

AGRICULTURE CENTER HAUS RISWICK IN GERMANY

Improvement of room hygiene by using probiotic cleaning products (Hendrik van de Sand, LWZ Haus Riswick, Nordrhein-Westfalen)

In the context of a special training course for milk producers in January 2008 at the agriculture center Haus Riswick, the Chrisal company presented a concept for the improvement of room hygiene by means of the PIP products (Probiotics in Progress).

The following working mechanism is behind this concept: after cleaning and stabilizing the surfaces by means of PIP products, PIP bacteria are covering these surfaces. The probiotics consume all microscopic dirt and biofilm trapped in the surface materials, thereby removing shelter and food for unwanted organisms. In this way a stable, healthy environment is established.

In the milking parlor of the Agriculture Center Haus Riswick the presented product has been applied for half a year now. Once a week the milking parlor is foamed with the Chrisal PIP cleaning product and a bit later the milking parlor is rinsed by means of a high pressure cleaner. To stabilize the environment after each milking session the PIP probiotics are misted into the milking parlor using a backpacksprayer. Also, the teat cups are dipped into a PIP cleaning solution.

Just before starting the PIP cleaning and two months later, plate count samples were taken at different locations in the milking parlor, in order to examine the risk of microbial contamination. In the following schedule the risk at *Enterobacteriaceae* (e.g. Salmonella, Klebsiella and Escherichia coli) and the risk at *Staphylococcus aureus* is represented before and after PIP application.

Table: Microbial contamination risk in different spots of the milking area

Location	Enterobacteriaceae		Staphylococcus aureus	
	Before PIP	After PIP	Before PIP	After PIP
Teat cups	> 200	1	> 100	25
Cows' standig area	> 200	4	> 200	1
Milking terminal	51	0	46	3

An improvement of hygiene in the overall milking parlor by using the PIP cleaning products has clearly been demonstrated.

To what additional extent this improvement of milking parlor hygiene also influences cow udder conditions positively will be determined after prolonged PIP application.
