

400 K beat it!

A collaborative effort of Dairy One and QMPS

Ynte Schukken and Jamie Zimmerman

For all dairy producers who may need some additional information or help to beat the 400K maximum somatic cell count, we have put together a new service package that provides a short-term – but intensive – boost to your milk quality management. The program’s name matches its intention: 400K beat it!

Reducing somatic cell counts takes teamwork. Milk quality in the United States 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. So, for long-term access to these milk markets, it will be important to always beat the 400,000 cells/ml (400K) SCC quality limit. Many farms already produce milk below this limit, but national data indicate approximately 50% of farms are sometimes or more frequently going over the 400K cutoff.

To beat the 400K limit, it’s important that several facets of your dairy are in good shape. Obviously, milking procedures and milk equipment are important. However, it’s not only the milking, but also the hygiene of the cow housing, the consistency of the herd staff, dry cow programs, nutritional programs and, certainly, the producer’s overall commitment to top-notch milk production.

Even all that may not be enough. Some cows may have nasty infections, such as *Streptococcus agalactiae*, resulting in persistent high cell counts. Or, 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 all dairy producers who may need some additional information or help to beat the 400K maximum count, we have put together a new service package that provides a short-term – but intensive – boost to your milk quality management. The program’s name matches its intention: **400K beat it!**

If things go well, we anticipate we will help you on your way in about 6 months. The program is currently tested out in a pilot project and we plan to roll it out across our services area in the next few

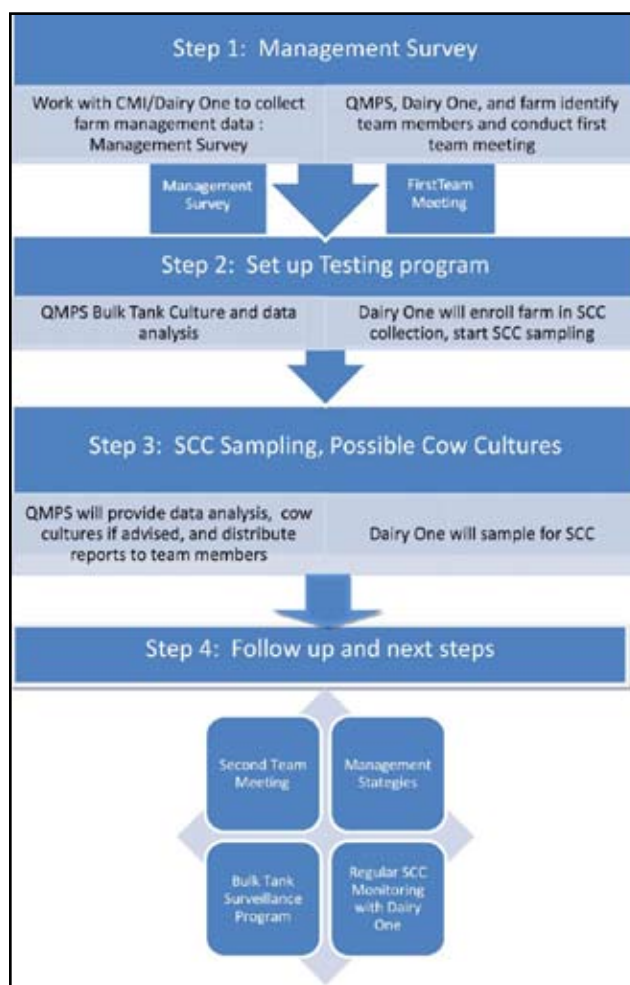


Figure 1. Schematic plan of the 400K beat it ! SCC reduction program.

months. The four 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 quality goals. The team's composition is flexible, and depends on what trusted advisors you or our dairy already work with. We anticipate your Dairy One market manager, milk inspector (CMI), herd veterinarian and regional QMPS veterinarian will be key members of the team.

The first step in the program is to complete a short risk assessment on your specific farm situation. With this initial information, the team will get an idea of the current situation on your farm. The team will review and discuss the 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, so it is efficient and cost-effective.

In the second step of the program, we will set up the testing program for your farm. The testing program will include a six-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 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."*

With the bulk milk monitoring, you will get an easy and cost-effective insight into the major bacteria that may be causing SCC problems in your herd. The individual cow data will help identify the cows responsible for the production of the cells, and provide very good data on the dynamics of infections in your herd. There are generally four important reasons for high SCC (**see box, below**).

Throughout the duration of the program, the QMPS veterinarian will provide you with reports based on results of the collected bulk milk and cow data. These reports provide concrete recommendations to lower the SCC in the bulk tank. It is likely, based on the collected cow production and SCC samples, some cows will 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 made. The team then decides on the follow-up and the steps to take to ensure a continued production of high-quality milk. The combination of test-day information with regular reporting on the results may very well be a process that continues to be important as an aid in your day-to-day management.

Reducing SCC takes teamwork. With the **400K beat it!** program, we provide you with a short-term, very focused program. You will receive the best possible support and the best possible data to support your milk quality management.

The final result will be that your herd's milk quality premium improves, milk production increases and, with the additional milk premiums, your investment in this program will show a return within a few months. So, you beat the 400K limit, and there's a nice return on investment to go with it: a double benefit!

For more information, 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.

QM² is the newsletter of Dairy One and Quality Milk Production Services.



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QMPS is a program within the Animal Health Diagnostic Center, a partnership between the New York State Department of Agriculture and Markets and the College of Veterinary Medicine at Cornell. The QMPS staff of veterinarians, technicians and researchers works with New York dairies to improve milk quality by addressing high somatic cell counts, milking equipment and procedures, and milker training in English and Spanish. QMPS also conducts research and teaching programs.

Reach the four regional QMPS laboratories at:

Central Lab, Ithaca.
877-MILKLAB (877-645-5522)

Eastern Lab, Cobleskill.
877-645-5524

Northern Lab, Canton.
877-645-5523

Western Lab, Geneseo.
877-645-5525

QMPS website:
<http://qmps.vet.cornell.edu>

Dairy One is an information technology cooperative, providing DHI records services and herd management software to dairies throughout the Northeast and Mid-Atlantic region. A comprehensive laboratory network provides milk quality testing as well as forage, soil, manure and water testing.

Contact Dairy One Cooperative Inc. at 730 Warren Rd., Ithaca, N.Y. 14850. Tel: 800-344-2697. Email: dmr@dairyone.com. Website: www.dairyone.com.

The reasons for high cell counts

The most important reasons for high SCC are:

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