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The Role of Somatic Cell Count Monitoring

Managing Fresh Cows

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The cornerstone of every successful dairy is a good fresh cow-monitoring program. The purpose of a monitoring program is to detect problems in your herd as quickly as possible so that you can implement an effective action plan.
Cows that freshen with high SCC (> 200,000 cells/ml) appear to be more likely to experience clinical mastitis in early lactation.

Despite proper dry cow therapy and an effective dry cow management program to reduce bacterial contamination, well-managed herds may still see infected quarters at calving. The greatest incidence of both clinical and subclinical Mastitis is one of the leading causes of early herd removal and decreased milk production; the impact of which is major economic loss.

SCC and Production Percent (%) Loss

SCC %	Loss
100,000	2.5
200,000	5
300,000	6
400,000	7
600,000	8
800,000	9
1,000,000	10

A somatic cell count should be taken prior to dry off and compared to a somatic cell count postpartum. The changes from dry-off to calving allow you to evaluate your dry cow management, antibiotic efficacy, and infection status of the cow.

Monitor fresh cows by screening for subclinical infections.
Uninfected cows will have SCC <100,000 cells/ml. Cows with SCC >200,000 cells/ml should be suspect of having subclinical mastitis.

Determine somatic cell count for individual cow quarters 3 to 6 days after calving.
Early detection of new or reoccuring infection allows for rapid intervention opportunities including treatment, segregation or culling.
Early detection of an udder infection and possible treatment may reduce the period of time bacteria is shed into the bulk tank.
Allows for early identification of potential infections and may preclude severe mastitis outbreaks.

Culture high SCC cow to determine if antibiotic therapy is appropriate.
SCC allows producer to monitor response to treatment. High SCC are related to increased risk of antibiotics in milk. Cow side somatic cell testing allows the producer to overcome the subjectivity of other procedures and allows for the testing of bulk tanks and individuals on a more timely basis. The use of SCC alone is not always adequate to determine if a quarter is infected or uninfected. Monitoring your herds somatic cell counts can save you money. Approximately 67% of the total economic loss from mastitis is from lost milk production.
By keeping your herds somatic cell count below 200,000; you are improving herd health, increasing milk production, and inflating your bottom line.

Managing Fresh Cows
Fresh cow screening allows the opportunity to increase milk production by lowering SCC and reducing the number of clinical cases of mastitis.