

Dairy Details

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NORTHERN VALLEY DAIRY PRODUCTION MEDICINE CENTER

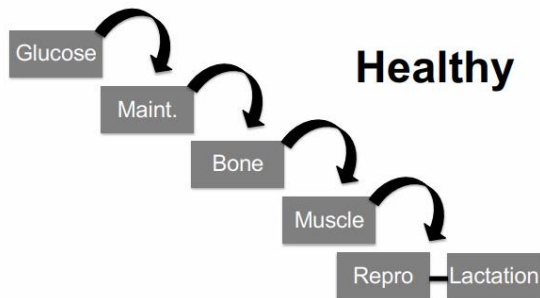
Are Your Heifers Weighing You Down?- Part 2

Last month we discussed Diamond V’s Dr. Staley’s compelling data showing that heifers that freshen at an older age will produce more milk in their first lactation and all subsequent lactations as well. His next question was, “Do these cows produce more because they are older at first calving, or because they are bigger?”.

Some herds studied recorded heifer weights at calving as well as their calf weights. Staley found significant production differences between different size heifers. The graph below shows 4 different weight groups of fresh heifers. There is a large production difference between the weight groups. Finally, his research concluded that **for every 1 pound increase in 1st lactation post-calving weight, one can expect to get 7 more pounds of milk during lactation.** That’s a lot of milk!

By WEIGH	Pct	Count	Av WSMK
1172	25	56	71.6
1261	25	56	79.1
1330	26	59	83.2
1428	25	57	88.7
=====	=====	=====	=====
Total	100	228	80.3

The reason we see bigger heifers making more milk is because of “Energy Partitioning”. Animals prioritize where they use their energy. As seen below, milk production is on the bottom of that priority list. The body “chooses” to take care of itself before it puts energy towards reproduction and making milk.



For years, dairy producers have concentrated first on the milking cows, spending time and resources cow comfort, heat abatement or reproductive programs. Heifers often take second place on the priority list. Now, Dr. Staley’s data may be telling us our biggest opportunity to increase overall herd production is back in the calf hutches and heifer pens.

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So, how big should our heifers be at calving to get optimal lifetime milk production? Staley suggests that after calving, 1st lactation animals should weigh 85% of what the farm's mature cows weigh. Close up springers should weigh 95% of mature body weight. But how many producers even know how much their cows and heifers weigh?

The answer - not very many. There's been a push to keep track of birth to weaning weights in calves, but very little talk of monitoring cow weights. But, as you know, you can't monitor what you don't measure.

The first step to see if you need to adjust your heifer program is to compare your fresh 1st lactation heifer weights to your mature cows. One farm I work with recently started weighing heifers when they leave for the heifer grower (~75 days old) and when they come home at ~ 1 month pre-calving. They run the trailer over a scale they have at the farm. Group weights are not as accurate as individual weights, but it's still a practical way to get data about how your heifer programs are working.

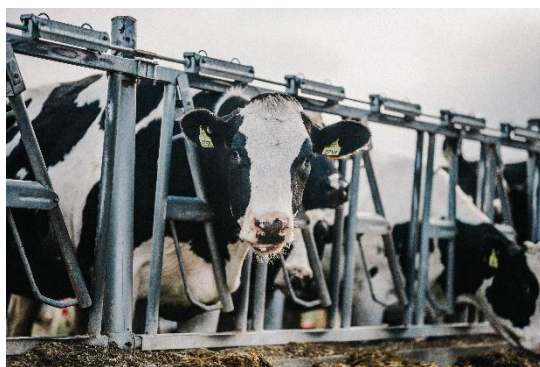
So, what if your heifers aren't 85% of mature body weight at calving? The first consideration is to delay breeding heifers until they are older. Sometimes pushing breeding back just 2-3 weeks has made a difference. I know! I know! This totally goes against everything you've read and heard over the last few years because we wanted to save on heifer rearing costs. But, I think Staley's data shows that we may be losing more than we are gaining.

Many farms, including my own, have tried calving heifers in at 20-21 months old and can say that it was a failed experiment. Staley's data shows that immaturity at calving affects a cow's ENTIRE PRODUCTIVE LIFETIME. He's disproven the belief that these 1st lactation animals will eventually "catch up". Maybe as producers our focus needs to shift from only health and mortality, but also to growth in our heifers from birth to calving. As an industry, we do very little objective monitoring of growth in our heifers.

Staley recommends gathering more objective data on dairy farms, including:

- Routinely weighing 3rd and 4th lactation cows (80-120 DIM) to determine your herd's mature body weight (MBW)
- Weigh Springers (within ~20-30 days of calving) to see if they are 95% of MBW
- Calculate the difference between desired and actual weights
- Based on age fresh and weights, calculate the average daily gain that your heifer program is delivering
- Determine the required breeding age of virgin heifers to deliver a mature springer and/or make the necessary changes to your heifer program to the growth stage goals.

In closing, we need to measure, monitor, and manage for maturity at calving to get optimal milk production within our herds.



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