

# 400K Beat It!

## A collaborative effort of Dairy One and QMPS

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Reducing somatic cell counts is team work. Milk quality in the US is becoming a key issue in our access to international markets. Since a portion of our milk is going onto these international markets, it is now becoming a fact of life that milk will need to meet international milk quality standards. For long-term access to the milk markets, it will be important to always beat the 400K SCC quality limit. Many farms already do produce milk below this limit, but national data indicate that approximately 50% of farms are sometimes or more frequently going over the 400K cut-off.

To beat the 400K limit, it is important that several facets of your dairy are in good shape. Obviously, milking procedures and milk equipment are important. However, hygiene of the cow housing, consistency of the herd staff, dry cow programs, nutritional programs and certainly the producer's overall commitment to top-notch milk production all play roles in preventing high SCC levels.

Even all that may not be enough. Some cows may have nasty infections that result in persistent high cell counts (such as *Streptococcus agalactiae*), or the cows may show a lot of variation in cell counts due to exposure to mastitis-causing bacteria, such as *Staphylococcus aureus* or *Streptococcus uberis*.

For dairy producers who may need additional information or help to beat the 400K maximum count, we put together a new service package that provides a short-term but intensive boost to your milk-quality management. The program goes by its intention: **400K beat it!** We predict that you will start to see results approximately 6 months after starting the program. The program is currently being tested in a pilot project, and we plan to roll it out across our service area in the next few months. The 4 steps of the program are shown in Figure 1.

The key to the program is the formation of a milk quality team that supports you to reach your milk qual-

ity goals. The composition of the team is flexible and depends on the trusted advisors you or your dairy already work with. We anticipate that key members of your team would include your Dairy One market manager, your milk inspector (CMI), your herd veterinarian and your regional QMPS veterinarian.

The first step in the program is to complete a short risk assessment of your specific farm situation. The team will review and discuss this initial information and come up with a plan to work on the identified priorities. We anticipate that in many cases, the team meeting will be done by conference call, providing efficiency and cost-effectiveness.

In the second step of the program, we will set up the testing program for your farm. The testing program will include a 6-month, bulk-milk monitoring program and a series of individual cow production and cell-count tests.

The third step of the program is to collect and interpret all of the data. Before the team can suggest improvements, it is key to measure precisely what is happening in the herd: *"If you don't measure it, you can't manage it."* The bulk-milk monitoring provides an easy and cost-effective insight into the major bacteria that may be causing somatic cell count problems in your herd. The individual cow data will help identify the cows responsible for the production of the cells, and it will provide very good data on the dynamics of infections in your herd. Box 1 provides an indication of the most important causes of high cell counts.

Throughout the duration of the program, the QMPS veterinarian will provide you with reports that are based on results of the collected bulk milk and cow data. These reports provide concrete recommendations to lower the SCC in the bulk tank. Based upon the collected cow production and SCC samples, it is likely to identify some cows that need to be sampled for individual cultures. These samples can be collected through the Dairy One field person at the next test day.

The final step of the program consists again of a team meeting. The team will review all the data and the progress that has been made. The team then decides on the follow-up and steps necessary to ensure a continued production of high-quality milk. The combination of test-day information and regular reporting on the results may very well be a process that continues to be an important aid in your day-to-day management.

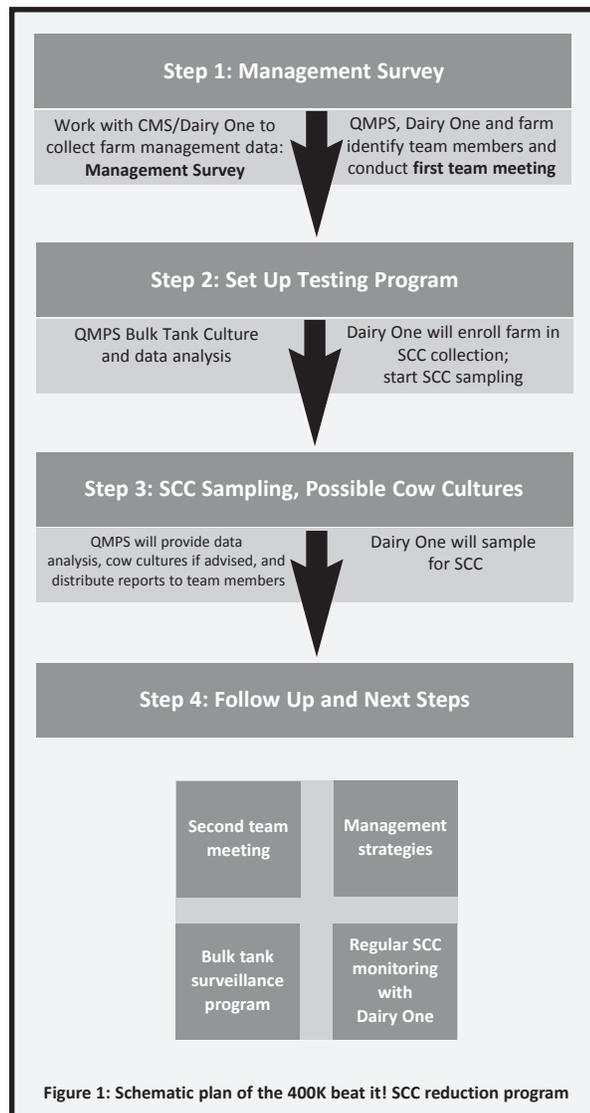


Figure 1: Schematic plan of the 400K beat it! SCC reduction program

### Box 1: The 4 most important causes of high SCC

- A few cows are responsible for the high cell count.
- There are too many cows with chronic high cell counts.
- There are too many cows that show a change in cell count from low to high.
- There are too many cows calving in with high cell counts.

The above 4 reasons may be across the herd or may be limited to a specific lactation group, such as the heifers or the cows in third or higher lactation. The issues may also be seasonal and only limited to the summer months.

Reducing somatic cell counts is team work. With the **400K beat it!** program, we provide you with a very focused short-term program. You will receive the best possible support and data to support your milk-quality management.

The end result will be an improvement in your herd's milk quality premium and an increase in milk production. An additional milk premium will show a return on your investment within a few months' time. So, you beat the 400K limit and there is a nice return on investment to go with it: a double benefit!

For more information on the program, contact your regional Dairy One market manager, your regional QMPS laboratory or your milk inspector. Again, the project is currently in its pilot phase and will be available to all farms in a few months.