USDA STOP PROGRAM IN DAIRY COWS

by

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A new program to detect antibiotic residues in the meat of dairy animals going to slaughter at federally inspected packing houses was outlined by Dr. Grace Clark, senior staff officer in the Residue Evaluation and Surveillance Division of the U.S. Department of Agriculture.

Dr. Clark said the USDA has had a residue testing program since 1967, but the new program, labeled Swab Test on Premises (STOP), involves a simpler and faster test which will permit the screening of many more animals.

She said a 1976 survey found there were more antibiotic residue violations in dairy tahn beef animals going to packing plants. She cautioned that "dairymen must begin to use more precautionary measures in their use of antibiotics."

Dr. Clark said the STOP program will not determine the type or level of antibiotic residues in a carcass, but will serve as a means to screen those which need more exact testing.

If a carcass is then found to be in violation of permitted residue types or levels, it would be condemned. She said producers found in violation will "feel the effects in a variety of ways," with animal screened more carefully in the future and inspectors looking for injection sites in the carcass.

"We recognize this program can have serious effects on dairymen and we want them to be aware of this," Dr. Clark said. She noted also that work is being done to develop a screening test for on-farm use.

What You Should Know About...

ANTIBIOTIC RESIDUES IN CULL DAIRY COWS

(Taken from USDA, FSQS-22)

There is growing government and public concern over the presence of drugs in meat animals.

As a dairyman, you've known for years that you are responsible for the wholesomeness of your milk. But, have you considered that you are also responsible for the wholesomeness of meat?

If you haven't, you need to know that important changes are coming. A new test has been developed to detect drug residues in cull dairy cows before their carcasses leave the slaughterhouse.
What's the Problem?

Approximately 2.5 million dairy cows are slaughtered each year. Government surveys indicate that between 10 and 30 percent of the cows showing specific disease conditions at the time of slaughter contain illegal levels of antibiotic residues.

Under the Food, Drug and Cosmetic Act—administered by the Food and Drug Administration (FDA)—it is illegal to market animals if they contain drug residues above established tolerances.

Similarly, under the Federal Meat Inspection Act—administered by the U.S. Department of Agriculture's (USDA) Food Safety and Quality Service (FSQS)—meat cannot be sold for human consumption if it contains residues above the tolerances set by FDA.

What's Causing the Residues?

The use of drugs to treat or control animal diseases has long been a common practice. This is particularly true among dairymen. Intramuscular injections to control various infectious diseases and treatment for mastitis are the major source of antibiotic residues among dairy cattle. The most frequently detected drugs are penicillin and dihydrostreptomycin.

Failure to observe required drug withdrawal times—which are listed on the drug's labels—is a major cause of violative residues.

What's Ahead?

The major drawback to USDA residue testing has been the time required to observe laboratory results. Heretofore, Federal meat inspectors collected tissue samples at the slaughter plant and sent them to a FSQS laboratory for analysis. Because of the sophisticated testing required to identify and confirm the specific residue, it took up to 14 days before the inspector in the plant could be notified as to the results. While this testing was done, the carcass was retained in the packing plant. However, starting officially in Feb. 1979, USDA veterinarians will begin using a new "swab-test-on-premises" (STOP) program on dairy cows. This new screening program will detect antibiotic residues in animal kidneys in a matter of hours, before the carcass would normally leave the slaughterhouse.

If the swab test is negative, the carcass will be released. If positive, the carcass will be retained until tissue samples are analyzed in FSQS laboratories. If the muscle tissue contains residue above the FDA tolerance level, the carcass will be condemned.

How Will STOP Work?

Following ante-mortem and postmortem inspection, USDA veterinarians will swab test dairy cow carcasses showing injection lesions, as well as carcasses of animals they suspect received antibiotic therapy because of severe mastitis or some other disease condition.

In each screening test performed, the veterinarian will insert a swab into the kidney from the suspected carcass. This swab is placed on a test plate and incubated for 18 hours. If the sample is positive for the presence of antibiotics, the carcass will be retained at the plant. Kidney as well as
muscle and liver tissue samples will then be sent to an FSQS laboratory to determine the specific antibiotic residue present and its level of concentration.

After this testing -- which takes 7 to 14 days to obtain results -- those carcasses and parts thereof containing no residues will be released for consumption.

What Are the Consequences?

This new STOP program enables USDA veterinarians to test more suspect cows with faster results -- and do it right in the packing plant. It's safe, simple, and accurate in detecting antimicrobial activity.

Dairymen who send cull cows to market with violative residues will run a high risk of being detected. Packers will learn quickly which producers or dealers are marketing violative cows. They may refuse to buy animals from people with a history of violations to minimize the chance of having carcasses condemned.

When a violation occurs, USDA's meat inspectors will increase surveillance and testing of a producer's dairy cows. This procedure will continue until the residue problem is solved.

All incidents of illegal drug residues are reported to FDA, which has the authority to investigate and take appropriate regulatory action. In addition, if problems persist, tighter restrictions could be imposed upon the use of antibiotics.

In short, everyone stands to lose unless antibiotic residues are brought under control.

Industry-Government Teamwork

The National Milk Producers Federation, National Mastitis Council, and American Association of Bovine Practitioners, along with the National Dairy Herd Improvement Association and United Dairy Industry Association, and with the support of the American Dairy Science Association and the Animal and Health Institute, have joined forces with the USDA, FDA, State Extension Services and State Departments of Agriculture in a united effort to help dairymen and the rest of the meat industry eliminate the problem of violative antibiotic residues in dairy cattle.

A comprehensive educational program is underway to help dairymen avoid marketing animals with violative residues. Your help is needed, too.

What You Should Do Now

Dairymen, everywhere, should immediately review their use of drugs for disease prevention and treatment.

First, consider whether antibiotics should be used at all. If you do decide to use drugs, know the proper procedure and insist that it be followed in treating your animals. Buy drugs from reputable suppliers and sell your cows only to reputable dealers.

Here are some tips to remember:
*Keep complete and accurate records on when and what dose was given to each animal by you, your employees, or your veterinarian. Know the withdrawal time and don't sell the animal before that date. Don't forget, the withdrawal time begins the last time the drug was administered.

*Remember, misuse of intramammary infusion drugs as well as injectable products will also cause tissue residues. When in doubt about how a drug should be used, consult your veterinarian or the dealer who sold you the antibiotic.

*Mark treated animals and, if possible, isolate each animal that has been treated.

*Drug labeling instructions change frequently; always look closely for the correct dosage and withdrawal time each time you but and use an antibiotic.

*Use only the exact dose recommended for the species and size of animal being treated.

*Administer the drug correctly; select needle size and injection site carefully. Adverse reactions and ineffective treatment -- as well as violative residues--can result from incorrect use of drugs.

*Don't "double dose"--for example, don't use an injectable drug along with the same antibiotic orally. On the advice of your veterinarian, if you do exceed the label's dosage directions, you and/or the veterinarian must be responsible for a longer withdrawal time.

*Be sure your veterinarian advises you on the safe date to market animals he treats, and the composition of any drugs administered.

Remember, safe meat--like safe milk--is your legal responsibility, Protect your investment and maximize your returns from the sale of cull cows by ensuring that they are free of antibiotic residues.