

The Role of Cow-Side Somatic Cell Tests in Managing Fresh Heifers

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The dairy heifer represents the future of every dairy herd and should contribute to the farm income upon freshening. Whether purchasing or raising your own, don't assume that your dairy heifers will freshen clear of an udder infection. Studies indicate that intramammary infection (IMI) (mastitis) in heifers is frequent; on average, 50% of heifers have some type of IMI at freshening and up to 90% have been reported to have at least one infected quarter at calving.

Somatic cell counts (SCC) are widely used as indicators of udder health within a herd and can be an effective tool in evaluating and improving herd management practices. The lower the somatic cell count, the healthier the udder and the higher the quality and quantity of milk produced. Uninfected heifers should have a SCC less than 75,000 cells/mL one week after calving.

Somatic cell counts should be one of the management tools used in evaluating fresh heifer udder health. Heifer IMI may persist for long periods of time, this can cause elevated SCC and may impair mammary development, adversely affecting milk production over subsequent lactations.

Conducting cow-side somatic cell tests can help you to identify milk quality trends in specific cows in a timely fashion. A good fresh heifer mastitis management program has both post calving and pre-calving considerations:

Post-calving mastitis management considerations:

- Monitor the incidences of clinical mastitis in fresh heifers; if more than 10% of heifers per year have clinical mastitis within the first two weeks of lactation, there is likely a problem with your mastitis management program.
- Collect quarter samples for SCC from all heifers 3 to 6 days after freshening.
- Monitor SCC regularly during the

first few weeks postpartum.

- SCC's are a useful tool for monitoring the success of mastitis therapy.
- Heifers with greater than 200,000 cells/mL should be cultured to identify infectious organisms.
- Heifers from herds with a high prevalence of contagious mastitis will likely be infected with contagious pathogens.
- Heifers from herds with a high prevalence on environmental pathogens (clinical mastitis) will likely be infected with coagulase negative staphylococci (CNS) and/or environmental streptococci.
- Heifers from herds with a high SCC tend to calf with a higher incidence of mastitis.

Pre-calving Mastitis Management Considerations

- Reduce exposure to environmental pathogens
- Segregate bred heifers from dry cows
- Treat prior to freshening (consult with

veterinarian)

- Barrier teat dips/sealants
- Mastitis vaccination program
- Somatic cell monitoring post calving

There are several commercially available products that can be used to monitor udder health on the dairy farm. These include the CMT, the Mas-D-Tec®, the Charm SomaLite™, the DeLaval DCC and the PortaSCC® milk test. Of all these tests, our experience has shown that the DCC and the PortaSCC are not only easy to use, but provide reliable, quantitative cell counts.

By regularly monitoring and lowering your herd's somatic cell count, milk production will increase and so will your profits.

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The PortaSCC hand-held digital reader and test strips. For more information visit www.portacheck.com