

The Dairy Goat Digest

Issue #5

September 2004

The Dairy Food Safety Unit at the Ontario Ministry of Agriculture and Food (OMAF) wants to keep you informed of changes and updates to the Raw Goat Milk Quality Program and ongoing quality issues. This newsletter should provide you with the information you need.

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New Producer Labels to be in place October 1st

All Ontario goat milk producers should be receiving a supply of new milk sample labels in September. The new labels will remain 6 digit, with a slightly different font, and will contain the words "OMAF GOAT" below the trillium symbol. The new labels are necessary to accommodate a new scanning device expected to be in operation at Lab Services Division (LSD) on October 1st, 2004.

All labels are printed by LSD and delivered to the appropriate transporter depot. From the depots, goat milk transporters will be assisting with further distribution of labels to each farm.

Producers should ensure their new labels are in place in the label dispenser in their milk house on October 1st, 2004 to avoid sample rejections at testing. Old label stock should be discarded. If you have questions or have not received your new labels by October 1st, please contact Brenda Norris at 1-888-466-2372, Extension 64684 or 519-826-4684.

High SPCs, What to do

Occasionally dairy goat producers will run into trouble with high standard plate counts (SPCs) in their bulk tank sample. This can occur either quite suddenly, or as a gradual increase in numbers on consecutive bulk tank tests. Either of these scenarios calls for immediate action by the producer to work on pinpointing a cause. As has been seen on many occasions, the initial cause of high SPCs can often have compounding effects that continue to worsen the problem. For this reason, quick action on the producer's part to respond to the first sign of an elevated bacteria count is critical.

While investigating quality issues during farm inspections, more than one potential cause of high counts has routinely been found. If your SPCs are on the rise, conduct a thorough review of your entire milking and milk handling operation including: the milking equipment condition; its' cleanliness and operation; milk cooling; milking procedures; and milk handling. Animal health should also be looked at. Following is a detailed checklist:

Equipment condition, cleanliness and operation – check *all* milk contact surfaces.

Disassemble as much equipment as possible for visual inspection. Always use a good flashlight to see those dark areas.

- ☐ Rubber or silicone parts should be clean, smooth, free of cracks and deterioration (inflations, hoses, gaskets, valves, receiver jar plugs).
- ☐ Stainless surfaces should be clean and shiny when dry. Deposits or films often show up as a white or slightly bluish discoloration. Significant water beading (water droplets clinging to stainless surface) indicates a fat film. These films can be removed by using a specific power wash as outlined in the OMAF fact sheet [Troubleshooting Films & Deposits on Dairy Goat Milking Equipment](#). If in doubt, contact one of the Raw Milk Specialists listed in the contact section of this newsletter.
- ☐ Inspect the bulk tank when empty, clean and dry. Check all interior surfaces including the agitator and shaft, dipstick, gaskets, and disassembled outlet valve. Use a strong light to readily see difficult areas.
- ☐ Observe automatic wash systems in operation – be aware of times, temperatures, chemical concentrations and wash solution flow.
- ☐ If wash system problems are suspected, contact your dealer.
- ☐ Increasing the amount of cleaning chemicals is not always the answer.

Milk cooling – rapid cooling and maintenance of milk temperatures to between 1 and 4°C. is critical to quality.

- ☐ Does milk cool to between 1 and 4°C. within one hour of finishing milking?
- ☐ Optimum maintenance temperature of milk in the bulk tank is 1 - 2°C.
- ☐ Is there significant formation of ice in the cooler which can obstruct uniform cooling of milk?
- ☐ Does the compressor automatically start before milk temperature rises above 4°C.? It is preferable for compressor to start before milk temperature rises above 3°C.
- ☐ Is the milk temperature being monitored with an accurate thermometer?

Milking Procedures and Milk Handling

- ☐ Is all equipment sanitized and completely drained prior to use?
- ☐ Are animals clean prior to milking?
- ☐ Are udders clean and clipped of long hairs when necessary?
- ☐ Is a proper udder wash technique being followed?
- ☐ If milking unit drop-offs occur, are the inflations sanitized prior to being reattached?
- ☐ Is the correct vacuum level being used?
- ☐ Is the milk house water source potable? If water quality is suspect, collect a water sample from 'point of use' and submit it to your local health unit for testing.
- ☐ If a dipper is used to sample, check that it is clean and free of cracks or crevices that could harbour bacteria. Always sanitize the dipper before using it. Review cleaning and sanitizing procedures for dipper.

