

Ask the Expert

Q: How can we ensure our udder prep cloth towels are truly clean and sanitized?



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(part 2 of 2)

In Part 1 of this question, the following seven points were identified to analyze your towel sanitation and handling program:

- Type of washing equipment used
- Overloading of machines
- Towel drying
- Wash water temperature
- Transport basket sanitation
- Micro fiber towel handling
- Bleach and sanitizing detergent used

With all of these variables, it is difficult to identify the most cost effective and efficient way to consistently produce clean, sanitized udder cloths. Last summer, a cooperative team of ABS Global and

Ecolab technical service members in the Midwest began working with several dairies to identify bacterially contaminated towels post-washing and implement solutions to correct the problem. To date, the following steps have been used to identify and produce consistently clean and sanitized towels.

Step 1.

Culture random towels to assess initial towel cleanliness. Typically we find gram positive and negative organisms at levels of thousands to tens of thousands of colony forming units (cfu's).

Step 2.

Evaluate current laundering equipment and practices. To date we have insisted on installing a front loading commercial washing machine if one is not in use. We establish a protocol designed to prevent overloading the machine. This has turned out to be one of the most difficult steps to change in towel management.

Most recently we have tried to sanitize towels from residential (top loading) washers. If the machine is not overloaded, the water is hot, and bleach is added in the "bleach dispensing port" so it is dispensed during the rinse cycle, we have been able to produce towels with no bacterial growth.

Step 3.

Install a chemical pumping system directly to the washing machine. The pumping system automatically dispenses the correct amount of liquid detergent and liquid sanitizer into the washer for

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Figure 1.

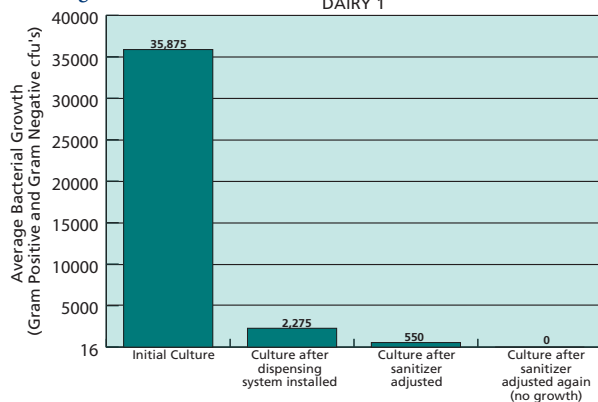


Figure 2.

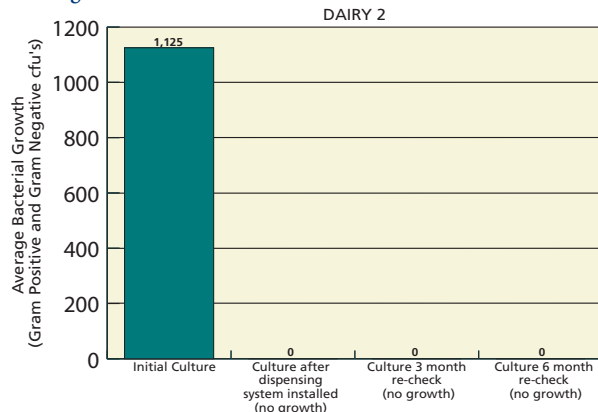


Figure 3.

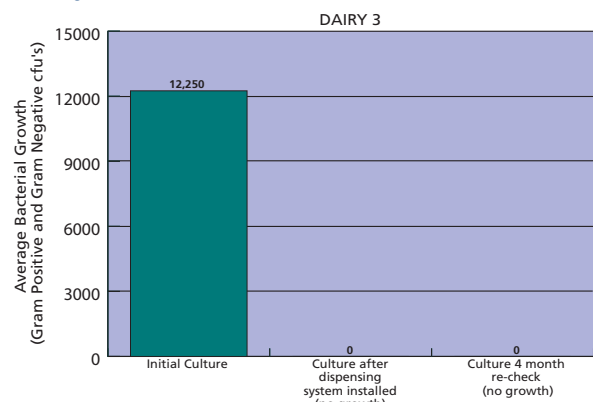
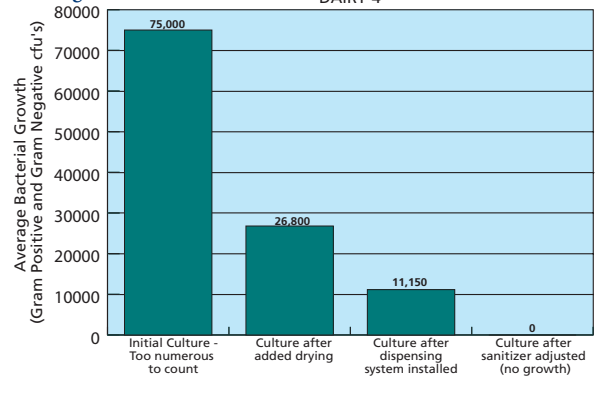


Figure 4.



the wash and rinse cycles, respectively. After 1-2 weeks with this system in use, we culture more random towels.

Step 4.

Start the sanitizer dispensing rate at a low level to control costs and minimize wear to the towels. Typically we find gram negative organisms are <100 cfu's or completely eliminated. Gram positive organisms are typically harder to clear.

Step 5.

Increase the sanitizer amount up. We culture towels until we get no growth from gram negative and gram positive organisms, and re-culture towels every 3-6 months to monitor results.

The value of this program has been two-fold. The decreased waste, with the elimination of powder detergents, has produced a cost savings in addition to the assurance of towel sanitation.

Figures 1-4 on page 10 demonstrate four different dairies and the results of towel cultures after respective management changes were implemented.

Through working with these dairies we have realized that a visual assessment of a towel is not enough to know if the towels are properly clean and sanitized.



Towel, visually clean, cultured heavy bacterial growth of Gram Positive and Gram Negative bacteria



Both towels cultured, no bacterial growth

A lack of attention to detail in correct towel laundering has resulted in bacterially contaminated towels being used on many dairies.

We know the removal of the organic matter is the largest challenge on a dairy and through the steps discussed in part 1 and 2, a dairy can take measures to improve towel sanitation to ensure a properly clean towel. ***A clean towel is one of the many important steps to proper udder health management.*** 