

Your Milking Routine:

– Eliminate Human Variables

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Your Milking Routine...
– Build One That Works!

While some variation in milking routine is normal, most variation frequently leads to financial losses in a variety of ways. The person milking and the routine they use have more potential for variation than milking equipment does. It makes financial sense to invest time to develop, implement and monitor a milking routine that will eliminate as much variability as possible.

Last month's "Your Milking Routine" article focused on the truths you need to understand to build a milking routine that really works. We discussed the role of oxytocin in optimum milk let down, the importance of stimulation to oxytocin production and how critical the prep-lag time is to fully utilize oxytocin's benefits.

This month, we will focus on implementing a routine and monitoring it through evaluation. The best routine developed on paper is of no benefit unless it is properly implemented and remains consistent.

Two Critical Elements Of Any Good Routine

Any farm, regardless of size, milking facility type or number of people involved can establish an excellent milking routine if the two elements of udder prep are always part of the milking routine. Those critical elements are:

1. Stimulation time should be a minimum of 10 to 20 seconds per cow. This physical manipulation

of the teats is necessary for the full release of oxytocin. It is normally accomplished by cleaning the teat sides, teat ends and fore-stripping. If fore-stripping is done, it should be done at the same time as the cleaning to accomplish maximum stimulation. Properly done, the time spent (10 to 20 seconds) can be the best investment you can make for fast milk out.

2. Prep-lag time of 60 to 90 seconds per cow means the milking unit will be attached 60 to 90 seconds after the start of stimulation. This is important to optimum milk out because oxytocin arrives at the mammary gland approximately one minute after stimulation and starts to diminish almost immediately in the blood stream. You will miss out on oxytocin's benefits if you do not strictly adhere to proper prep-lag times.

Any deviation from your milking routine will result in lost potential for the best milk let down possible in your herd. Just like the designer of an aircraft cannot ignore the basic laws of aerodynamics, a dairy farmer cannot ignore these two basic elements of dairy cow physiology.

Effective Procedure: Effective Routine

To be effective, the udder prep procedure and the milking routine must be specific and always executed the same. As a reminder, I have chosen to refer to the procedure and routine as follows:

- Procedure: refers to the individual tasks performed in the udder prep, e.g. – apply dip, fore-strip, wipe, attach unit, etc.
- Routine: includes the tasks performed, the sequence of the tasks, the time allowed for each task and the time lapse between tasks.

Good milking routines cannot be put in place with directions that simply implore a person to "do a good job." The routine must be very specific in its design and must be communicated to every person milking cows. This communication (training) needs to emphasize that the two critical elements of adequate stimulation and proper prep-lag time cannot be deviated from in the udder prep procedure.

Once the importance of adequate stimulation and proper prep-lag time has been established, training can focus on the technique involved in performing the actual tasks used in the udder prep procedure. The procedure and routine information should include the following information:

- Every task that is to be performed (pre-dip, fore-strip, wipe, etc.).
- How each task will be performed.
- How much time will be spent doing each task.
- The sequence (order) in which each task will be performed.
- How much time is allowed between tasks.

Since the specific tasks and who performs them varies with the type of milking facility, the number of people milking and the udder prep materials used, it is important to design a routine that is specific to your dairy facility.

These topics are discussed at MMPA's Milker Training Schools. The schools, offered in February and March each year, provide the chance to discuss the merits of different tasks and procedures that can be used in a milking routine. This year's Milker Training School schedule is on page 29.

Your Routine: Consistent and Correct Over Time?

Once you have decided how you want your farm milking routine to be performed, how can you guarantee that the routine will be executed the same by every person that milks and that it will not change with time?

My experience is that milking routines are doomed to inconsistency, variation and counter-productive activities unless they are put in place with a plan that ensures the right procedure is performed correctly over the long term. Here are some ideas to use in implementing an excellent milking routine that will enjoy a long life on your farm.

Your Routine: Everyone Must Understand What's Expected

A good way to ensure everyone knows what is expected is to meet with everyone who milks cows, preferably in one group. This group meeting may be a discussion between family members or may consist of 15 to 20 employees. Part-time milkers should always be included in this discussion. During this meeting be prepared to:

- Explain why the farm procedure is being established.
- Explain why the procedure is

so important to cows and quality.

- Explain the exact procedure (each task) to be used.
- Emphasize the time and technique for every task and the time between tasks.
- Provide a written copy of the procedure to be used.
- Respectfully address and resolve any concerns about the procedure.
- Emphasize that everyone who milks is part of the milking team and that everyone is expected to perform the same procedure.
- Explain that all employees are paid to perform the farm procedure with no deviations.
- Anyone who does not buy into the team concept should be considered a candidate for reassignment.