Animal Health – although a less common source of high bacteria, recent investigations indicate that infected goats may shed enough bacteria to markedly increase the bulk tank SPC. Actions to be taken include:

- ☐ Screen all milking goats using the California Mastitis Test (CMT) three to five times over a one week period. Note that a slight gelling or graininess is a normal reaction for goats milk. Goats are suspect when one or both udder halves score a two or higher.
- ☐ Any goats scoring two or higher should be pulled out of the milking group and their milk kept out of the bulk tank.
- ☐ Consider using a strip cup as part of the pre-milking routine to more accurately detect abnormal milk.
- ☐ Watch for udder halves that slacken off in production. Slack halves are a common sign of infection.
- ☐ Examine teat ends for signs of damage. Like any open wound, damaged teat ends can lead to infection.
- ☐ Treat or cull the infected goat(s).
- ☐ Consult with veterinarian if necessary.
- ☐ Keep all milk from any infected goats out of the bulk tank until the goat(s) are cleared of infection and antibiotics.

The above guidelines are intended to give producers direction for where to start looking in the event they run into high SPC's on their bulk tank samples. If problems persist producers are advised to contact their equipment dealer or OMAF Raw Milk Specialists.

What does OMAF's Raw Goat Milk Quality Program cover?

OMAF's Raw Goat Milk Quality Program is responsible for administering inspection services and raw goat milk testing as prescribed in regulations under Ontario's *Milk Act*. Following is a brief overview of what the program covers.

Since July 2003 two full-time Raw Milk Specialists, Mike Foran and Phillip Wilman, have been conducting a range of inspection work required by the program including on-farm inspections, evaluations of Bulk Tank Milk Grader performance and inspections of bulk tank trucks. These inspections are conducted under the authority of Regulation 761 of the *Milk Act* (Ontario) to evaluate, in detail, all aspects of milk handling which could influence the raw milk quality and safety.

Routine on-farm inspections are conducted annually on the approximately 170 dairy goat farms in the province. Additional inspections are conducted if premises are non-compliant with regulations, or if raw milk test results indicate problems with milk quality.

Bulk tank samples are collected by certified Bulk Tank Milk Graders (BTMGs) at each farm pickup of milk. These milk samples are refrigerated and transported to Lab Services Division, University of Guelph for random monthly regulatory testing. Milk quality test results are reported to OMAF, who in turn, reports results to producers as soon as possible.

The duties and responsibilities of the BTMG are outlined in regulations under the *Milk Act* (Ontario). Before becoming certified, BTMGs must attend a three day Bulk Tank Milk Grader's course and pass both a written and a practical milk grading examination. BTMG certificates are renewed by OMAF every five years upon successful completion of an evaluation of their performance. Raw Milk Specialists periodically accompany BTMG's on truck rides to review how they are carrying out their responsibilities and to ensure that proper procedures are being followed concerning milk and sample handling.

The bulk tank trucks that are used to collect milk at the farm and transport it to licensed processing facilities are also routinely inspected as part of the Raw Goat Milk Quality program. Milk trucks are inspected for cleanliness and sanitary design as outlined in regulations under the *Milk Act* (Ontario).

Food Safety & Quality Act, 2001

Now you may be asking, "Where are we with the *Food Safety & Quality Act*?" OMAF staff are completing a technical review of regulations specific to the dairy goat industry for inclusion under the new *Food Safety & Quality Act* (FS&QA). However, currently Food Inspection Branch, legal and policy staff, are working on the development of meat regulations under the FS&QA. This is the top priority of OMAF and was one of the significant recommendations made by Justice Haines in his report released July 22, 2004.

In January 2004, Justice Roland Haines was asked to examine the roles and responsibilities of various provincial ministries as well as local health units with respect to provincial abattoirs and free-standing meat processors. He was asked to assess the current regulatory standards and the co-ordination of inspection, compliance and enforcement. While Justice Haines concluded in his July report that the meat in Ontario is generally safe, he made numerous recommendations to improve the system further. The government has committed to implementing the recommendations.

Regulations developed under the *Food Safety and Quality Act* are being developed based upon an assessment of the risks along the food production and processing system. A risk-based

system uses scientific knowledge to proactively identify the food safety risks along the entire food chain. After potential hazards have been identified, appropriate measures including regulatory requirements can be established to minimize those risks. Modern approaches to food safety from around the world will also be considered as regulations are developed, as well as aiming to make regulations more outcome-based, as opposed to the more traditional, prescriptive format.

Over the past year OMAF has conducted both a raw goat milk baseline study, and a dairy goat producer survey to be able to summarize and document industry practices, and identify issues that will help in developing appropriate standards and regulations.

