Dairy Mgt. Conference

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Dr. Larry Hutchinson
Penn State Extension Veterinarian

Residue Avoidance

Pennsylvania has one of the highest contamination rates for drug residues in bob veal calves, according to Hutchinson. About 47 percent of the Northeast's sulfa drug contamination cases occur in Pennsylvania, although some of these animals come from out of state for slaughter.

"We need to address this problem (of drug residues) and get our act cleaned up." Hutchinson cautioned dairymen.

Most slaughter plants now test for drug residues in meat by performing the STOP test (Swab Test On Premises). The most commonly occuring residue problem is sulfa drugs in bob veal calves. Bob veal calves are dairy calves sent to slaughter at less than one month of age. Sulfa drugs generally require a 20-30 day withdrawal period for drug residues to clear.

The LAST test (Live Animal Swab Test) is now available. It provides the producer with a quick method to detect the presence of bacteria-inhibiting substances in the urine or milk of the live animal before it is marketed.

Research has shown that calves fed milk from a cow that has been treated with antibiotics will have residues of the drug in their meat. Therefore, Hutchinson recommended not to feed milk from treated cows to calves that will be sent to market until the milk is free of drug residues. He reminded dairymen to read the drug label for the recommended withdrawal time. There is no apparent detriment to feeding milk from a cow treated with antibiotics to a calf that will remain in the herd.

Hutchinson suggested avoiding the use of antibiotics as a preventive measure in newborn calves. To keep calves healthy he recommended:

-Get colostrum into calves immediately.

-Calve cows in a clean, dry area.

-Provide claves with clean, dry bedding and good ventilation to avoid scours and pneumonia.

Vaccination Programs at Calving Time

Hutchinson also spoke on establishing and updating effective vaccination programs. Because there are new vaccines available for cattle diseases, he urged dairymen to review their present vaccination program.

He recommended using the following vaccines in all herds: IBR-PI3, Brucella, and Lepto-5 strain.

He recommended using the following vaccines if your herd is at risk,(if the disease is in your herd or in the area): BVD, Vibrio, Pinkeye, Coli, and Haemophilus pneumonia.

He said he would probably not recommend the use of vaccines for: Clostridia, virus calf scours, Chlamydia, and Staph.

Effective use of vaccines can be made by following these pointers:

1. With your veterinarian, develop the right vaccination program for your farm.
2. Review and update the vaccine program at least twice a year.
3. Don't use unnecessary vaccines.
4. Buy fresh, refrigerated vaccine from a reliable source.
5. Keep vaccine refrigerated until use.
6. Follow the label directions exactly.
7. Use sterile, disposable syringes that have not been used for othe drugs.
8. Discard outdated vaccine or opened bottles that cannot be used right away.
9. Don't mix two vaccines unless so indicated by manufacturer's directions.
10. Don't vaccinate sick or stressed cattle.

Linda Scibilia, graduate student, dept. of dairy science
Dairy Calf Energy Needs in Cold Weather

Ms. Scibilia, a native of New York State, has been researching the affect of energy in the ration on average daily gain of calves under one month of age that are exposed to cold weather.

The calves in her experiment were fed milk replacer with varying levels of fat. They were measured for average daily gain (ADG).

Research has demonstrated that calves need extra dietary energy in winter if they are housed in the cold, in order to maintain a desirable ADG.

The National Research Council recommends 10 percent fat in milk replacers or 1.71 megacalories of metabolizable energy per pound.

Ms. Scibilia's research suggests that this level may not be adequate in cold weather.

Jerry Jones, dairy Extension specialist, VPI
Dry Cow Care and Management

Problems occuring during the dry period tend to show up later during the following lactation, according to Jones. For this reason dry cow care is extremely important.

"Length of the dry period has a definite affect on production of the following lactation," said Jones. "The ideal length is 50-70 days."

Jones proposed that cows should be fed on an individual basis during the dry period just as they are during lactation. Each cow has different nutritional needs that should be met. Cows that are over condition should be fed to reduce weight before calving to avoid the problems associated with the "fat cow syndrome."

Body condition during the dry period also affects production. Diseases associated with the cow at calving are, milk fever, ketosis, retained placenta, metritis, displace abomasum and indigestion.

Jones outlined nine points for improve dry cow care:

1. Separate from milkers.
2. Balance ration.
3. Avoid diet changes at calving.
4. Restrict corn silage and grain.
5. 50 to 70 day dry period.
6. Keep cows open 100 to 120 days.
7. Provide exercise lot.
8. Provide good water supply.
9. Worm if needed.

Larry Muller, professor of dairy science
Feeding the Dry Cow for Daylight Calving

Muller is conducting research that may allow dairymen to sleep easier at night. He is trying to determine if it is possible to induce cows to calve during daylight hours by controlling their feeding during the dry period.

Most farmers under normal feeding conditions have an even distribution of calving times, Muller reported. Some research indicates that you can increase the percentage of daylight calving by restricting feeding to one time per day during daylight hours.

Muller reported that his research has found that, one time per day feeding of dry cows between 5 - 7 p.m., starting two weeks before calving will result in a 10-15 percent increase in daylight calving.

Muller said, he is looking for dairymen in Pennsylvania who would be willing to cooperate with him on research in their herds on this subject.

Look for more informaton from the Penn State Dairy Herd Management Conference in next week's issue of **Lancaster Farming.**