

# Let's Control MASTITIS

## Prevention and Treatment Needed

By V. H. Fisher

Of the 2.5 million dairy cows in the United States, about one-fourth are believed to have mastitis in some degree.

By far the largest percentage of these will have chronic streptococcal mastitis. While this type of mastitis is seldom as violent or dramatic in its appearance as is the acute mastitis, it is many times more costly to the dairy industry.

Unlike acute mastitis, which is ushered in with a fanfare of alarming symptoms, chronic mastitis usually has a very insidious course and the infection may be active for weeks or months before it is recognized. The occasional visible flare-ups of chronic infection are usually short-lived and then simmer down to their regular chronic stage, at which time it is frequently incorrectly assumed the condition has been corrected.

### Destroys Tissues

Actually, from the time that the organism becomes established in the mammary tissue it is gradually but persistently destroying the milk-secreting tissues of the udder and replacing them with scar tissue. Eventually, if this process is not checked, the cow will become commercially non-productive. All the while this tissue change has been going on, the cow has been a possible source of infection to other animals in the herd.

The bacteria-causing mastitis can gain entrance into the udder and produce the disease only through the teat opening and teat canal. Conditions which interfere with the proper closing or cleaning of the teat opening all favor the entrance of infection. Hence, such things as warts, pox, chapped teats and injuries to the teats are all predisposing factors. Many authorities are of the opinion that mastitis is always associated with injury. All possibilities of udder injury should be minimized.

Most spread of mastitis is associated with the act of milking. The milk

### Good Milking Practices

- Milk cows in order of their classification.
- Before milking each cow, wash udder and teats with an approved warm disinfectant solution. Use clean cloths or disposable paper towels and change solution frequently.
- Strip-cup test each quarter immediately before each milking.
- Before putting machine on each cow, dip teat cups in clean water, then in disinfectant solution. Use vacuum and pulsations recommendation of manufacturer.
- After milking each cow, dip the ends of the teats in disinfectant solution.

### Good Management Practices

- Feed cows properly and for moderate production.
- Eliminate mechanical hazards that can cause udder injuries; i. e., loose wire and rubbish in pastures and corral, high door sills, slippery floors, and crowded stalls.
- Keep barn and corrals clean and disinfect milking floor frequently.
- Thoroughly clean and disinfect all milking equipment immediately after each milking.
- Feed calves pasteurized milk; or, if raw milk is used, prevent them from suckling each other.

from an infected cow is carried to the teats of other cows on the hands or equipment of the milker. Infection can also be spread by other means, such as unsanitary corrals and barns and by flies.

The practice of feeding calves unsterilized milk from infected cows permits them to infect one another's mammary glands if allowed to suckle one another. In this case the infection is usually not recognized until the heifer freshens with mastitis.

To control mastitis it is necessary to detect the infected animals in the herd and to classify the cows and handle the herd under a sound management and sanitary program. Many of the infected animals do not constantly show clear-cut evidence of infection and hence it is necessary to use special tests to pick out the infected individuals. Laboratory tests of the milk are the most comprehensive methods of diagnosis, but are not a necessity.

Regular use of the strip cup or similar device immediately prior to each milking, and recording of all positive findings regardless of how mild they may seem, will soon establish a pattern of infection. These findings, along with other available barn data, such as frequent bromthymal blue tests, udder examinations, and classifications conducted by a veterinarian will enable the herd owner to classify

his herd into three groups: Group I—Negative cows, free from evidence of infection; Group II—Cows that are suspicioned of infection; and Group III—Positive cows known to be infected. The cows are then arranged and milked in this order, using the most approved sanitary procedures.

### Treat Infected Animals

Treatment is given to all infected and suspected animals. Those that prove incurable are disposed of by slaughter. The cows are not advanced favorably from their original classification as long as they remain in the herd, regardless of the apparent response to treatment. Strip-cup examinations are made routinely at each milking, and periodic chemical (barn) tests are made at regular intervals.

First-calf heifers are placed at the head of Group I as they freshen unless shown to be doubtful. All cows dry at the time of the original classification are added to Group II upon freshening, as are purchased additions.

The control of mastitis depends primarily upon prevention rather than treatment, but a combination of the two usually gives excellent results.

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