



# Northwest Veterinary Associates, Inc.

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## Animal Welfare and Productivity March 2020

On a recent farm tour in Chittenden County with a group of students, a student asked why so many cows in this free stall barn had swellings on the top of their necks. At that point, I hadn't noticed the swellings but I was stewing on the feed pattern in the feed alley that suggested that the feed had not been pushed up recently. Of course, the neck swellings were from cows pushing hard against the neck rail to reach the feed.

A few days ago, I was part of a farm meeting with a farm owner and his nutritionist as we discussed issues on the farm while we walked along the feed alley. Several of the groups had an unreachable ridge of feed with bare sections of the manger just in front of the cows. As we spoke, we witnessed a worker aggressively pushing cows back to their pen from the parlor with some cows at a full gallop.

Our conversation shifted from the challenging quality of this year's corn silage to much simpler issues like feed refusals, feed push-ups, stocking density and cow stockmanship. These issues aren't actually simple- in fact, they can be much more difficult to resolve but they surely are low-hanging fruit.

At a recent Vermont Veterinary Medical Association meeting, we listened to Dr. Rick Grant, director of Minor Institute in Chazy, New York as he laid out his case for increased focus on cow time budgets and cow comfort economics. He shared four management factors that are most highly associated with welfare and productivity.

- Comfortable, clean stalls
- Adequate feed and water
- Access to exercise
- Relationship to stockperson

We need to sharpen our focus on the consistent economic benefits of improved cow comfort while acknowledging that modest investments in housing or changes in cow management routines can pay big dividends in greater cow health and performance. Here are some summary points from a number of research studies.

- 47 herds were fed the same TMR. Non-dietary factors were associated with 56% of the variation in milk yield: 1. Feeding for refusals – best herds averaged 3.5# more milk. 2. Feed push ups- best herds averaged 8.7 # more milk
- Stocking density doesn't affect performance if lying time is not compromised. (Cows can adjust feeding behavior but not lying behavior)
- First calf heifers behave much differently than older cows in their feeding behavior. They take smaller bites, eat more slowly and spend more time feeding. They are less dominant and are more easily displaced from manger, stalls and water.
- The cost of heifers competing with older cows: 10% reduction in dry matter intake, 20% reduction in resting time, 9% reduction in milk production.

- Heifers separated from older cows for the first 30 days of lactation produced over 500 pounds more milk in that lactation.
- If pens are overcrowded and time budgets are pinched, cows will choose to lie down instead of eating. But in healthy stocking density situations, as resting time increases, DMI and milk production also increase.
- Gentle handling of cows by milking crew can add up to 13% increase in milk production.
- Zero hours of empty bunk compared to 6 hours of empty bunk per day (midnight to 6 am): 7.9# more milk, 1.8 times greater time lying in stalls, cows less restless.

So what does the perfect dining experience look like for a cow?

- \*Management that optimizes rest and rumination (R+R?)
- \*Feed availability on demand
- \*Consistent feed quality and quantity along the bunk
- \*Stocking density less than or equal to 100% (>24" bunk space per cow)
- \*TMR fed 2X/day
- \*Push-ups focused on the first two hours after feeding
- \*About 3% feed refusal target
- \*Bunk empty less than 3 hours per day (ideally never!)

We sometimes lose sight of basic stuff (like washing hands!!). One of my clients showed me a photo of an absolutely bare bunk in his barn taken at midnight. That group would not be fed until 6 am. Now he is actively addressing feeding strategies in his herd that have a very small cost but may provide large dividends! What opportunities can be harvested on your farm?

**Just wanted to say that NWVA will be staying open during this Coronavirus situation. So please call the office as usual to place your calls and needs for meds. We will be doing our best to serve you as always.**