If conducted in a non-threatening manner, the meeting can start to establish a team approach among employees and family members alike. Handled properly, you can establish a clear picture of what is expected and what constitutes a good job. Most people who milk cows like cows and want to do a good job. This meeting should help establish a feeling of competence and consistency. No one should have to wonder if the other milkers are doing the same caliber of work.

Implement Your Farm Routine

An effective way to implement a milking routine is during milking. This "wet lab" is the most realistic training facility you can hope for. Again, include every person who milks cows in this training and be prepared to:



- Teach exactly which tasks are to be used.
- Show and tell exactly how you want each task performed.
- Teach how much time is spent on each task.
- Teach how much time should elapse between tasks.
- Measure and evaluate technique and timing during the training. Use a stopwatch so you can be exact about the times.

You cannot expect implementation of a milking procedure that is specific in technique and precise in timing to be perfected without training. If training is not provided to every person who milks, and preferably with everyone at the same time, the performance will quickly deviate from the original farm milking procedure into something that is convenient for the person milking and probably not good for the cow. The idea of training everyone at the same time may be cumbersome but is the best way to get everyone on the same page all at once.

Who Should Do The Training?

The trainer is an important component to the successful implementation of your routine. Choose your trainer with the following in mind:

- One person should be responsible for training.
- The trainer must be well

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versed in the technique and the timing outlined in the farm procedure/routine.

- The trainer must be comfortable training and evaluating people who milk.
- The milkers must be comfortable with the trainer.

If you are not comfortable doing the training or other family members in the milking crew make procedure training a sensitive issue, enlist assistance from someone off your farm. Be certain that person is well versed in what constitutes a good procedure. MMPA's Member Representatives are trained in udder prep procedure and will provide assistance to members who request it.

Every MMPA member has the opportunity to attend a Milker Training School. These schools are offered every year, can provide training for the owner or the employees and provide a unique opportunity for hands on training.

After The Training: Monitor The Routine Through Evaluation

Good training is only the beginning. Even milking routines that are excellent in design and properly implemented are destined to fail if the routine is not monitored regularly.

- A maintenance program designed to reinforce those doing good work and retrain those who are missing the target must follow training efforts.
- Regular evaluation of everyone who milks is the best maintenance program you can use.
- One person on the farm is usually designated to be in charge of keeping the farm routine consistent with the training and consistent among milkers.

- Regular evaluations reinforce the importance of the milking routine.

People need to know that their job is important. Regular evaluations help send that message. Most people want to do good work and welcome direction that helps them do a good job. People who do good work want their coworkers, including family members and especially their employers, to know how well they perform. People who want to do good work usually invite evaluation.

Constructive evaluation has so much potential to improve job performance and raise job satisfaction that you cannot afford to overlook this opportunity. If you, as a dairy farmer, are uncomfortable with the idea of training and evaluating, enlist the help of someone who will do it for you. MMPA Member Representative are trained in milking procedures and evaluations and can help you get started with this opportunity.

If regular evaluation of the procedure is not implemented, the milking procedure put in place during training will quickly erode into one that is based on personal preference and convenience. The techniques and timing that are best for the cow and milk quality are soon forgotten.

Some final thoughts about evaluation:

- Evaluation should start immediately after training.
- Evaluation should continue once or twice a week until each person has mastered the technique and timing of your farm procedure.
- Routine evaluations should occur monthly.
- Evaluation should always be an opportunity to positively reinforce good work and constructively retrain work habits that have deviated from the farm procedure.

- Use a flashlight to examine the teat ends for cleanliness.

- Use a stopwatch to actually measure the timing for each task and the timing between tasks.
- Use a checklist of what you want done to evaluate a milker.
- Let the milkers see the checklist before you use it to evaluate them.
- People who do good work prefer to be evaluated so they know where they stand.

Some of these ideas may seem over the top. If you have ever used them, my experience is that they work well to ensure that everyone performs the milking procedure the same way every day.

A milking routine that is developed on the idea that it has to work well for the cow, is properly implemented through training and is monitored by regular evaluations of the milkers, will remain in place and will not break down.

Milker Training Schools – A Unique Opportunity

MMPA's tenth season of Milker Training Schools will be offered during February and March 2006. The sessions not only teach techniques, procedures and routines that are good for your cows but also offer suggestions on how to do milker evaluations. The evaluations include all milking parlor activities and are printed out for several different parlor situations and routines.

If you are interested in picking up some ideas that may improve milking performance on your dairy, sign up for a MMPA Milker Training School. A schedule is listed on page 29.

The schools are a service MMPA provides to its members. There is no fee for you or your employees to attend the schools.