

dhia

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Question: What are some early signs that the diet fed to our cows will cause laminitis? Will feeding bi-carb alleviate the problem?

There are some definite indicators that our cows are willing to share with us concerning diets that may lead to rumen acidosis and eventually to laminitis. These can be grouped into two types, measurements and physical observations.

The physical observations are the earlier signs that we can see when the diet is wrong. The problem here is that these observations are mostly not taken seriously enough and often times are not recorded to make them a management tool that we can rely on.


For those dairymen that look at their cows with that special critical eye, cud chewing will tell us mostly what we need to know about the diet and the rumen health maintained by it. You should make these observations away from feeding, milking, and any other time that encourages cow movement. A good time would be the time that you use for heat detection. As a rule of thumb, 50% or more of the cows should be chewing their cud during this observation. A bit easier evaluation can be done on only the cows that are lying down. These cows that are resting should be chewing at a rate of about 3 out of 4 cows or 75%. When a problem is suspected, you should increase the frequency of observation. This will force us to realize the severity of the problem and not discount it to bad timing.

Dairy producers that do not use this form of physical observation due to time constraint or some other reason can rely on measured information that we collect at intervals on the farm. The obvious indicator that is easy to recognize is when we see milk fat depression. Butterfat test that is substantially below normal levels for the breed is only one indicator of butterfat depression. Using DHIA records to count the

Dairyman To Dairyman

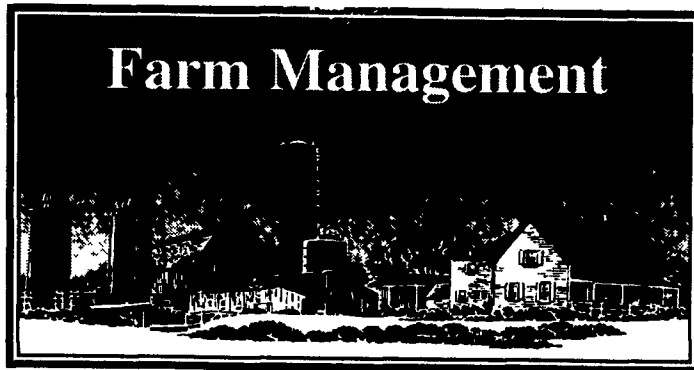
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number of cows below 30% butterfat in a Holstein herd will allow us to recognize nutrition problems in the herd. This number should not be greater than 2 out of every 10 cows or 20%. Most often these will be cows with fat-protein inversions and indicate diets that do not promote good rumen health. The ratio of butterfat to protein can be calculated for the herd prior to this by dividing the %protein by the % butterfat of the herd. For example, a herd with a 30% protein and 36% butterfat would have a ratio of 83% ($(30 / 36) \times 100$). The expected ratio for Holstein herds would be 78 to 85% (true protein used). Herds that fall out of this range should recognize that a problem may exist and investigate further by counting cows with inversions or extremely low fat tests (below 30%).

Feeding bi-carb is a practice used by many dairies. This should be used to help intakes in high producing herds especially during early lactation. The correct level to use is 75% of the ration dry matter. Per cow that equates to 35# bi-carb fed per cow per day when the intake is 47# dry matter ($(47 \times 75) / 100 = 35$). Unfortunately people look for bi-carb to solve poor diet related problems. If you have the signs as we talked about above, then you need to do more than make "ARM and Hammer" rich by feeding bi-carb. Look at your cows, evaluate the DHIA measurements, and then react by feeding diets that encourage good rumen function.



STYLES AND OPTIONS OF DAIRY FARMING
PART 2: ALTERNATIVES TO LARGE-SCALE DAIRYING
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The more I work with both successful and struggling dairies, the more I realize there are many ways to make a dairy work.

It is difficult to really know if a dairy is successful by just looking at surface issues such as production statistics and the size of the dairy. Successful farms, whether they are small or large, have some things in common.

- Successful dairies:**
- Meet the goals of the management.
 - Have a good working environment for all involved.
 - Are financially sound in respect to the goals of the owner.
 - Look forward in their planning.

Also keep in mind most competitive businesses:

- Keep capital and overhead costs low.
- Focus on the things that they are good at and make them profits.
- Stop doing the things they are weak at and are not making money on.

Part 1 of this series focused on large-scale expansion. If you have decided that a large expansion is not in your future for one reason or another, what options are available for you to remain competitive.

Sometimes you get to a point where there is not much more you can cut or improve upon. The system in combination with your circumstances just is not competitive enough to make a living. Sometimes an infrastructure change or a change in style of dairying can work. Possibly you could also focus on a specialty business supporting another dairy or just focus strictly on dairy and not even grow any crops at all.

The following are components or styles of dairying that could help your farm as a "small dairy" remain competitive and keep on milking cows but at the same time limit the amount of "people" issues. Remember, a large-scale dairy involves being a "people person". Please note that "small dairy" is in quotations because "small" is a relative term and the ideas listed below allow or enable expansion.

As with everything, you still need to ask very critical questions, including profitability and long-term survival issues, including transferring the farm to your successor. Goals are critical into shaping the future of your farm.

