



by Steve Martin

What to do with feed refusals

IT CAN always be said that much is learned during hard times. Such is true about what the dairy industry went through in 2009 and the multi-year drought that followed.

We often look back at those times and say, “yeah, we started or stopped doing that in 2009”. These included long-standing management practices that had their root in convenience rather than good economics, or maybe feed ingredients that we thought we had to use and a few we actually did use that were not previously considered milk cow feed.

The issue of correct milk cow bunk management was clearly in the middle of this discussion – how much must I overfeed, and will I lose milk if I feed to a slick bunk? During part of that time milking rations cost up to 15 cents per pound of dry matter, so reducing extra feed was a cost-saving opportunity. For many dairies the tight economics led to a reduction in the traditional amount of feed refusals. Was that a good or bad change?

As with many things in the dairy vocabulary world, what we call feed refusal varies widely across different geographies. I grew up in the business calling it push-down. I have since heard it called clean-out, clean-up, push-out and simply refusals. In any case, we all know what it is.

The questions are, how much should you generate, and what is the best use for it? I find that opinions vary widely and all can be correct if they are thoughtfully executed.

In those tight economic times many producers said it was a luxury to have a lot of feed left in the bunk each day. But at the same time we also knew that an extra pound of feed intake almost always made a couple pounds of milk. Since the move to primarily TMR feeding, keeping adequately filled bunks has been pretty much a standard practice. The predominant idea is that over-feeding by two to five percent will insure milking cows have all they want to eat.

Think about feed timing

But is that truly the right amount? The answer depends upon a lot of things, and it all starts with timing.

As bunks were simply managed

The author is the founder of Dairy Nutrition and Management Consulting LLC, which works with dairies and heifer growers in Texas, New Mexico, Kansas, Colorado, Washington and California.

for a leftover amount, how much consideration was being given to when feed was available versus when cows wanted to eat? And what was the “freshness” of the ration? Did its freshest point match the cows’ maximum appetite?

As we dug into it, the question wasn’t as simple as how much extra we should offer during a 24-hour period. It could be that if we learned a little about when the cow wanted to eat, along with her travel habits to and from the parlor, maybe we could time feedings and clean-ups to better match them. Thus, we might be more exacting with the amount we offer and not simply over-feed just to be sure her intake desires were met.

Another issue of timing is how often bunks are cleaned. I see practices that range from every day to once a week. Many factors determine which is best. Maybe daily is good for fresh pens, close up pens and high pens. Perhaps every other day is adequate for cows in later lactation.

I’ve seen once a week push-down work, but it is probably not ideal. In such cases it is tempting to feed light on clean-up day to reduce the amount of feed that has to be collected. I’ve seen short-feed days coincide with preg checks. That’s clever, but let’s not make the cows eat six days worth of refusals in one day just to get a good lock-up for the vet.

Two to five percent refusal is a pretty wide range and should meet the needs of any dairy. The question is, should you be at the top or bottom of the range? The answer probably has to do with timing of the push-down, how long will the bunk be slick before new feed, and what your options are for finding a good use for push-down feed.

There are no one-size-fits-all directives. This is an issue that needs to be given serious consideration to be sure that cows are eating as much as they want and you are finding a positive use for push-down feed.

What are some pitfalls? The first consideration needs to be knowing what the nutritional value of push-down is and where it best fits as a ration ingredient. These are a few ways that I see push-down being used. I have seen all of them in practice and some are better ideas than others:

- put it back into milk cow rations
- use it in dry cow or heifer rations
- keep a handful of beef cows and

let them eat it

- sell it to a neighbor
- give it to a neighbor
- simply throw it away

If push-down material is used in milk cow rations there are few things that must be done. First, clean bunks every day and be sure not to use anything from the close-up lanes and probably not from dry cow lanes. Second, push-down material needs a periodic lab analysis to be sure of its nutrient composition.

Push-down feed can sometimes test very similarly to the TMR it came from, and depends mostly on sorting potential of the original ration. If it’s a high silage diet you might be surprised at how little it changes. But if it’s a high hay diet... well, who knows. Frequent on-farm moisture checks are also advisable.

Push-down needs to go into feed management software as its own ingredient and be assigned a dry matter percentage. Also, be 100 percent sure that two-day-old push-down is never fed to milk cows.

With any well thought-out use, there needs to be a contingency plan for when push-down is not available. Alternate rations can be set up in all feed management software programs to allow feeders to select a “No Push-Down” option. Such days can easily come on times when you are “chasing” cows up on intake and can’t seem to catch them, or when push-down is full of snow, wind-blown, dry manure, sand, etc. Sometimes you just have to bite the bullet and throw it away.

Never push across manure

Another potential issue relates to how push-down is picked up. The main risk there relates to being sure the feed lane arrangement, push wall, etc. do not allow feed to be pushed across manure. At many dairies this is a big challenge. No matter whether it is a cow lane, flush area, manure vacuum turn-around or whatever, do not push refusals across concrete that has manure on it and then re-feed it.

What do you do when you have too much push-down? In my experience the biggest risk is to heifer rations. Feeders may have a tendency to want a clean feeding area at the end of each day. At times when there is too much push-down I am certain it will all manage to find its way into some ration – most likely in heifer di-

ets. I suspect that some also feeders get pretty skilled at making sure the push-down pile is gone by the end of the day. A few weeks or months later you wonder why you are freshening so many fat heifers.

Don’t let heifers be the flex in this system. Look at expected push-down volumes, heifer and dry cow pen counts, and calculate how much per head best estimates a 100 percent usage. It will never be perfect. A couple of alternate rations with and without push-down for heifers and dry cows should allow for using 100 percent of the variable volume.

Specifics about thoughtfully using push-down in heifer and dry cow diets are not complicated. By using an occasional lab analysis, on-farm testing and a little math, push-down can be a positive and very useful ingredient in any non-lactating ration – with the exception of young calves and close-up animals.

For growing heifers through springers and far-off dry cows, any grain that those lower energy diets need can easily be supplied by grain and higher quality forage contained in lactation TMR push-down. The biggest risk there is over-feeding; don’t let procedural drift occur using push-down feed in heifer diets that results in fat heifers.

One more comment to put a bow on this nearly unending discussion: be careful how feeders influence the implementation of push-down feeding. It takes a lot of work to go around a dairy and collect feed. If nice push-walls are in place it makes the job much easier.

The point is that feeders can influence the amount and timing of push-down to make for an easier day. For example, if feeders have authority to read bunks, cows could be underfed to minimize the time required to collect push-down material. This could reduce voluntary intake and thus milk. Another trick would be to use push-down and some silage interchangeably to make the amounts available each day magically work out just right. We all are tempted to cut corners; don’t let it happen here.

Developing a good plan for how much feed refusal best fits a particular dairy and how to best utilize push-down feed is truly feeding for the bottom line.