

Somatic Cell Counts Aid In Reducing Mastitis Wastes

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NEWARK, Del. — Mastitis has been discussed and described for more than 100 years. With the advent of milking machines some 80 years ago, the interest in mastitis intensified because often it was blamed on the machines. Yet today's milking machines are on the verge of becoming fully automatic — from attachment, stimulation, detachment to mastitis monitoring and the making of milk discarding decisions.

The most valuable recent development in mastitis control has been the use of monthly somatic cell testing of individual cows as part of the DHIA program. This program allows dairy farmers to manage herd udder health much more successfully than ever before, because somatic cell counts are directly related to udder infections.

Somatic cell counts can answer a number of questions. They can tell you whether your herd's heifer raising program is providing new springers with clean, uninfected

udders. They can tell you if your dry-cow program has positive or negative effects on the herd's udder health. And they can show if the daily milking herd environment causes an increase in udder infections.

The somatic cell count program is a monthly report card on each cow with respect to her udder health. Raw cell counts in 100,000s per milliliter milk and a so-called "linear score" tell the story.

The magic number is "5" on the linear score because it means 400,000 cells and a normally healthy udder, although lower scores do occur. For cows with linear scores of less than 5, any culture of their milk will usually be negative in 90 percent of all samples. Cows with more than a linear score of 5 usually have positive cultures for pathogens.

Linear scores are also an indication of milk wasted; that is, not produced by the cow because of subclinical or clinical infections. For each linear score step, an average 1.5 pounds of milk per cow per day is wasted, or about 400 pounds per lactation.

A linear score increase from 2 to 7 (5 steps), means a rise in somatic

cell count from 50,000 to 1,600,000. That means 7.5 pounds of wasted milk per cow per day. For the entire herd, if that score was the herd average, it means 3,000 pounds per cow per lactation, or 210,000 pounds of milk for a herd of 70 cows. That amounts to \$23,100 less income for that herd for the year due to wasted milk.

So you see how important somatic cell testing can be when you're trying to survive the present profit squeeze!

High counts on individual cows can mean several things — chronic problems, fresh cows, late lactations or acute problems. Sometimes only one of the four udder quarters is the problem.

After somatic cell counts, the next step in diagnosis is to get out the California Mastitis test paddle or the electronic cowside conductivity meter and check each quarter for possible isolation and treatment.

Milking procedures, milking machine maintenance, the vacuum, udder and pipeline washing procedures, teat dipping, between-cow back-flushing and dry-cow treatments leave absolutely no room for "left-

handed," halfway measures. Somatic cell counts quickly tell whether every step in the procedures was exactly right or only more or less right.

If more than one-third of your first-calf heifers have linear scores above 4, suspect udder infection and start preventive measures on them.

If somatic cell counts increase as lactation days increase, subclinical mastitis is being spread during milking and you should start corrective steps there.

If somatic cell counts are highest in early lactation, suspect mastitis causes in the calving stall and dry cow environment. These causes could include dirty bedding, mud, cold concrete floors on which udders lie, or just too much manure where the cows are resting.

Mastitis waste can be effectively reduced today using the available tools. Taking steps to do so is one way to ease the present profit squeeze on dairy farms.

Supply Management

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milk manufacturing facilities on a large scale over the years to undergird their bargaining purposes and to guarantee their members a market. An estimated 77 percent of producer milk in the U.S. is marketed through cooperatives. When the manufacturing facilities are running near capacity, which is the case in periods of excess milk supply, the manufacturing facilities generally are in a breakeven to a profit-making

situation.

A mandatory supply management program that could effectively reduce supplies would lead to a situation of some excess capacity, higher operating costs, and lower savings for farmer members.

Competition for producer milk would intensify with mandatory supply management. Producers would find new pricing and hauling incentives to switch sales outlets and memberships.

One effect of the competition would be to boost producer prices above the prices stipulated in the base program. Also, dairy cooperatives would find themselves in a stronger position to bargain for higher over-order premiums. The strong upward pressures on producer prices that a supply management program would generate could mean that the program would have to incorporate price ceilings as well as price minimums in order to serve the public interest.

Imports

A last market implication that should be reorganized is that a tight supply-demand situation brought on by a base program could invite increased imports of dairy products. In 1973 and 1974, import quotas were relaxed substantially when milk production dropped abruptly and markets were short of milk.

A supply management program cannot be managed or administered perfectly and additional imports could be required again to assure adequate supplies.

Politics

Finally, a word about the politics of supply management is appropriate. It will never go anywhere in Federal legislation until a large majority of milk producers clearly indicate that a mandatory base plan is what they want.

If a vote were taken today, it is not clear that 67 percent or even 51 percent of the dairy farmers in this country would support mandatory bases. The difference among dairy farmers would be everywhere—between neighbors, between dairy cooperatives, and between regions.

Beyond that, Congress has its doubts, and the current Administration has already drawn its line—NO. So we are looking at a program that is three to five years away at best.

A quota program is a serious alternative. Our challenge is to further evaluate its long-term benefits and costs in formulating a dairy price policy that effectively serves its objectives. We should look closely at all the aspects of this approach before we leap.



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