As a dairy producer, what are the components of your milk quality program? Do you have a written protocol for producing high quality milk? What practices do you and the people who milk and handle the cows on your farm follow to insure that you are producing the highest quality milk possible?

Dr. Pamela Ruegg, an Extension Milk Quality Specialist at the University of Wisconsin, a few years ago wrote a very good paper on the 10 smart things she thought dairy farms do to achieve the production of high quality milk (achieve milking excellence is what she called it). I have taken the liberty of adding my comments and suggestions to her list of 10 things to do to produce high quality milk. The list is presented below.

1. Set Performance Goals: Quality goals must be set so the performance and progress of the workers and quality measurements of the milk produced can be evaluated. Set goals for bulk tank milk SCC and SPC values. Striving to keep SCC scores always under 400,000 cells/ml should be an attainable goal. Once attained, keep lowering the value and strive for a herd SCC value of less than 250,000. Other goals to work towards are having Standard Plate Count values that average less than 10,000 cfu, a new subclinical infection rate of less than 5% per month, and over 85% of the cows in your herd with a DHIA linear SCC score of less than 5.

2. Identify Milk Quality Problems Quickly: Use practices that detect mastitis infection early. The use of cow-side SCC measurement devices can be helpful. Using the CMT on all fresh cows within the first few days after calving is recommended. Stripping a few streams of milk from each quarter before attaching the milking unit is very important. And monitoring the monthly bulk tank SCC values, as well as reviewing monthly individual cow SCC values can help detect problems early.

3. Milk Clean Cows: To reduce the time needed in the milking parlor to clean cows before milking, the cows should be as clean as possible when they get to the parlor. You should have properly sized and maintained free stalls. Use sand bedding if possible, and be sure an adequate amount of clean bedding is kept in the stalls at all times. Alleys should to be scraped as often as needed to be kept reasonably clean. Use a predip to reduce the number of environmental bacteria on the teats at time of milking.

4. Standardize Your Milking Routines: Establish a written protocol of the milking preparation routine to use in your dairy, and then be sure everyone follows it at every milking. Your protocol should include forestrip, predip, dry, attach, and post dip. Consistent use of these components will help you produce better quality milk.

5. Train Your Staff: People who work in your dairy should have written protocols for the jobs they perform, they should receive training for the jobs they are expected to do, and they should receive periodic update or refresher training for those jobs.

6. Maintain and Update Your Milking System: Milking systems in small herds need to be serviced 1-2 times a year, and systems in large herds should be serviced more frequently (at least quarterly). Replace inflations and other components as recommended by the manufacturer. Adjustments to automatic take-off units should
be made to conform to current standards for milk flow rate at time of removal and
detacher delay time before removing the milking unit.

7. **Have Written Treatment Protocols:** Treatment protocols are used to define
standard treatments for common diseases. Protocols are especially important when
multiple people have responsibility for treating sick animals or when extralabel drug
use is prescribed by your veterinarian. The protocols can be simple, but should be
developed by you, your veterinarian, and your key employees who take care of the
animals.

8. **Have A Mastitis Biosecurity Plan:** Have in place a plan for how to protect your
cattle from contagious mastitis pathogens. Steps to include in your plan are to only
buy healthy cattle, buy from a healthy herd, keep purchased cattle healthy (separate
for a time after bringing onto your farm), and culture bulk tanks twice monthly after
newly purchased cattle are brought into your herd to monitor for new pathogens.

9. **Take Proper Care of Your Dry Cows:** Most new cases of mastitis occur during the
dry period. Maintain clean, dry housing for dry cows, infuse a dry cow antibiotic into
all quarters, use a teat sealant at time of dry off (either an internal or external
product can help prevent new infections), use appropriate vaccines, and feed
properly balanced rations.

10. **Use Appropriate Consultants:** While producers obtain information from a variety of
sources, consultants can help determine what practices are appropriate for your
herd and your management level. Form a consultant team for your farm that meets
periodically to review your programs and the progress you are making at reaching
your goals for producing high quality milk. I suggest you include on your team your
Extension agent, veterinarian, milk handler field representative, and other qualified
individuals who you currently consult with.

A host of resources on producing quality milk are available from the University of
Wisconsin Milking Research and Instruction Laboratory. Dr. Ruegg is a faculty member
in that lab. The web address for the Milk Quality Resources site is
http://www.uwex.edu/milkquality/index.htm. I encourage you to access it and review the
many materials available.