

## *Competitive Agricultural Systems in a Global Economy*

# **Meat By-Products**

### ***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, John Marchello, UA meat scientist, 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.” 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.

### ***Impact***

These products have improved the value of each animal by \$40 to \$50. The lab has developed one product

so original that the UA is applying for a patent on the formula for it. It's a shelf-stable meat log for pets that includes 50% meat, along with peas, carrots, and other ingredients. Ostrich products, considered lean meat, have been picked up by pet food companies to be marketed in overweight dog products.

### *Funding*

University of Arizona College of Agriculture

### *Contact*

John Marchello, Professor  
Department of Nutritional Sciences  
The University of Arizona  
Shantz Room 309  
Tucson, AZ 85721  
Tel.: (520) 621-1188 FAX: (520) 621-9446  
Email: jam@ag.arizona.edu