Dairy Baseline Study

From January 2003 to March 2004, an OMAF sampler collected milk samples from Ontario dairy goat farms as part of a raw goat milk baseline study. On average between six and eight one litre samples were collected from each farm over that period and delivered to Laboratory Services Division, University of Guelph for testing.

This dairy baseline study was conducted to help identify microbiological and quality risks in raw goat milk. Study findings will help to determine what kinds of quality standards (tests) are needed for goat milk, and what are reasonable and attainable levels. The data collected from the baseline study is currently being analyzed and summarized and a summary report is expected this fall.

Dairy Goat Producer Surveys

In March 2004 surveys were mailed out to all Ontario dairy goat producers requesting information on milk production practices. All of the completed dairy goat producer surveys have been collected and entered into a data base which will enable us to summarize results and analyze trends relating to milk quality. We have been very pleased with the overall response and participation by producers in completing surveys and providing comments. Eighty four percent (84%) of 170 producers completed surveys. We thank you for your time and thoughts. A generic summary of findings will be distributed to the industry later on this year.

Milk House Workshops

In March, Raw Milk Specialists, Phillip Wilman and Mike Foran conducted several informal milk house workshops with local producers in northern and eastern Ontario. These sessions were a good opportunity to demonstrate and explain some of the more common problems found to affect milk quality. The small group format allowed for good discussion between inspection staff and producers. If you are interested in hosting a milk house workshop, please contact Vanessa Taylor, Milk Quality Assurance Lead, at 519-846-3403.

Code of Professionalism for Inspectors

OMAF staff strive to demonstrate professionalism in the manner in which they deal with the public. Inspection staff in the Raw Goat Milk Quality Program use a code of professionalism to guide them in their daily interactions with industry partners. Following is a brief description of the main elements of professionalism we aim to maintain:

Honesty and Integrity - Conducting inspections and communication with the public in such a manner as to bring confidence and respect for the position of public trust held by inspectors.

Confidentiality - respecting and protecting private information collected from individuals.

Respect - treating businesses and the public with respect by being courteous.

Objectivity - performing all duties impartially and objectively.

Timeliness - conducting and concluding activities within reasonable time periods.

Knowledge and Competencies - Striving to be on the leading edge of technology and actively seek training opportunities.

Compliance and Risk - consider and weigh the risks to goat milk quality and safety, as well as the producer, when conducting inspection activities. If necessary, compliance actions can be taken by inspectors to bring about necessary changes.

If you have questions about the code, please contact Dairy Food Safety Program Manager, Rena Hubers at 1-888-466-2372, Extension 64378 or 519-826-4378.

OMAF Goat Website

<http://www.gov.on.ca/OMAFRA/english/livestock/index.html>

Check out the OMAF Livestock page on the web by clicking on the address above. Scroll down the page to the "Goats" section for all your information needs on animal health and livestock production, information on milk quality and procedures, forages, predator control, and more. You can also find archive copies of the Dairy Goat Digest in this section as well. There is a lot happening on the website with more to come, so keep checking back to the website regularly!

The Small Ruminant Scoop Newsletter

The OMAF website now has a newsletter dedicated to small ruminant producers! This exciting new publication covers dairy, meat and fibre commodities and provides information on animal health and livestock production that highlights current research and topics of interest relevant to goats and sheep. Click on <http://www.gov.on.ca/OMAFRA/english/livestock/goat/news.html> to check out the first edition of The Small Ruminant Scoop Newsletter and sign up today to receive the June/July 2004 issue!

Standard Plate Count Summary

Figures 1 and 2 on page 7 are a summary of the regulatory testing of goat milk samples conducted once a month on a random basis. Results of additional testing conducted by goat milk producer groups is not represented. Although OMAF's goal is to test all licensed producers each month, due to constantly changing numbers of active producers, and sample transport limitations, it is nearly impossible to achieve 100% testing.

