SCC Countdown in Progress

BY MARTHA J. GEHRINGER

LANCASTER — A change is coming for dairymen that concerns milk quality and could leave some dairymen dumping their milk if they can't make the grade.

Starting July 1 the allowable somatic cell count level drops from 1.5 million to one million. Any farmer with a count that routinely runs close to or exceeds the million level should be in the process of making changes that will reduce this count.

Some economic benefits that occur with the correction of this problem are; reduce veterinarian bills, increased milk production from cows that stay in the herd longer, and receiving premium payments for milk that meets quality standards.

Before the problem can be solved, it is important to understand why the level is high and why some actions are effective in solving the problem.

Somatic cells is the collective term for leucocytes and epithelial cells. Leucocytes present in an area increase in response to infection or injury, while the epithelial cells are present as a result of injury or infection, according to a report by mastitis expert Dr. W. Nelson Philpot.

When an injury or infection invades the udder, leucocytes increase in number to fight this microorganism. Epithelial cells originate in the secretory tissue of the udder, the target of many microorganisms.

After the "battle" these two cells slough off into the milk. These dead cells are measured as the somatic cell count of milk. Therefore, the somatic cell level of milk rises as a result of udder infection. This is inversely related to milk production as the milk secretory or producing cells are harmed in the "battle."

Measurement of these cells is usually done by the most accurate method, Direct Microscopic Count (DMSC). Other methods of testing for somatic cells are the Wisconsin Mastitis Test (WMT), Modified Whiteside Test, California Mastitis Test (CMT), and the Milk Quality Test.

Some recommendations made by the Inter-State Milk Producers Cooperative to improve the SCC count in their member's herds cover milking practices, cow care, and environmental factors.

Milking practices are perhaps the area of greatest influence since most organisms are introduced into the udder right before, during or immediately after milking, according to the guides issued by Inter-State.

Proper milking techniques recommended by Inter-State and Philpot include use of a stress free milking environment; the removal of two or three streams of foremilk from each quarter for detection of problems between laboratory counts and a CMT; washing the udder with a warn sanitizing solution and drying with a single service towel; attaching the teat cups approximately one minute after starting udder prepping or when the teats are full of milk.

These recommendations also include adjusting the milker forward and downward to insure proper milk out; avoiding overmilking which irritates and injures the teat and makes it susceptible to infection; shutting the vacuum off prior to removing the teat cups to reduce damage to the teat end; and teat dipping immediately after removal of the milker further protects the teat when it is "wide open for infection."

Checking the milking system at least twice a year by a qualified technician, and regular replacement of inflations after 1,000 to 1,200 milkings are important factors in avoiding stress at the teat end.

Monthly CMT tests, and enrollment in the DHIA SCC testing program are two tools which are available that can pinpoint the problem cows in a herd. Additional care should be given to these cows to solve the problem.

Dry treating, milking them separately or last, and chronically high testing cows should be culled or dried off are suggestions in a report by Dr. Larry Hutchinson, Penn State Veterinarian, in dealing with high SCC cows.

Pennsylvania DHIA has a new Somatic Cell Count program that aids in detecting subclinical mastitis. Dairymen enrolled in this program receive a monthly report on each cow's SCC level and an average for the herd.

The difference between this and the old program is the narrower breakdown of the somatic cell count per milliliter. This system improves the relationship between SCC and milk loss and eases interpretation of results, according to DHIA.

Every time the SCC count doubles, a 1.5 pound per day or 400 pounds per lactation loss occurs. These figures are for one doubling. If a cow's level doubles three times or if it is at the 565,000 level, her production per lactation will decrease by 1,200 pounds of milk.

Research in the U.S. and Europe indicate that production losses begin at levels lower than 100,000.

DHIA has developed a worksheet which will allow the dairyman to compute, through use of the SCC code, the total amount of milk lost per period per cow. This worksheet permits the farmer to see on paper how much of a liability a high somatic cell count really is.

The new rules, regarding the maximum allowable somatic cell count level in raw milk, specify that if milk excedes the million mark for two out of four counts, a written notification will be sent to the producer.

If a third count tops the million mark, a two day suspension for shipping the milk is levied. This milk cannot be picked up by the hauler until the level drops below the upper limit of one million.

During any suspensions, the farmer is responsible for the proper disposal of his milk.

Lowering a herd's SCC level need not be time consuming or expensive. Many problems can be corrected by paying attention to details. These details have the potential of paying large dividends through lower health costs, greater production and a larger net profit.

DHI To Conduct Pilot Info System

Beginning June 1, 1986, and running through September 1, 1986, Pennsylvania DHIA will be conducting a pilot program to evaluate the new Agricultural Records Information Service (ARIS) system. The ARIS system is an on-line computer service, which allows DHI dairymen to access their records and create customized management reports. Twelve dairymen will be participating in the pilot project with the goal of evaluating and giving direction to the program before it is released statewide. Participants in the pilot project include Mason-Dixon Farms, Adams County, Sinking Spring Farm, Inc., York County, Marymead Farms, Montgomery County, Richard Warnshuis, Erie County, Gillbrook Farms, Huntingdon County, Noll Farms, Cambria County, Oliver Butler, Tioga County, Slusser and Naugle, Crawford County, Kevin Schrack, Clinton County, William and Dan Boham, Susquehanna County, and Albert Lendel, Mercer County.

ARIS services should be available statewide sometime this fall. Interested dairymen may contact Jay Wilson, Manager of Technical Development and Special Services.