Two basic management practices that impact dairy cow performance and profitability

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Regardless of markets or economic conditions in the dairy industry, dairy owners and managers should continually ask themselves these questions:

- · How can we improve feed efficiency?
- · How can we increase components and milk production?
- · How can we decrease feed cost?
- · How can we minimize stress?

These all lead to one bigger question: How can we be more profitable?

There are two basic management practices that have proven to be a great investment. These practices are not new or unknown to our industry, but they are not always monitored or they may be forgotten for many reasons. These key practices are 1) pushing up feed and 2) calculating dry matter intake.

Sometimes these two fundamentals are neglected when the focus is put more on feed efficiency, labor efficiency or the many other numbers that get crunched. By no means are these other areas less important. It's just that if there is no feed available in front of a ruminant, none of the other numbers matter.

1 Pushing up feed

Having feed in front of the cows at all times is vital to a dairy's success.

Let's be practical though and think about the process of pushing up feed on dairies of any size. Is this one of the everyday activities that gets left for later or is it skipped when things get busy on the farm? As a former dairy manager and a field nutritionist, I've seen this activity often overlooked.

Unfortunately, things happen and sometimes cows don't have feed, but it becomes a major profit-eating factor when this becomes a habit. A producer may notice that nothing "bad" happened that one particular time he skipped pushing up feed, but when it happens over and over and now, he's pushing up feed every 6 hours instead of every 3 hours it becomes problematic. Inadequate feed push-up can lead to fewer, larger meals which can result in a drop in the cow's rumen pH and a higher risk for subacute ruminal acidosis and milk fat depression.

Also, when feed is limited or difficult to access, cows can become stressed. Aggressive cows will dominate the feed bunk, while subordinate cows will cower and have less to eat. At the 2023 American Dairy Science Association's annual meeting, Faith Reyes and her University of Wisconsin colleagues presented research related to stocking density and how more competition at the bunk lowered intake. She concluded the following: "As stocking density increased, cows appeared to modulate their bunk visits and eating rates to adjust for greater competition and less opportunity to gain feed bunk access."

What is the right number of times that feed needs to be pushed up in a 24-hour period? Many agree that the answer is every 2 to 2.5 hours. This translates into 9.6 to 12 times a day. Is this really practical and achievable? On many operations, yes, it is. But for most Midwest dairies, a more realistic goal is 6 to 8 times a day. This means pushing up feed every 3 to 4 hours. Either way, it's a tough chore to be done by one person all the time. Which is why it's important to set a schedule, monitor it regularly, include it in your SOPs (Standard Operating Procedures), and communicate it effectively.

Without a high priority and set schedule, feed is probably not being pushed up consistently and often enough. This leads to lower DMI and consequently lower production, or increased size of meals and therefore, lower components.

The magical number of times that feed needs to be pushed up also may vary depending on the number of milkings and number of feed deliveries in a day. Work to find that magic number on your operation, achieving an optimal balance between maximum feed intake and the amount of work it requires to do it. I have witnessed several examples (in dairies ranging from 80 to 800 cows) where the effort put into creating and following a schedule of pushing up feed has significantly increased profit levels. Research shows that herds with a routine push-up schedule experienced over 8 pounds of more milk per cow per day compared to herds that did not push up feed.

2 Calculating dry matter intake

Another basic but important practice often overlooked is knowing the actual dry matter intake (DMI) of all cows. DMI is the measure of moisture-corrected pounds of nutrients consumed by a cow. DMI changes seasonally, along with the stage of lactation and with the age of the animal. There are many other factors that influence DMI, such as fiber content of the ration, butyric acid in forages, daily changes in temperature-humidity index (THI), grouping practices, and

more. Unless DMI is monitored on a daily or weekly basis, there is no way of knowing if cows are maximizing DMI.

DMI is the single, most important factor that affects milk production, feed efficiency and subsequently, farm profitability. Since DMI is part of these important equations, we cannot predict and manage those numbers unless we know the DMI. Let's not forget the good old statement: "If you can't measure it, you can't manage it!"

To calculate DMI, you need to log the total amount fed and the weight of what was left over before the next feed delivery. This determines how much the average cow consumed. Then, measure the dry matter (or moisture) content of the feed. It may seem like a lot of work, but most dairies have all the tools, and it is absolutely worth the extra effort. Once established, the DMI can easily be manipulated and optimized. And optimized DMI means optimum profitability.

A large number of dairy farms do not take the time to measure DMI on a regular basis. This does not mean producers aren't managing their bottom lines. I think it's that producers tend to drift away from basic practices for various reasons. These drifts often end up being expensive when we lose the handle on what's fundamental and chase profitability in other ways. There is nothing wrong with looking for alternative ways to improve as long as we don't forget the basic fundamentals.

Simply put, it is always important to double-check, confirm and master the basics, including maximizing feed push-up frequency throughout a 24-hour period, knowing how much cows actually eat, and how and when DMI changes and why.

At Jefo Nutrition, we're creating more awareness of stress factors, including nutritional, and the solutions available to help keep cows comfortable, healthy and productive. Learn more at JefoDairyStressors.com, an educational resource center for research, articles, podcasts and more.