

**MAKING MILK**

By Kathy Barrett

# Co-Vale Farms-Feeding accuracy to maximize nutrition

In 2003 Brad Cates took a hard look at his milk check and decided he needed to focus on raising the pounds of components in the milk he was producing. Cates is the owner-operator of Co-Vale Farms in Preble, NY. A fourth generation farm and a Dairy of Distinction, Co-Vale's history is one of constant improvement. Presently the dairy consists of 500 registered cows milking and dry. They are housed in a six row freestall. Cows are milked three times a day in a flat barn milking parlor. Co-Vale's commitment to cow comfort is obvious from the sand bedding in stalls to the misters for heat abatement. All forages are grown on the farm. Replacements are homegrown as well.

Since Cates is paid on pounds of components, not percentages, that is what he is focused on. He realized that increasing component percentages while decreasing volume would end up with fewer pounds of components sold and a smaller milk check. Yet he wasn't convinced he had to sacrifice milk volume to raise components. Working with his nutritionist he was able to accomplish his goal of maintaining and raising milk volume and component pounds. Although he used quality ingredients in his ration, his income over feed cost improved. Presently the farm produces 31,000 lbs of milk with 4.0% butterfat and 3.13% protein. The combination of high milk volume with high components is a profitable one. The ration formulation is crucial in providing the cows the nutrition necessary to achieve this kind of production.

But Cates quickly determined that the ration was only as good as his feed delivery system. He next refocused his attention on developing a system to increase and monitor feeding accuracy. Cates heard a speaker at a Cooperative Extension meeting talk about ration variability.



"What he said stuck with me," Cates said. "He had purposely fed a dry cow ration to a high group and kept the ration consistent. He fed another high group a ration that was formulated for their level of production but varied the ration. He found the cows on the dry cow ration who were fed consistently performed better than the cows with the varied ration that was formulated for their level of milk production. Imagine how cows on a consistent ration that is formulated for their production would do."

Determining the dry matter of feed as fed was the first and most important step to decrease variability. Forage samples are taken at

**Table 1. DM Intake per Head***From 2/9/2015 until 2/16/2015*

Date	Call Wt.	Delivered Wt.	Dry Wt	# Animals	Price	Price/Animal	Weighback	Refusal %	DMI
Pen : 01, High									
2/9/2015	16,566	16,570	7,017	120	\$810.86	\$6.76	494.16	2.98%	56.73
2/10/2015	16,429	16,430	6,913	118	\$801.66	\$6.79	489.98	2.98%	56.84
2/11/2015	16,958	16,970	7,145	120	\$823.51	\$6.86	506.09	2.98%	57.76
2/12/2015	16,958	16,960	7,164	120	\$831.20	\$6.93	505.79	2.98%	57.92
2/13/2015	16,958	16,960	7,141	120	\$823.03	\$6.86	505.79	2.98%	57.73
2/14/2015	16,815	16,820	7,097	120	\$818.88	\$6.82	501.61	2.98%	57.38
2/15/2015	16,668	16,670	7,012	121	\$807.99	\$6.68	497.14	2.98%	56.22
Average	16,765	16,769	7,070	120	\$816.73	\$6.81	500.08	2.98%	57.23
Total	117,352	117,380	49,487	839	\$5,717.14	\$47.70	3,500.56	20.88%	400.58

**THE MANAGER**

harvest but dry matter can change over time due to environmental conditions. Co-Vale Farms checks the dry matters of its feeds three times a week. The ration is adjusted based on this information. Refusals are weighed back daily for each pen and recorded. Feed Tracker is used to monitor the program. Table 1 shows the information that is collected and recorded daily. This information is then entered daily in the farm's Milk Tracker spreadsheet that tracks the following information on a daily or weekly basis (Table 2). It takes just a minute each morning to input the dry matter intake information. This key piece of information can then be used to monitor other aspects of the dairy.

Key to this information being useful is that the people responsible for feeding the cows have the skills and desire to make sure that

the details are taken care of. At Co-Vale samples are taken correctly and consistently. Scales are checked to make sure they are accurate. Refusals are collected and weighed back. Feeders are trained and comfortable using Feed Tracker. The commitment of the feeder is fundamentally important to achieve feeding accuracy.

Improving feeding accuracy allowed Co-Vale Holsteins to take fuller advantage of the ration that was developed to increase pounds of components sold. It also impacts overall cow performance and farm profitability. □

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**Table 2.**

Date	Milk Lbs. Sold	Feed DM Lbs.	Milk Cows in Tank	Treated Cows	Dry Cows	% BF	% Prot.	SCC	Bact.	Mun	Milk/AC	7 Day Milk Avg.	ECM	DMI	FE
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*Milk/cm includes only cows milking, milk/ac includes all cows including treated and dry. FE-feed efficiency*

### Focus on quality

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ately culled a number of cows," Gendebien said. "Fresh cows that responded to treatment were kept. Legs were banded on cows that gave over 90 pounds of milk, but that had cell counts of 200,000 to 400,000. We can make culling choices because beef prices are high. In another year it may have been much harder to make those choices."

In the summer when cows are on pasture, the milking unit is dipped in chlorine, and banded cows are milked last. Positive cows were separated and moved to a barn on his father's property. Somatic cell ranges from 150,000 to 190,000, butterfat is 3.93 to 4.0% and protein is 3.15 to 3.17% at the home farm.

An intern the farm hired from SUNY Cobleskill, Shizuko Maeda, who also has a vet tech degree from SUNY Delhi, and speaks Spanish, English and Japanese, manages the culture sampling, and coordinates with the farm's Hispanic milkers. Every month all fresh and clinical mastitis cows are sampled.

"It has been expensive, but at the very least it has been a wash with the quality premium," Gendebien said.

A herd with lower somatic cell will also likely make more milk, resulting in unseen increased income, Scillieri Smith said.

Gendebien recommends: Give responsibility to one person to



**Blake Gendebien separates Staph aureus positive cows into a separate barn.**

culture and treat. Sample the entire herd to identify positive cows. Sample every fresh cow. "We have a lot of room to improve," Gendebien said. "Our goal for this year is to stay below 200,000."

And that, Scillieri Smith says is a smart strategy. Maintaining one goal, for any farm, before trying to further reduce somatic cells count is realistic. □