



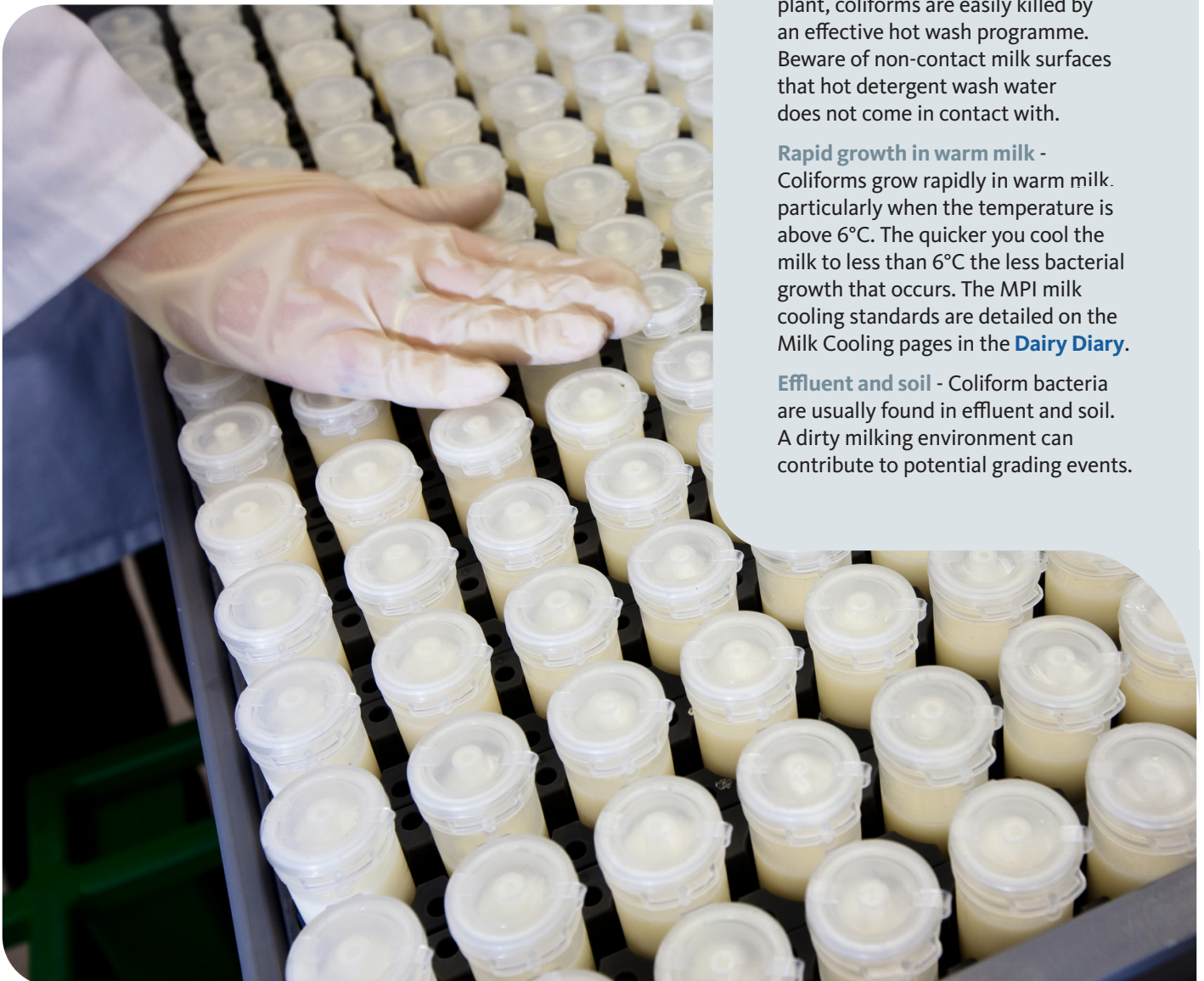
The
**Co-operative
Difference**



Reducing the risk of coliform downgrades

Coliform bacteria are fast growing bacteria which attach to the lactose (sugar) in milk and form strong-smelling compounds that impact the flavour of milk. The coliform test measures coliform bacteria in raw milk.