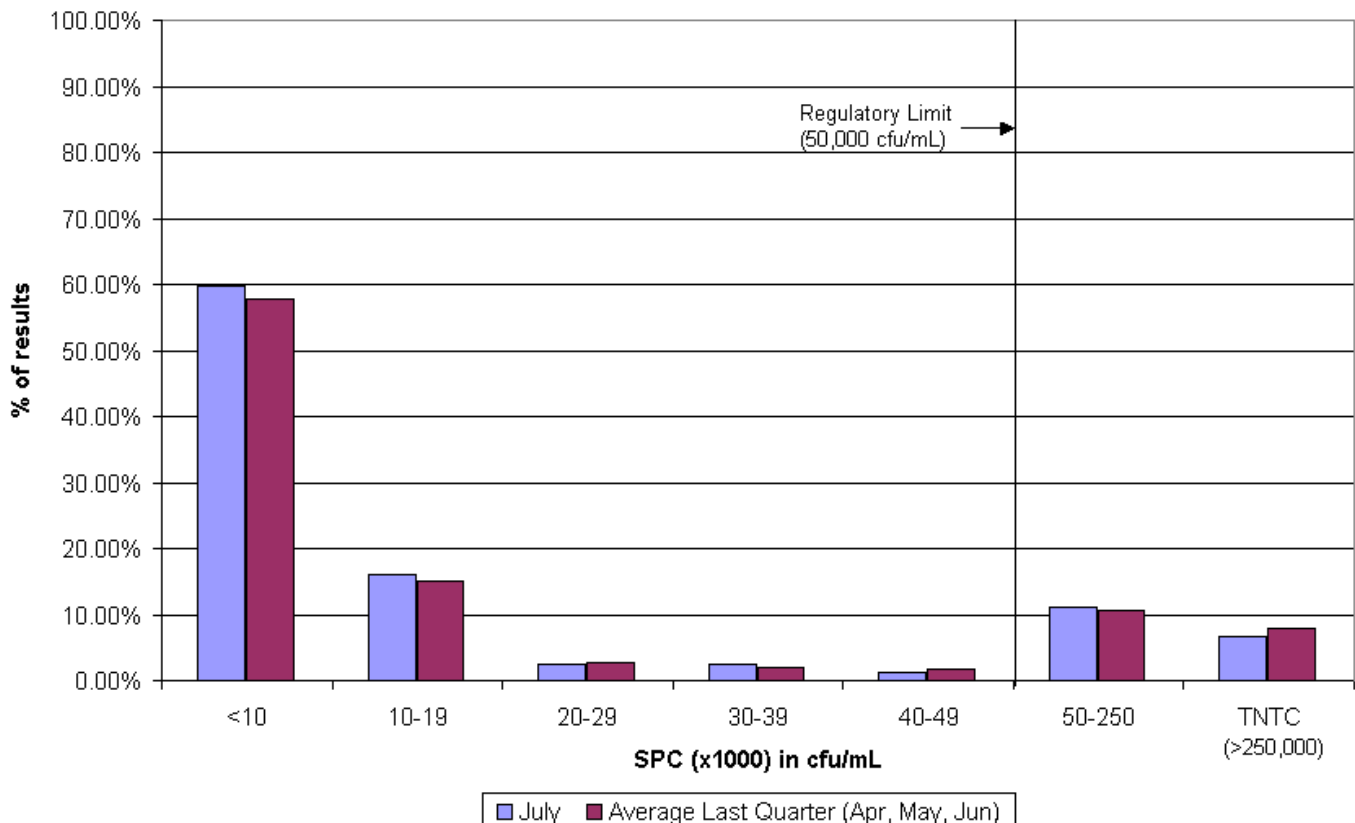
Figure 1

	# Licensed Producers	# Regulatory Tests	% Tested	% of tests		
				<50000	>50000	NR
July 2004	171	162	94.74%	82.1%	17.9%	0.00%
June 2004	172	167	97.09%	83.2%	16.8%	0.00%
May 2004	173	163	94.22%	84.7%	15.3%	0.00%
April 2004	174	164	94.25%	70.7%	23.2%	6.10%

NR = test not reportable; test malfunction

Figure 2

Regulatory SPC Results - July 2004



OMAF releases new Field Pocket Guide

- a practical tool to record crop management activities.

The Ontario Ministry of Agriculture and Food (OMAF) has developed a practical new tool to help farmers keep accurate records of their field management practices. Called a Field Pocket Guide, the record book is free to Ontario residents and \$20 for people outside of Ontario.

Pocket-sized and durable, this guide contains a variety of record keeping pages for things such as, tillage/ incorporation, weed pressure and nutrient application. It also contains handy conversion tables, calculators, field sketch pages, soil sampling guidelines and weed/pest identification pages and plastic “pocket” pages to insert notes in and keep records safe. The Field Pocket Guide is encased in a clear-vinyl sleeve to keep it protected while being used in the field, carried in a pocket or stored in the tractor.

The Field Pocket guide is now available through OMAF. To order your Field Pocket Guide call: 1-877-424-1300, or order it using the publication order form on the OMAF website at www.omaf.gov.on.ca.

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