

Adams Advanced Nutrition, Inc.

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Tools for Diagnosing Nutritional Problems in Dairy Herds ~ Part I

There are several diagnostic tools available to help nutritionists, veterinarians and producers discover the cause of suspected

nutritional problems and, more importantly, to help fine-tune rations for the most profitable milk production response. These tools can be used to pinpoint a particular nutritional and/or management problem, which may be the cause of suboptimal milk production, low reproductive efficiency, or metabolic diseases. It is often stated that a cow receives three different rations: the one formulated by the nutritionist (on paper), the ration that is mixed and fed on the farm; and the ration the cow actually consumes. Here are a few tools that can pinpoint areas in ration formulation and feed delivery, which may be opportunities to improve herd performance.

EXAMINE MILK RECORDS ~ Taking time to examine both the production and reproductive records can provide several leads as to when a problem started and some answers as to the cause. The first area to evaluate is the total amount of milk in the bulk tank. This can help to determine how well feeding and management programs are working. If, for instance, milk production decreases 30% from one pickup to the next, you might consider changing the amount and quality of forages being fed... or at least to look more closely at this. While the amount of milk in the bulk tank is an important indicator, it does not give the total picture as to how well a feeding program is working. Looking at the monthly production of each cow and the summary that many computer-based programs can provide can help in providing a much more complete picture of what is happening to the herd.

OBSERVE COWS & FEEDING FACILITIES ~

Taking time to observe cows eating and resting can provide invaluable clues as to the subtle problems in the feeding and management scheme. Cow comfort is necessary for optimum milk production. In addition to meeting necessary space requirements, it is a good sign when you see at least 40% of the resting, undisturbed cows chewing their cud. Fresh feed needs to be readily accessible to cows for at least 22

hours a day for maximum dry matter intake. A simple glance at the feedbunk to see if feed is available can go a long way in explaining why cows are not milking as well as expected. Make sure there is sufficient bunk space for forages, so as not to limit intakes, which is especially important in early lactation cows.

REMEASURE DRY MATTER INTAKE ~ The amount of dry matter a cow consumes determines the amount of nutrients she receives and ultimately the amount of milk she will produce. Too often, the actual amount of feed consumed by the milking herd is less than what is recommended in the ration by the nutritionist, or the quality and/or type of forage being fed has changed. It is a good idea to keep track of dry matter intake using a portable scale. Also, the use of a Koster tester or microwave oven can help in determining the dry matter content of feeds, which is variable between forage types, different cuttings, etc.

FORAGE PARTICLE SIZE ~ Cattle require roughages in their diets to maintain normal rumen function, to allow for efficient fiber digestion, and to maximize energy intake from economical feedstuffs. Roughages encourage the cow to chew and ruminate, stimulating saliva production, which buffers the rumen contents for efficient microbial fermentation. Maintaining particle length in forages is critical in stimulating the cow to chew her cud. Cows that do not receive adequate amounts of effective fiber often have low dry matter intakes, reduced butterfat tests, high incidence of displaced abomasums, and more cases of laminitis and other foot problems. A Penn State Particle Separator can be used to quantify the distribution of particle size within a forage, and more importantly, in a total mixed ration. Particle size must be considered when balancing rations.

To be continued in the April issue!

(edited from an article by Donna M. Amaral-Phillips, U of Kentucky)

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That's Renaissance's commitment!

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**THE TEAM FOR QUALITY...
THE TEAM FOR RESULTS!**

Planting Results!

What you plant has an impact on the rations you feed livestock. Since forages comprise the largest single entity in most rations, they play a significant role, providing either a positive or negative impact on the ration program, and subsequently on the results! Both productivity and profitability are linked, in part, to the quality of your feeding program. What you feed is a vital, determining factor in the ultimate performance of your herd. Are you committed to buying seed because of the quality it can bring to your ration program? Do you have a plan to help meet your goals for production and profitability? I can help! Call today.



AROUND THE FARM THIS SPRING... Planting will begin almost any day now, depending on where you live. Seed has been purchased, ready to be planted as soon as weather and soil conditions permit. Fields have been designated for specific crops, considering crop rotation, corn-on-corn potentials, ensuring you have several [corn] hybrids to plant, etc. In order to maximize time and resources, make sure all equipment is in good working order, calibrations are set, and you have a backup supply of necessary items in order to prepare the fields and plant the seed. There is bound to be the inevitable breakdown... but forward planning and preparation can make a big difference in the timely planting of your crops. We cannot control the weather. But we can, to some extent, control our time. Use March to make final preparations for planting... and as soon as the conditions are right you can "hit it hard!"

A POINT TO PONDER... Stop. Take a deep breath. Think spring! While the weather can be variable for a few more weeks, we know that things are headed in the "right direction." Spring brings a lot more work on the farm. However, it's important to take time and enjoy the unfolding beauty around us, like the emerging plants and flowers... singing birds... the fresh smell of newly-tilled fields... and more! Spring is an ideal time for renewal after the long, dark months of winter ~ and refreshment before the rigors of summer.

COMMITTED to ~ SOLUTIONS for SUCCESS!



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March 2007...

*spring is coming!
diagnosing nutritional problems.
what are you planting?
Check it out.*