

TMRs: Monitor Them to Manage Them

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FeedWatch Factsheet



One of the most important daily tasks on a dairy farm is getting the cows fed. For without consistent feeding, it is challenging for cows to milk well or stay healthy.

People can use many different systems to get this task accomplished. However, the monitoring of feeding often is an afterthought. Still, it is an extremely important aspect of knowing how well this task really is being done. Feed is the largest daily expense on most dairy farms, and improving the accuracy of feeding can help keep that cost under control.

There are many different ways to monitor TMR feeding - TMR samples, notebooks, clipboards, spreadsheets, TMR software programs, and so forth. Any of these can be successful. The TMR software programs are the most detailed in arranging the different items. Some names of programs you may have heard of are EZ Feed, Feed Supervisor, Feed Watch, and TMR Tracker.

What are the common features of these?

- Ingredient information: dry matter percent, storage location, received inventory, cost.
- Diet information: usually by diet type (lactating, dry, and so forth).
- Pen information: animals per pen, production per pen.
- Transfer abilities between computer and mixer scale.
- Reporting of the interactions of each of the above.

The analysis of data is only as good as what is entered. Thus, if moisture adjustments are not made when the forages or other "wet" ingredients change, there will be inaccurate dry matter intakes, inaccurate diet formulations, reduced feed efficiencies, and greater load deviations. The same concept can be applied to pen counts, ingredient costs, inventory entries, and so forth.

When looking to manage any of the items around feeding, think of the concept, "Are we good enough to get better?" This will influence the feeding team in using the program and allow tightening of the constraints made on the important task of feeding cows.

HOW CLOSE DID FEEDERS COME?

Ingredients	Avg. feeding rate (% of called for weight)	Actual fed range of called weight
Wet Ingredients (Brewers, distillers, gluten, beet pulp)	103%	100-112%
Dry Ingredients (Corn, soybean meal, canola, gluten feed, cottonseed, protein mix)	102%	97-108%
Hay/Straw	103%	70-117%

WHAT WAS FED COMPARED to what was supposed to have been fed is shown for 20 midwestern dairies using TMRs. The numbers represent a two-week period on each farm. Inclusion accuracy for hay and straw ranged from minus 70 to being over by 17 percent.

If the reasons for implementing the TMR software are not properly communicated to the feeder, the feeder may feel like he or she is not trusted. It is important to implement the thought process that "we are good enough to get better" and that it's a priority to have a tool to help improve how the cows are fed, track shrink, find actual dietary costs, and more.

As for overseeing the feeder, yes, this can be done. However, for the feeder to really improve, report information and feedback needs to be given so they can understand what is happening and how it may be affecting the cows.

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Think about the importance of being able to accurately report the dry matter intakes of different groups of cows to your nutritionist. Similar information can be provided to the feeder, so they can work on reducing ingredient variation within TMR mixes. The detail of topics the feeder and nutritionist discuss will improve as an understanding of how different ingredients are handled on each farm occurs.

An example could involve an ingredient that should be a cost savings to use in a diet, but the consistency and handling issues cause that ingredient to be overfed. The nutritionists may need to adjust how much of an ingredient gets fed per cow to match what the payloader bucket empties into a batch. Then it can be re-evaluated if the ingredient still is a good buy.

Here's an example of this:

- Use wet distillers costing \$50 per ton as-fed.
- The formulated diet calls for 10 pounds per cow per day. This costs 25 cents per cow per day.

In this example, let's say this saves us 5 cents per cow.

- Maybe the mix runs 20 percent over on the wet distillers (12 pounds per cow). Now this ingredient costs 30 cents per cow.

The diet no longer saves the 5 cents per cow, plus you no longer are feeding the formulated diet. Does this have potential to impact cow health or milk components?

Wet distillers is used only as an example. All ingredients will have some loading variation. Commonly, bulky ingredients and wet by-product ingredients will be extremely variable. Loading variation will vary and depend on feeding methods (bins with augers versus payloader bucket).

Regularly and accurately checking dry matters on forages should reduce the loading variation of the most variable ingredient on the farm. Having a software program to assist with feeding may give more incentive to check dry matters as updating diets can be done simply by changing that forage's dry matter percentage in the computer. This eases the process of adjusting batch weights.

The table on the front is a summary of data from 20 midwestern dairies using TMR software programs. It shows the variations of ingredients being fed versus

what was called for. Each farm's data was pooled for two-week periods, so larger day-to-day or individual feeding variation is not shown. This indicates that the ingredient category with the largest variation is hay/straw. Being fed at 100 percent would indicate that it is fed right on the call weight.

On the topic of monitoring ingredient purchases, it becomes increasingly more accurate to monitor diet costs by tracking the costs and orders of each ingredient delivered to the farm. Your nutritionist may report to you what your diet should cost based on dry matter formulation. This should be a close estimate to the actual cost, but, if there are deviations in how the TMR is mixed, the most accurate cost is the mix delivered to the cows.

If you have one of the TMR programs, how can you better learn to use the software? You can develop the relationships with the software providers and consultants you work with to cover the information that needs to be entered, collected, and also analyzed. Those who see these programs used in different scenarios may be able to recommend solutions for common issues in feeding cows. There also is benefit in discussing with other producers how they are utilizing the programs in feeding their cows.

As a producer, nutritionist, or consultant, you can either be optimistic or cynical of what the programs can do to help you. It all really comes down to how well you want to manage what's probably your largest daily expense.

Optimistically, it is easy to look at improving mixing consistencies, improving feed efficiency, reducing feed shrink, and reducing feed refusal, along with other management areas that the program can be of benefit. Being cynical, it also is easy to state that we have limited loading variation in mixes, no or little feed shrink, and little feed refusal. To truly manage feed, the data needs to be collected and sorted through. In some instances to allow the programs to help us, concessions may need to occur in a farm's current philosophy of feeding cows.

Many good dairy managers have stated that they became better at feeding cows once they allowed the TMR software to help them feed instead of trying to out-think the cows (by using "cheater" or "add" batches, and so forth).

CanWest DHI sells and supports FeedWatch® Feed Management Software in Canada. To find out more, please call us at 1-800-549-4373.