Title: Consistency is the Key

By: Steve Martin

Cows are creatures of habit. The more you study cows, the more evident this becomes. For a cow, her life, like ours, revolves around a 24-hour clock. To her, this is more like a 24-hour schedule. It doesn't matter if it is a dairy cow in a very high-tech operation or a beef cow that is in a two-cows per section stocking rate environment. These bovines like to do the same things at the same times every day. It is not only in her daily schedule that consistency is best, but she benefits from the same diet day-to-day as well. We would be smart in a modern dairy operation to consider these two areas of potential variability and manage them as well as possible.

First, let's look in the area of a dairy cow's daily schedule. No matter if you milk her two times, three times or even four times per day, keeping a constant schedule in the parlor is best. The entire dairy's daily schedule revolves around the parlor. Feeding, breeding, treatments, etc., all follow the pattern set by the milk barn. So, if the parlor stays on schedule, barring any breakdowns, the rest of the dairy should go as planned as well.

There are many different philosophies of feeding styles as it relates to timing. Some dairies have the feeders "follow the parlor" in an attempt to deliver fresh feed to be consumed when the cows return from milking. This is a smart angle as cows have a hormonal drive for intake that is timed with being milked. But, with 2x or 3x milking, this might be impossible to accomplish every time. Some herds have prioritized their pens based on days in milk and production, and work to be sure those pens are fed while the cows are in the parlor. A late lactation pen probably is not as critical. With breeding pens, there is the added complication of getting a good lock up for the breeder. When schedules get complicated, this breeding lock up and feeding may not time with the parlor.

We do see some issues at times on dairies as it relates to lock up schedules. There are at least two principles at work here. The first is to have this lock up event occur at the same time every day. The second is to work very hard to minimize the amount of time a pen is standing locked. The most common infraction we see here is with the most vulnerable cows on the dairy, the fresh pen. This is a big disservice to these animals.

As it relates to the day-to-day variability in feeding, there are a couple of issues at work here as well. First, the feeder needs to start at the same time every morning and should be on a strict and scripted schedule. Cows get in the habit of having their major meal time events occurring at the same time every day. All of the leading on-farm feeding software programs have time stamps for the start of the day and every major event through the day. These should be evaluated to be sure a consistent schedule is being followed.

The second and arguably more important daily variability risk is with feed ingredients. These ingredients must be the same every day and be mixed the same every day. Cows may get accustomed to some variability due to sometimes necessary ingredient outages and the resulting adjustments. However, to whatever degree they "get used to" these variations, it will be at the detriment of milk production and cow health. Rumen microbiologists tell us that the rumen microbial population takes a couple of weeks to adjust to ration changes. I think some cows on some dairies are in a continual state of adjustment due to feeding variability. We can say for sure that this fact will limit milk production.

We also need to remember that the ingredient blend in a ration is only one of the potential variability we need to minimize. The physical form of the diet is nearly as important as the nutrient blend. Shaker boxes can be used to measure this variability, but the trained eye can probably pick up on this as well. Mixing time and ingredient loading order needs to be the same every day to have the resulting TMR length be the same as well. If a forage change occurs, perhaps a change in order or timing might be needed to deliver a constant forage length in the TMR. This potential change must be managed. High corn silage diets are certainly easier to manage in this area when compared to high alfalfa hay diets.

We should mention a couple of the more subtle ingredient changes that can occur. One of these is the common practice we see of feeding from more than one corn silage pile. At times, due to rain, trucking or other logistics, silages delivered to the dairy might change. The silage company or farmer might think that this is not an issue, but we know that corn silage is not corn silage! At times, we see multiple pits open as a contingency plan if a particular supply is disrupted temporarily. The concern with this is that the blend of two silages must be constant every day. I often doubt if this really occurs.

The other potential subtle variability would be buying flaked grain from multiple suppliers based on price. Due to a significant amount of recent detailed starch analysis, all flaked corns are not the same. Changing back and forth frequently due to price advantages might not work to the advantage of the cow. Changes can occur to allow the advantage of feed cost savings, but changes should be gradual and infrequent.

When considering the impacts on these potential variations, consider it on an individual cow basis. A particular cow has its own true lactation curve based on her daily milk flow. If we graphed an individual cow's daily milk to build her personal lactation curve, how many down days would we see occur because of a change in her schedule or a change in her diet? I am sure some cows are more reactive to these variables than others. In any event, milk losses pre-peak will almost certainly reduce the eventual level of peak milk she achieves. Daily milk losses in excess of the normal decline post peak will only lead her down that lactation curve in a steeper fashion. This might increase her chances of culling or early dry off but will for sure decrease her total production for the current lactation.

So, the message is to do as many things as you can for your cows today just like you did them the day before and the day before that, etc. Undoubtedly, things occur that will knock a dairy off schedule and these events must be managed through as well as possible. Just be sure to err on the side of the cow and get back to your plan as soon as possible.