- The components include:
- Grazing systems.
 - Efficient low-cost milking systems and robotic milking (This has possibilities but still not on the market yet).
 - Focusing on managing and milking cows. TMR is purchased, and manure is marketed or managed in environmentally sound manner.

GRAZING

I have worked with management-intensive grazing systems

(moving the cows to fresh pasture daily) for nine years and have seen its strengths and weaknesses. This system works great if the manager is committed to making it work.

The major benefits to the system are that capital costs are reduced by having the cows do much of the harvesting when forage quality is excellent. Harvest risk is reduced greatly. The pastures also serve as a great housing system that keeps the cows clean and healthy.

Typical cull rates for well managed grazing herds are 15 to 20 percent. The combination of lower capital costs, high forage quality, and low cull rates make this system very competitive. In addition, expansion is possible with little or no changes to feed and manure storage and possibly housing.

Milk production on this system as with any other system is dependent on the goal of the farmer. What does it take to make grazing work:

- Positive attitude to learn the system.
- Good fence and water system (you want a simple effective fence, not Fort Knox).
- A minimum of one third of an acre per cow (Supplemental feeding would be required at this high of a stocking rate).
- Time to observe pastures and cattle.
- Time to set up paddocks.
- Time to think about where the cattle will be tomorrow, next week, etc.
- A support or management team that believes in you and in your goals.

The major negatives of grazing:

- Time to learn a new system
- The cows need to be moved constantly, which requires time and dedication
- Hot weather is difficult to have cows actively grazing
- A backup housing system is still a good idea for extreme weather.

LOW-COST MILKING SYSTEMS AND ROBOTIC MILKING

It may seem odd that I lumped both low cost milking systems with robotic milking together, but the two really can be thought of in the same light in that they both have potential to improve the efficiency of the farm. Milking facilities and labor associated with milking are one of the major limiting factors on most dairies.

The low-cost systems include various flat barn parlors, swing parlors, and possibly other "no-thrills, bells and whistles parlors" focus on keeping capital costs low while achieving good cow flow. These parlors just get the cows milked and no more. Robotic milking when available may be high in initial capital cost but will cut labor costs considerably and quite possibly increase milk production per cow.

Both the low-cost parlors and the robotic systems free up labor to allow more cows to be milked, thus allowing a family to increase its herd size or cut its labor cost. Of course, when expanding herd size, all related pertinent questions must be asked. Grazing in combination with low-cost milking systems in my opinion have great potential,

since the grazing system will provide low-cost housing and a partial manure system (the cows take the manure to the pasture).

FOCUSING ON MANAGING AND MILKING COWS

Again one key to surviving in a competitive industry is keeping the capital or overhead costs low. What I mean by focusing on managing and milking cows is giving up the crops or at least the activities associated with growing the crops and spending your time on either doing a better job on the herd that you have and/or getting a little larger.

By giving up the tasks associated with growing crops, you reduce your equipment needs greatly. The surplus equipment can be sold and overhead is reduced: You can even take this idea as far as having a TMR delivered to the feed manager.

If your facilities are set up, you could potentially have a farm with practically no equipment needs beyond cattle equipment. Of course you give up control of many items and you now rely on many service providers.

Working with the service providers will be critical to your success. Hopefully they can operate at a better economy of scale than you can and the cost would be lower than you doing everything.

Manure management or processing obviously would also need to be worked out. I can imagine feed companies expanding into TMR companies and those enjoy crop work more than the cows expanding their crop acreage to make high quality forages for the dairy producer or TMR provider.

The ideas mentioned above need an improved dairy infrastructure for it to happen, but we have been moving slowly in this direction for years and I am confident that farming will continue further down the road of specialization.

OTHER ISSUES

If you are just plain tired of milking cows and are looking for a change, you could possibly change the focus of your business into a dairy support business.

The following are examples of specialty strategies:

- Custom calf and heifer raising
- Dry cow boarding and care
- Custom TMRs (maybe in conjunction with a feed company)
- Forage production
- Specialty grain production
- Manure and nutrient management.

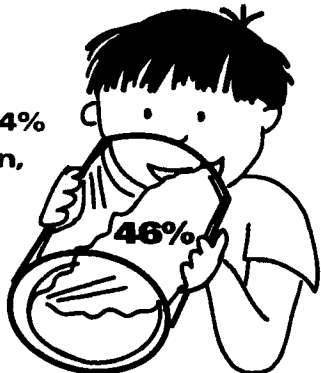
If you don't like any of these options and you can't seem to think of any other alternatives to keep you in business, maybe it is simply time to sell the business and work for someone else. If you are still connected to the land and the farm, there are plenty of other dairymen and crop farmers looking for someone with your work ethic and experience. You have nothing to be ashamed of and lots to be proud of.

For more information and guidance, contact your dairy and farm management extension agent. We can help you in charting your future.

JUNE DAIRY MONTH

KIDS GULP MORE MILK

While youths (18 & under) represent only 24% of the population, they drink 46% of all milk consumed in the U.S.



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