The Co-operative Difference

Fonterra Dairy for life

Reducing the risk of Bactoscan downgrades

The Bactoscan test is a measure of the total amount of bacteria in milk.

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

A snapshot of what to look for:

- Normally associated with fresh milk deposit in the milking plant and poor milk cooling
- Poor plant hygiene
- Inadequate wash systems
- Soil or manure deposits on cow udders and legs
- Mastitis can also impact bacteria counts

How to prevent Bactoscan downgrades

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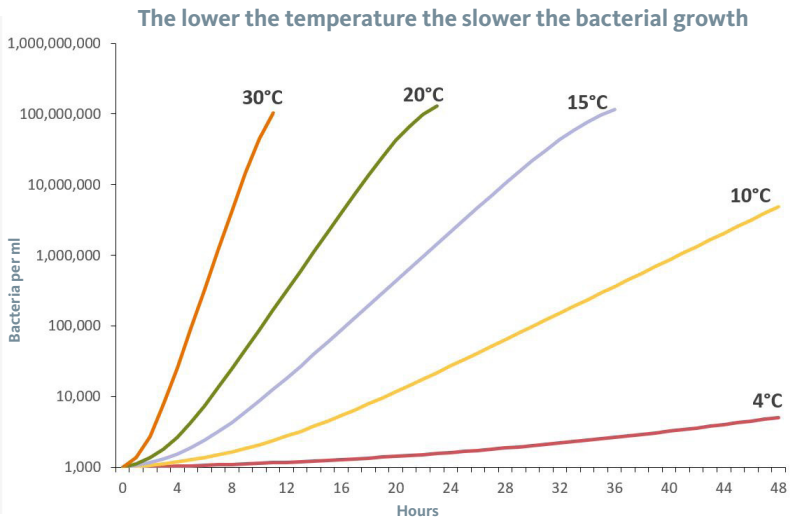

Assess your milk cooling system

1. Check that your primary milk cooling system works effectively.
2. The milk temperature should be cooled to less than 18°C going into the vat. The water used should be the coldest available.
    - Is the water used at the farm dairy coming from the coldest source?
    - Is the water line from the water source buried
    - No recirculation - e.g. water recycling back to the same tank
3. Ensure the system is achieving maximum heat transfer. The milk exiting the Primary Cooler should be no greater than 2- 3°C higher than the water entering the Primary Cooler. If the difference in the inlet water and outlet milk is above 3°C then review
    - The milk flow through the cooler - the lower the better
    - Is the flow at the correct ratio? Water 2 to 3 times higher than milk cooler
    - Are the plates clean, seals not over compressed and plumbed correctly
    - Is the plate cooler the correct size? Check with your refrigeration service person
4. The milk must meet MPI cooling requirements. The quicker you cool the milk to less than 6°C the less the bacterial growth that occurs. 6°C and below inhibits the growth of bacteria. The MPI milk cooling standard is detailed on the Milk Cooling page in the Food Safety Practices and Procedures, found within the **Dairy Diary**.
5. The volume of the first milking into the vat needs to be sufficient to cover the bottom agitator blade. Without agitation, the milk can't be effectively refrigerated.
6. When arriving and before leaving the farm dairy at each milking, look at the vat temperature gauge to check that your refrigeration unit is on and working.
7. 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 on the refrigeration unit and observe the milk cooling performance normally associated with rotten deposits in the milking plant, bacteria 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.
8. Check your Milk Vat Monitoring system for cooling data

Check your milking plant hygiene

- Ensure 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)
- Have your milking machines serviced annually
- Check the plate cooler for blockages that can 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

Keep soil and manure deposits from cow udders and legs

- Prevent effluent ponding on races and minimise effluent build-up on feed pads and loafing barns
- Prevent cows lying on badly pugged or effluent-coated surfaces

Testing

The Co-operative will test your milk randomly on three occasions each month. If your milk vat monitoring indicates an elevated milk quality risk score then this will trigger a Bactoscan test outside of the normal testing regime.

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 the results are elevated to a B category then 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.