impact
of the College of Agriculture and Life Sciences

Competitive Agricultural Systems in a Global Economy

Meat By-Products Improve Value Per Animal

Issue

Meat animals, including cattle, sheep, swine, goats, and poultry animals such as ostrich and emu yield both edible and inedible by-products at slaughter. At the request of ranchers and processors, the Meat Laboratory at the University of Arizona has developed an array of meat by-products (anything that comes from the slaughter of a meat animal) to increase the value of each animal.

What has been done?

Various meat by-products were developed at the UA Meat Lab for the pet feed industry, primarily for treats. Products include cooked and smoked beef bones; cooked and dried organs such as heart, liver and kidney; and products from connective tissue, including tendons and neck straps, to be eaten as "chews." A shelf-stable meat log for pets includes 50% meat, along with peas, carrots, and other ingredients. Poultry products include smoked and dried ostrich, turkey and emu necks; emu and ostrich jerky, and ostrich and emu Italian and summer sausage. The lab meets federal inspection guidelines for sanitation, and each product has label approval from the Food Safety and Inspection Service (FSIS). The UA Meat Lab currently produces these by-products for several different pet food companies and for three zoos. A new meat product developed for zoos — for large cats in particular — uses beef and beef by-products in place of horse meat as a higher quality diet.

Impact

These products have improved the value of each animal by $45. The amount of waste that would ordinarily go to a renderer is reduced by an average of 20 percent. Ostrich products, considered lean meat, have been picked up by pet food companies to be marketed in overweight dog products. Some of the procedures developed at the University of Arizona for producing animal by-products have been adopted by the commercial meat industry.

Funding
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