



# Three Ways to Help Improve Dairy Farm Profitability

As we move away from record milk prices, dairy farms are under increased pressure to find ways to protect profitability on the farm. This means making sure the best cows possible are standing in the stalls. The only way to know which cows are the best cows is to test the herd on a regular basis. Dairy One provides testing services to farms across the Northeast. Knowing milk weights, components and somatic cell counts for all cows in the herd allows a farmer to make decisions on actual production data, not just on how full a cow's udder looks.

A recent survey by USDA found that farms using dairy herd improvement (DHI) testing services, on average, produce more milk per cow than farms not on DHI testing services. **For the Northeast, cows on test average 2,700 pounds of milk per year more than those not on test across all herds. At a milk price of \$18.00/cwt, that's \$24,300 in additional revenue for a 50 cow herd.** In times of low prices, the value of DHI testing is even more important for farms trying to make decisions about which cows to keep.

Getting milk weights and components is just the start. Dairy One also offers a number of milk tests and reports to help dairy farmers more profitably manage their herds. Here are 3 specific ways that Dairy One can help a farm immediately protect farm profitability:

**1. Improve the herd nutrition program.** Feed costs are the largest variable cost on a dairy farm. Sources of protein often make up a big portion of this cost. This means that farms buying protein will want to make sure the cows are getting as much nutritive value from the ingredient as possible. One way to do this is by measuring Milk Urea Nitrogen (MUN) in DHI milk samples. MUN provides a good, inexpensive measure of how well cows are using the protein sources in the ration. Case studies have shown that adopting MUN testing can provide a 10 to 1 return to the farm.

A general recommendation is that MUN values fall between 8 and 12 mg/dl. Higher levels mean that protein sources in the diet are not fully utilized (meaning they are wasted). When this happens, the cows turn the excess protein into urea that is excreted in urine and milk. Reasons why this could be happening include too much protein in the diet, the wrong forms of protein in the diet, or poor rumen health. There could also be an imbalance in other aspects of the diet that impact protein utilization. Lower MUN levels mean that a cow is not getting enough protein, or that protein may be the limiting factor to optimal production. This means the cow is not being fed to perform at her best, often hindering milk production and animal health.

Knowing the herd MUN level allows dairy farms to better make changes to the herd ration, helping control the biggest variable cost on the farm. Examples

of some changes include reducing grain purchases, changing the type or ratio of ingredients, or adding other ingredients to the ration to make better use of the protein. In some cases with low MUN, farms might need to increase protein levels in the diet.

Testing for MUN is simple: farms just need to tell their technician they want to run MUN on test day. Once the results come back, farms should work with their nutritionists to interpret MUN results and develop a plan to improve ration efficiency.

**2. Capture milk quality premiums.** Focusing on milk quality can be a good way to get some more money in the milk check. For most farms, this means reducing somatic cell count (SCC). To help farms reduce SCC, Dairy One offers a tool known as the Bulk Tank Contribution Report.

The Bulk Tank Contribution Report tells which cows are the largest contributors to the bulk tank SCC. It considers both the individual cow SCC as well as the amount of milk the cow produces. Knowing this information allows farmers to focus their management on cows that are causing the biggest problem to milk quality. A sample of the report is below.

Management of high SCC cows can mean several different courses of action. In Figure 1, you can see that cow 105 has a current SCC of 919,000. Based on her production, this means she is responsible for 16.5% of the bulk tank SCC. This is only her first test above 200,000 (see the "#>4" column). It turns out she recently banged her hock, which likely caused a somatic cell spike. The farm should probably watch her cell count during the next test. Cow 111 contributes 11.4% of the bulk tank SCC and this is her 6th high SCC test this lactation. With the high price of cull cows, it might be time for her to leave the herd. Finally, cow 95 only contributes 3.4% of the bulk tank SCC, but if we remove her, the bulk tank SCC will drop below 100,000. Since she is only making 30 pounds, maybe she should be dried off.

Any farm maintaining herd records with Dairy One can receive this report. It can be sent in the mail with the farm's monthly test results. It can also be

e-mailed for even faster turnaround time. Ask your technician to sign you up for the report next time you test.

**3. Improve Herd Reproductive Performance.** Getting cows bred is a key aspect of profitable farm management. If a cow is not bred back in a timely manner, it often means a longer lactation. This, in turn, means the cow is delayed in getting back to the early phase of her lactation (usually the most profitable part). Poor herd reproductive performance also ultimately increases the number of cull cows. This requires using heifers as herd replacements instead of having the option to sell heifers for additional income.

Dairy One offers several tools to help farms improve reproductive performance. Two specific tools include:

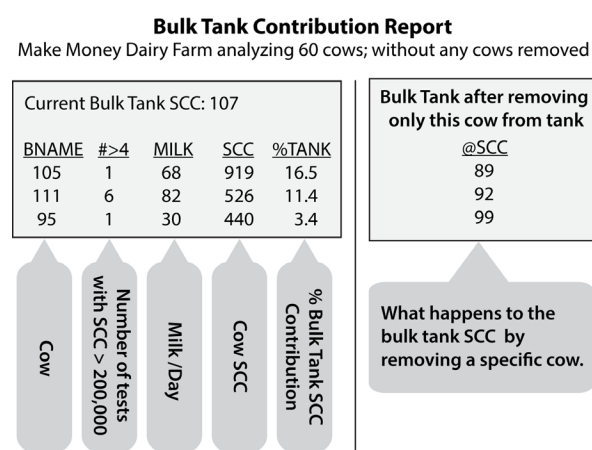
**Pregnancy Risk Report:** The first step in reproductive efficiency is making sure cows get bred. The 21 Day Pregnancy Report shows 2 important numbers. The first is the number of animals actual bred compared to those that could be bred during the past 21 days. This number is essentially a measure of how well the farm is detecting heats. Improving this number is a first step in improving reproductive performance.

The second number on the Pregnancy Risk Report is the pregnancy risk number. Increasing heat detection is good as long as farms also see an increase in pregnancy risk. A higher pregnancy risk number means not only is a farm identifying cows in heat, but the farm is also successful in getting those cows to conceive.

**Milk Pregnancy Tests:** Technology now exists to determine if a cow is pregnant using a standard DHI milk sample and testing pregnancy associated glycoproteins (PAGs). This can be done as early as 28 days after breeding with farms receiving a "Pregnant" or "Open" result. In some cases (about 4%), farms may receive a "Recheck" result. This means that levels of PAGs are inconclusive. With "Recheck" results, Dairy One does not charge the farm for the test. The milk pregnancy test is a very cost-effective way for farmers to confirm if an animal is pregnant. The sooner a farmer knows an animal is open, the sooner efforts can be made to get her bred. Some farms have even started to use milk pregnancy tests multiple times throughout the lactation to make sure a cow hasn't lost a calf.

Dairy One technicians can work with farms to generate the pregnancy risk report during the monthly test. This is also the time to order milk pregnancy tests.

Dairy One is ready to help you protect farm profitability. For more information, please contact us by phone at 1-800-344-2697, by e-mail at [dhiarecordservices@dairyone.com](mailto:dhiarecordservices@dairyone.com), or visit our website at [www.dairyone.com](http://www.dairyone.com).



**Figure 1: Bulk Tank Contribution Report**