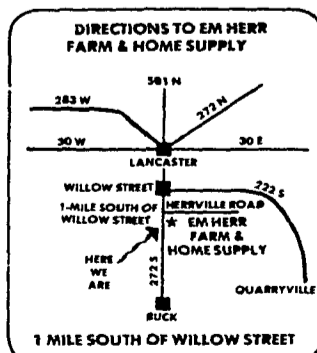
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