

Straight to the bottom line

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Title "From Allegory to Reality"

Last month's column was an allegory telling the story of a manufacturing company that produced various types of balls. These balls were shipped in various quantities in boxes of variable sizes. Though the manufacturer's income was calculated from the number of each ball sold based on its market price, the business gauged its daily success based on the number of boxes they shipped.

Though the comparison is not perfect, the way dairy producers focus on pounds of milk shipped each day is similar to the ball manufacturer counting boxes shipped and not balls sold. Without a close second, pounds of milk shipped each day by a dairy is the first measure of dairy success. The math is simple and, at most dairies, it is a daily calculation. This measuring process can take many forms. In some cases, a graduated wooden stick is used to measure the depth of the milk that is then compared to a chart set to determine pounds in a particular tank. Other farms may use milk truck scales values. The more modern approach utilizes flow meters. These meters might calculate bulk milk flow between the parlor and the tank or may be on each individual milking stall. In any case, the numerator of a fifth grade math problem is determined. The denominator is simply the number of cows. Almost as singularly as number of years describes a person's age, pounds of milk produced per cow describes the success of a dairy farm.

The problem though comes when considering the fact that not every pound of milk is the same. Not only does a pound differ from dairy to dairy, pounds differ from season to season even on the same dairy. There are at least two major drivers that might make a pound today different from a pound half a year ago. The first of these is the component percentages of butterfat, protein and other solids. The second influence is the widely variable value of each of these components.

To be fair, dairy producers are certainly aware of the percentage of the components in the milk they are measuring. But the multiple variables that exist with ups and downs in the solid components and the monthly variations in price, it is beyond a normal person's skills to do that math in their head. Looking back to the boxes and balls analogy, it would be akin to the ball manufacturer knowing how many boxes he ships each day and having a pretty good idea what the percentage of space in an average box is taken up by footballs, basketballs and ping pong balls. It would be better if he just knew each day how many of each ball type left the facility. The boxes are almost irrelevant.

It is a paradigm shift for sure, but beginning to think this way would make our measurements more predictive of financial results. Instead of knowing that you are shipping 75 pounds of milk and recent components are 3.6% fat and 3.15% protein, one might say we are shipping 2.70 pounds of butterfat and 2.36 pounds of protein. Then a few months later, perhaps in the spring flush, your ability to describe an increase in flow would be more meaningful. Instead of saying with great joy that you have increased to 85 pounds milk and with a little less enthusiasm admitting that, "well we are a little down in components". The more informative way to describe the 85 pounds of milk with a 3.3% fat and a 2.95% protein would be to say you are shipping 2.81 pounds of fat and 2.51 pounds of protein. These pounds of solids shipped are better for sure, but not to the tune of 85 pounds verses 75 pounds.

In the previous example, milk flow was increased by 13%. However, since most dairies are paid on solids not fluid, how much more actual fat and protein was sold? This example of a nice 85 pound spring flush only resulted in selling 4% more fat and 6% more protein. It is still more, but not nearly as much more as the first glance comparing 85 to 75.

Additionally, what if the annual spring flush was predicted by the milk markets and the price per pound of both butter and protein were lower. And to add insult to injury, what if the cows did what cows normally do and eat a little more during the spring. A few pounds of extra dry matter intake at 12 cents per pound to get the marginal increase in a lower priced solid components sold might even net less margin!

It should be said that not all of this is in our control based on ration dynamics. In fact, much of it is seasonal. While knowing these seasonal trends, the experienced formulator adjusts diets to control as much of this natural seasonal trend as possible. If we would focus more on the solids and less on the total pounds, we would see that the sellable product variation is often much less.

So, just like the box and ball producer in the allegory decided to think less about boxes and more about balls, the financial-minded dairy producer needs to think more about pounds of butter fat and pounds of milk protein sold. And, to take it a step further, knowing the current price per pound for each will be another improvement. Another way to describe the paradigm shift needed is to think about “average area pay price” often listed on milk check pay stubs. This value is the price of milk for that month with the average components for a particular geography. Many producers know this number and are aware of how their farm’s pay price compared. This may not be a valid comparison. This would be like the box and ball manufacturer knowing the average price per box of all the various box and ball combinations from all producers without knowing how many boxes other producers sold nor how many balls were in each box. He really needs to know how many of each ball he sells and the price for each ball type.

Instead of knowing the area average pay price each month, a dairy producer should know what the current price per pound is for butter fat and milk protein. Then, work to produce as many of both as possible!