Early intervention is the best tool you have to prevent coliform downgrades.



A snapshot of what to look for:

Hot water - Normally associated with rotten deposits in the milking plant, coliforms are easily killed by an effective hot wash programme. Beware of non-contact milk surfaces that hot detergent wash water does not come in contact with.

Rapid growth in warm milk - Coliforms grow rapidly in warm milk, particularly when the temperature is above 6°C. The quicker you cool the milk to less than 6°C the less bacterial growth that occurs. The MPI milk cooling standards are detailed on the Milk Cooling pages in the [Dairy Diary](#).

Effluent and soil - Coliform bacteria are usually found in effluent and soil. A dirty milking environment can contribute to potential grading events.



How to prevent coliform downgrades

Early intervention is the best tool you have to prevent coliform downgrades.

Hot water and plant & vat cleaning

- Check that the temperature of your wash water is 80 - 85°C. You should dispose of your alkali wash water to waste before the temperature gets below 55°C
- Carry out hot water washes with the correct amount of detergent at least once a day
- Monitor wash functions including the washline injector (to make sure it's creating sufficient turbulence) and the jetter operation (check the flow rate, and check for air leaks and blockages)
- Carry out routine cleaning and monitoring of non-contact milk areas including air lines, sanitary traps, dead ends, perished seals and unions, milk filter joins, inside of the test bucket hoses, CIP non-return valve connected to the vat inlet valve (check for leakage in the delivery hose line), and the vat manhole door rubber
- Do not re-use filter socks
- Always clean the airline and milking cup cluster (all 4 liners) after a split liner
- Always clean the airline if the milking plant floods
- Check the plate cooler for blockages that could cause milk deposit build-up
- Carry out monthly plant and vat hygiene checks and complete the assessment at the beginning of each month. You can do this using the **Dairy Diary app** or the physical book

Rapid growth in warm milk

- Check the primary milk cooling system works effectively. The milk exiting the PHE should be no greater than 2-3°C higher than the water entering the PHE. If the difference in the inlet water and outlet milk is above 3°C the primary cooling is not working effectively
- Have your refrigeration unit serviced annually and check before commencing supply at the start of the season. e.g. Put some water in the vat, turn the refrigeration unit on and observe the milk cooling performance
- When arriving and before leaving the farm dairy at each milking, look at the vat temperature gauge to check the refrigeration unit is on and working



Check non-contact milk areas including airlines and sanitary traps

Effluent and soil

- Keep the bail floor area clean during milking and put cups on clean teats
- Prevent effluent ponding on races and minimise effluent build-up on feed pads

Water quality

Check that the water used for plant cleaning and flushing purposes is of good quality and meets MPI requirements for clarity and being free from E coli.



Training

PrimaryITO offers a Milk Quality Programme that aims to improve on-farm skills, knowledge and procedures to reduce the risk of downgrades while increasing the profitability of your dairy operation.

This course has been developed in conjunction with Fonterra.

To arrange training for you and your team, contact PrimaryITO on 0800 20 80 20 or visit their [website](#).

Support

Your milk quality results are available daily on your tanker docket or on the Farm Source website. If your results are elevated (300 to 499 ml), you should carry out an immediate plant and vat hygiene check. There is a Pre-Season and downgrade busting factsheet available on the [Farm Source website](#).

If you cannot determine the cause of the test result or you receive downgrades, call the Farm Source Service Centre on 0800 65 65 68. Depending on the duration and severity of the issue, they will organise an on-farm trace back and take you through the Milk Quality Support Programme.

Fonterra will refund up to the total amount of the deductions made under Clause 9.5 of the Fonterra Farmers' Terms of Supply ("**Terms of Supply**"), in the current season, to cover the cost of help from a Fonterra approved service provider to solve milk quality problem.

Please refer the Terms of Supply Clause 9.7 for more information.