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PREVENT

MASTITIS

DON'T GAMBLE

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Mastitis is an inflammation of the udder brought about by the activity of bacteria (germs). It is known by other names such as garget, stringy milk, mammitis and cacked udder, but they are the same disease.

From the economic standpoint, mastitis is the most important disease of dairy cows. Losses suffered by the dairy farmer because of mastitis are great.

Losses caused by mastitis may be due to one or all of the following: (1) Decreased production, (2) poor-quality milk, (3) destruction of one or all quarters of the udder and, in some instances, (4) death.

SIGNS OF MASTITIS

In mild mastitis a few clots appear in the first milk removed. Sometimes there is a slight swelling of the infected quarter and this quarter may feel warmer than usual.

In acute mastitis many clots are formed and the infected quarter has an extensive abnormal secretion. The quarter is swollen, hard and hot. The body temperature is abnormal and the cow may be off feed.

In peracute mastitis all the symptoms of the acute form are exhibited, only in a more intense manner. In addition, the animal is usually completely off feed and very depressed. All cows that have mastitis will give less milk, but in a varying degree.

In chronic mastitis (flare-ups now and then) any one of the above types may be present, depending on severity of the case.

CAUSES OF MASTITIS

Improper management is the most common cause of mastitis. Mastitis is caused by bacteria which may be in the barn, on the cow, or in the udder at all times. These bacteria must have the right conditions to cause trouble. Improper management (poor milking methods, injury, dampness and cold drafts) provides the conditions necessary for bacteria to produce mastitis.

Mastitis differs from diseases like tuberculosis and Bang's in that mastitis is not caused by one germ but by many different types. Injuries, warts, chapped teats and cow pox may open the way for mastitis. Decreased milk production may serve as a warning of probable mastitis.
Feeding - Feed is not important either in causing mastitis or in preventing it. Some feel high protein rations play a direct part in producing mastitis, but there is no controlled experimental evidence to prove this.

Also there is no proof that high concentrations of various vitamins and minerals will help prevent or cure mastitis.

Use plenty of bedding; avoid drafts and cold.

TESTS FOR MASTITIS

There are many tests for the detection of mastitis. Two are of real value -- use of the strip cup and the laboratory bacteriological examination. A simple strip cup will do in every case.

Any of commercial types of strip cup will do. All you need is a container of some sort and a black-surfaced cover which shows up clots in the milk. The strip cup is an essential piece of dairy equipment and should be used regularly at each milking.

Watch your dry cows closely for signs of mastitis. Also pay particular attention to the cow that is about to freshen. Check each quarter of the newly freshened cow several times each day for the first week. During this period the udder is largest and most subject to injury.

Laboratory bacteriological examinations are only adapted to research work or to herd problems where the veterinarian does the work.

PREVENTING MASTITIS

Most mastitis can be prevented by good management. Good cow men have little trouble with this disease. The term management applies to a wide area of procedures that the dairymen go through every day -- like the ones listed in the following paragraphs.
When milk flow stops, remove the teat cups at once. Continued milking may injure the sensitive tissue lining of the teat and the lower portions of the udder. Then, the conditions are right for the organisms causing mastitis to start an infection.

Pay particular attention to animals that milk out rapidly or have one quarter that milks out more rapidly than others. It is very easy to forget and leave the milking machine on the easy-milking quarters or easy-milking cows after the milk flow has stopped.

When cows are drying off and milk production is low, it is especially easy to forget that you need less time for milking than when the cows are milking heavily. And, if you fail to remove the milking machine in time, mastitis may follow. When production is 5 pounds of milk or less per milking, stop milking with the milking machine.

Remember, always to have your milking machine in the best operating condition. Hard or cracked inflations cause mastitis. Your milking machine dealer can be of great help to you in keeping your milking machine in top operating condition. Many farmers use two complete sets of rubber inflations for each machine and alternate them each week. When not in use inflations should be thoroughly cleaned and stored in a cool dry place. Clean rubber inflations milk faster and last longer.
When prevention fails, treatment is necessary.

You may obtain treatment for your sick cows by seeking the services of a competent veterinarian -- a "must" in successful treatment of mastitis. Remember, your veterinarian has had extensive training in the use of antibiotics and the various sulfas now available. In addition, he understands the use of antiseptics, a very important point in mastitis treatment.

Call your veterinarian early.

Most mastitis begins as a mild case and becomes gradually worse. You can counteract the effects of these mild cases by removing all of the milk from the infected quarters as soon as you see clots or stringy milk by the strip cup. Follow this, by removing all milk every 1 or 2 hours until the milk becomes normal. Before milking, stimulate the cow for milk let-down -- wash udder in warm water and massage it. (See NDAC Circular 211, Better Milking Practices).

If this frequent removal of milk from the infected quarters appears to be having no effect, consult your veterinarian at once. If you have any doubt as to which procedure to follow -- whether to continue this partial milking or call the veterinarian -- don't gamble. Call your veterinarian.

The essentials of successful treatment then are: (1) Early diagnosis with a strip cup, (2) reduction of the effects by a frequent partial milking and (3) early veterinary treatment.

Another point to remember -- use the highly advertised mastitis cures with caution. Frequently, you can bring about a more severe case of mastitis than the one already existing if you use these "cures".

Another dangerous practice is to insert anything into the teat opening. The dairy barn, the cow's teats and the worker's hands all contain many potential mastitis-producing organisms. Germs may be pushed up into the mammary glands on the teat tubes etc.

Use of teat dilators and teat slitters is very dangerous and should be done only by a veterinarian.
STEPS IN CONTROLLING MASTITIS

WATCH YOUR MILKING MACHINE

Injury to the teats and udder is an important cause of mastitis. The delicate linings on the inside of the teat and udder may be injured even though there is no outside evidence of injury. An important management factor in avoiding injury to these delicate parts is the proper use of the milking machine.

Remember, always remove the machine when the milk stops flowing. Never let one man attempt to operate more than two units. Keep your milking machine in top operating condition. Hard, dirty or cracked inflations, too high a vacuum, or poorly operating pulsators will lead to mastitis. Varying pulsation rates also interfere with good milk let-down and may cause loss of milk. Have your milking machine service man check your machine at six-month intervals and follow his instructions.

BE SURE STALLS ARE LARGE ENOUGH

Stalls should be large enough to provide comfort and prevent injury. Stalls too short will force the cow to lie so her udder may be injured by contact with the gutter edge of the platform. Avoid support posts and sharp cement ridges in stalls as cows can injure teats and udders on them. Narrow stalls may cause cows to step on their own or each others teats.

KEEP COWS WARM AND DRY

Avoid drafts and cold, damp stall floors. Use enough bedding. Good straw, plus wood shavings, make an ideal bedding. Good bedding protects against drafts, dampness and cold and aids in preventing injury. Rebedding all cows before you retire in the evening helps prevent teat and udder injury and keeps udders clean.

STRIP CUP HELPS FIND MASTITIS EARLY

Regular use of the strip cup at each milking gives you a means of detecting mastitis early.

SEE YOUR VETERINARIAN

Early detection is essential to successful treatment. A competent veterinarian is usually less expensive than the use of highly advertised mastitis remedies.

(Illustrations courtesy of University of Minnesota)