

Straight to Your Bottom Line

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2/16

Ration Consistency

The Penn State particle separator, or the way most people refer to it “the shaker box” is a useful, but sometimes frustrating tool. It is easy to fall into the trap of thinking we can find the “ideal” ratio between the boxes and it becomes our goal to make every ration fit into that “ideal” breakdown. The fact of the matter is, each dairy has its own unique feedstuffs and ration mixing capabilities and its own unique cows for that matter. And although general guidelines are helpful, each dairy should have its own relative shaker box targets and not rely solely on general all-encompassing targets as its goal.

For those who are unfamiliar with the shaker box, it is 3 or 4 trays (we use 4 trays) that stack on top of each other with different sized openings in each tray to separate the different particle sizes in a TMR. Then the feed in each tray can be weighed and the physically effective fiber (peNDF) portion can be objectively measured. It gives us the ability to quantify ration length and bulk, instead of “too short”, or “too long and sortable” we have the ability to put a number to the measurement. “The high cow ration has 16% peNDF, we need to add some length to it and get it to an 18% peNDF.”

Now the next phase is – How do we add length to the ration? The answer is - it depends. Is the ration being mixed properly but the ingredients are just too short to begin with? Or are the feedstuffs long enough, but we are over processing in the mixer and creating a ration that is too short? The answer to this question is obviously important as we determine the corrective action to implement.

Recently, at a couple of different dairies we work with this very issue was illustrated very nicely. The exact same ration was implemented on both dairies. Forages come from a common source, but each dairy is equipped with its own mixing capabilities. At dairy #1 it was determined that the ration contained 19.3% peNDF. However, dairy #2 was determined to have a 16.1% peNDF ration. Exact same ration formulation with common forages. That is a big difference, especially on the same ration. Dairy #1 was getting 15% more peNDF out of the same ration. Obviously, there is plenty of length to work with from the ingredients we start with, so the issue seems to be over processing at dairy #2. How do we correct that? Mixing time, mixing order, premixing, number of knives, kicker plates, wear and tear, etc...

The point is not whether we need to be feeding a 16% peNDF or a 19%peNDF ration, the point is that rations change for the cows many times even when we don't do anything differently with the formulation. People are important, processes are important, equipment is important, measuring change is important, because cows love consistency. The more we understand about where inconsistency can come from the better equipped we are address and minimize those negative impacts. Consistent, boring and monotonous might not be how you would describe a good time but to your cows it means efficiency- and that efficiency will go Straight To Your Bottom Line.