Are Somatic Cell Counts Increasing?

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The USDA Animal Improvement Programs Laboratory recently published the national DHI average somatic cell count (SCC) information for 2001, and the data raise some concerns about the changing status of our national milk quality.

Nationally, the yearly average SCC for herds on DHI trended upward by about 2,400 cells/ml for the year 2001. The actual SCC values for 2001 versus 2000 showed an increase from 316,000 to 324,000 cells/ml. While this may not seem like much of a change, it reversed the downward trend that had occurred the previous two years. Perhaps of greater concern, though, is the fact that the increase resumed the upward trend that has occurred since 1995 (the earliest year for which there were data reported). The value for 1995 was 304,000.

Other data presented in the report revealed that the percentage of herd test days with SCC values greater than 750,000 cells/ml trended higher by 0.1%, with the actual percentage being 4.9. This value indicates that on DHI test day 4.9% of the cows were producing milk with a SCC value higher than is legal to be sold for human consumption. Since cows that have mastitis on test day and are being treated are excluded from the bulk tank of milk that is sold, but are included in the DHI test data, the percentage reported probably overestimates slightly the number of herds that exceeded the legal limit on test day. Still, the fact that the percentage increased and continued the yearly trend of increasing should raise concern.

As would be expected, the average SCC’s were lower in the western states and higher in the southeastern states. While temperature and humidity certainly contributed to regional differences, the SCC differences between adjacent states within a region were substantial. This was the case in all regions of the country. This situation suggests that the mastitis prevention and control programs that are being used by dairy producers vary greatly between states with similar climatic conditions.

An obvious question that this USDA report suggests is what can be done to reverse this trend of increasing national SCC values in milk? I believe the most important thing that must happen is that dairy producers must become more committed to producing the highest quality milk they possibly can. They and their employees need to focus on routinely following all the practices and guidelines that have been developed by researchers, educators and consultants for promoting cow comfort, healthy udders, and high quality milk. The environment the cow lives in and is exposed to needs to be supportive of and conducive to the cow being able to produce high quality milk. Without a fervent commitment by dairy producers to following the basics, as well as the details, of producing high quality milk, our national milk quality (as measured by SCC values) will probably continue to deteriorate, or at least not improve. Furthermore, the claim that milk is nature’s most perfect food may be challenged more strongly by certain groups.