On July 25, 1996, the United States Department of Agriculture Food Safety and Inspection Service (USDA FSIS) mandated requirements in efforts to reduce the occurrence and numbers of pathogens on meat and poultry products, reduce the incidence of foodborne illness associated with consuming these products, and provide a framework for modernization of the meat and poultry inspection system. What does all of this mean to meat processors and how will your business be affected?

The new regulations require that you establish four new programs. The first program requires that each establishment develop and implement written sanitation standard operating procedures (Sanitation SOP’s). Secondly, regular microbial testing will be required for slaughter establishments to verify the adequacy of a plants’ process controls for the prevention and removal of fecal contamination and associated bacteria. All slaughter plants and plants producing raw ground products must meet pathogen reduction performance standards for Salmonella for the third program. Lastly, all meat and poultry plants must develop and implement Hazard Analysis and Critical Control Point (HACCP) programs.

USDA FSIS established dates for implementing these programs in plants:

**HACCP Programs**
- January 26, 1998, in large establishments, defined as all establishments with 500 or more employees.
- January 25, 1999, in smaller establishments, defined as all establishments with 10 or more employees but fewer than 500.
- January 25, 2000, in very small establishments, defined as all establishments with fewer than 10 employees or annual sales of less than $2.5 million.

**Sanitation SOP’s**
- January 27, 1997, for all establishments.

**E. coli Process Control Testing**
- January 27, 1997, for all establishments.

**Salmonella Pathogen Reduction Performance Standards**
- Simultaneously with applicability dates for implementation of HACCP.

As you can see from this timetable, all state and federally inspected meat and poultry plants have less than 5 months to develop, maintain and adhere to written Sanitation SOP’s, if they are not already in place. Sanitation SOP’s must describe all pre-operational and operational procedures your plant conducts daily to prevent direct contamination or adulteration of products. With the implementation of Sanitation SOP’s and upon the effective date of this regulation, plants not otherwise notified by their inspection authority may begin daily processing once pre-operational sanitation activities have been completed without the prior approval of an inspector.

In addition, on January 27, 1997, plants will be expected to begin E. coli process control testing. State inspected plants will begin sampling carcasses for E. coli next June, July and August. FSIS will use production volume as the basis for determining the frequency at which plants will conduct E. coli testing. FSIS published guidelines that provide additional, detailed information on how best to sample, test, record and interpret results for E. coli under this regulation.

To help you develop and prepare Sanitation SOP’s, KSU is offering a one-day workshop on Saturday, October 12, 1996, in Manhattan. Contact the Department of Animal Sciences and Industry at (913) 532-6131 to obtain more details about this informative workshop.

**Opportunity Available**

Pony Express Ranch Meats is interested in finding a capable, experienced meats person who would like a career with good future potential in a family owned, successful, USDA inspected specialty meat plant. The owner is retiring and will offer salary, training, benefits and equity to the right person who would like to learn and have their own independent business. For more information, contact Jim Swim, Pony Express Ranch Meats, Box 246, Marysville, KS 66508, (913) 562-3726.
### Producing Award-Winning Meat Products

Earlier this year, several award-winning Kansas meat processors shared their tips and insight on creating champion products during a KSU-KMPA sponsored workshop. Excellent pointers on producing boneless hams, bacon, chopped and formed jerky, summer sausage and snack sticks were presented.

To create a competition quality summer sausage, Bob Danler, Flint Hills Foods, offered these suggestions:

- **The key to grinding is to be sure to have sharp knives and cold meat. Keep meat as cold as possible, to the point of having ice crystals, to enhance particle definition.**
- **Use the freshest meat possible.** Since beef is firmer than pork, Bob prefers to use a combination of 80% beef and 20% pork to achieve a desirable texture. Cow or bull meat should be used for the beef source and sow for the source of pork. The goal is to obtain a deep purplish red color in the final product.
- **Add seasonings to coarse ground meat and hold mixture in a cooler overnight before regrinding to enhance product color and flavor.**
- **To ensure good distribution of the cure and erythorbate in summer sausage, Bob recommended mixing the cure with water and the erythorbate with water before blending these ingredients into the meat block.**
- **Total mixing time, from start to finish, should not be longer than 5 minutes.**
- **To minimize swirling, match the size of the stuffing horn with the casing. Also, Bob does not use prestuck casings for competition.**

Wayne Beckman, Kensington Locker, shared these tips for producing award winning boneless smoked ham:

- **Sanitation and freshness are keys to success.**
- **Trim skin and excess fat off evenly, down to $\frac{1}{8}$ inch or less.** Since Wayne removes most of the seam fat, he estimates that about 3 out of 20 boneless hams will separate during tumbling. While boning, remove the heavy sinew above the aitch bone. Remove the aitch bone, the femur, followed by the shank meat and bone.

- **Always use fresh, cold pickle.** When making pickle, use coldest water possible and add phosphate first, stirring until completely dissolved before adding cure followed by erythorbate. Lastly, add ham spices and/or smoke flavoring.
- **Develop a good pumping technique to achieve uniform pickle distribution.**
- **Use intermittent vacuum tumbling for at least 6 hours before stuffing in presoaked fibrous casings. Lay the boneless ham in the stuffing horn, with the outside muscle on the bottom, the inside muscle on top and the tip muscle nearest to you. Carefully push the ham into the casing while keeping the muscles aligned. Force out as much air as possible, then clip and net.** If there is time available, set the ham back into the cooler for additional equilibration time and more shaping.