



A Mastitis Decision Case
Penn State Nutrition Conference
10-26-04

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- + You have been called out to Joe and Joanna Joyanski's Dairy because they are having some mastitis problems.
- + You are their trusted nutritionist and seem to have all the good answers and are very genuine. If you don't know something you find out and get back within a short time period.
- + You have won and earned their respect through hard work and demonstration that you respect them as people and also care about the profitability of their business. (APPROACH STEP: Trust and Rapport have been established so conditions are set up for Listening (by the producers) and Willingness of Joe & Joanna to change and/or refine management systems to reduce their mastitis problem is very likely.)
- + You have been through a 'sales training course' (*MANY TIMESxxxx as management changes within your company*) and know the right approach to investigating challenges on-farm and identifying true needs through interviewing (INTERVIEW STEP). Mastitis is not your best area of expertise but you have gone through training on the nutrients and products associated with mastitis (susceptibility or resistance) and can start asking questions and then will seek advice from others (Extension Specialist and herd veterinarian, etc.) to precede further if needed.
- + You also understand the importance of demonstrating and validating how a nutritional service or management practice can work, based on research and field evidence that has shown it can meet their need(s) and solve their on-farm management challenges. You have some tools in your tool box to start this process. (DEMONSTRATION/VALIDATION STEP).
- + You also know that there may need to be modifications made to use of a new service or management strategy due to unique aspects of Joe and Joanna's dairy (NEGOTIATION). You assist them in making these modifications to suit the specific conditions of this case, conditions, and unique qualities of Joe, Joanna, and their relevant employees. In addition, you never sell a product or service without carefully monitoring whether it does in deed work to address the specific needs of the producer and at a good return on investment to the dairy.

So, what are the specific conditions on the Joyanski Dairy?

You know this relevant information about the dairy based on years of carefully monitoring herd records:

- + Milking Cows: 240
- + Facilities: Free-stalls for milking cows; 110% capacity; Freestalls are in pretty good condition; cows don't use some of the freestalls along one side of the barn (High Producers; Early to Mid Lactation Cows); rain and other precipitation tends to come into this side of the barn.
 - o Cows are separated into groups by age, with older cows divided by production/stage of lactation
 - o Dry Cows and Close-ups are in 2 groups in a Hoop/Greenhouse Barn. Close-ups are in FreeStalls. Far-off Dries are on Bedded Pack.
 - o Cows are bedded with mattresses and sawdust bedding.
- + Bulk Tank Somatic Cell Count: Has been as high as 500,000 but now 350,000
- + Ration Specifications: You are feeding this herd (e.g., balancing the ration). There is currently no special products (e.g., proteينات or organic selenium products) in the ration. Nutrients (trace, macro mineral and vitamins) are fed at NRC 2001 levels for milking and dry cows.

So what did you learn when Joe called?

- + Joe called you because he has had 5 cows die of coliform mastitis over the last month. In addition, there have been a relatively high number of cows with clinical mastitis. The cases are relatively severe and many cows drop in production. When cultured, many of the milk samples are negative showing no bacterial cause. Some have high SCC and others have low SCC. No bulk tank cultures have been evaluated.
- + Joe has no idea of what could be contributing to the problem or what he could do differently to fix it. He just knows the current situation is not good. He is losing too many cows and no treatments seem to be working.

What questions should you ask and what direction should Joe and Joanna take to fix things?