Use of Nutritional Consultation in Dairy Practice

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Of all the factors which have an influence on the incidence of illness and disease on the farm, as well as the outcome, probably nutrition plays the most important role. Not only does it influence our client's livestock physical health, but also our client's fiscal health. Therefore, it influences our own fiscal wellbeing. The reasons for a veterinarian becoming directly involved in his clients nutritional programs then are obvious. The nutritional consultation is means for the practitioner to influence the ultimate success or failure ultimately of all the efforts of the farm. Nutritional consultation provides the veterinarian with the opportunity to change his/her relationship with clients to that of a consultant. It allows for a change in the emphasis of practice to a more organized schedule for task completion. It allows the veterinarian to practice beyond certain physical limitations. Ideally, it can be used to enhance the effectiveness of therapy. Within the limited scope of this paper, I will attempt to describe the basis of evaluation that is used by us to provide nutritional advice to clients.

First of all, we attempt to establish whether or not a problem exists, and if it does, can it be identified? Several times a year, our herd health clients are asked a list of questions on a prepared sheet that we bring along during our visit. The first sheet is a pressure sensitive health record that allows the recording of individual cow data. It also is used to record the condition score of the cows examined. These scores can then be quickly tabulated for an evaluation of the overall condition of the cows presented for examination. This is particularly important for the client who has his cows "dry checked." Since we consider the lactation to begin with the dry period, it sets the basis for our dry cow nutritional goals. Numerous researchers have indicated that for each lb. of milk that we can get the fresh cow to peak, we can increase by two hundred lbs. the total milk produced in her lactation. Thus an increase of ten lbs. at peak will potentially mean two thousand more lbs. for this lactation. Recommendations regarding management and nutrition start here.

The second herd sheet serves as our overall barometer of what the farms physical management is doing. By evaluation of ALL the facets of animal husbandry, we try not to miss those recommendations which we all ASSUME that the client is doing but never know for sure. In a 7 person practice, you would not believe how easy it is to assume that your associate went over the basic practices with the client when your associate assumes that you did it! I do know that this form has been responsible for large numbers of animals

Paper presented at the 11th Annual Food Animal Medicine Conference, Columbus, OH, Dec. 5-6, 1985. Dr. Glenn F. Hoffsis, Coordinator. receiving vaccinations and balanced rations that otherwise would have gone without. It also brings to the attention of the farmer that you might be the one to provide non-traditional professional services. At least those which he may not have previously employed you for.

We try to provide two basic services. First, routine ration evaluation and recommendations. We base our evaluation on forage analysis and NRC guidelines with our own prejudices on certain elements. Forage samples are collected by clients as the crop is harvested and frozen for later analysis or many times representative fresh samples are collected and submitted. We strongly advise the collection and analysis of total ration samples to see if they are coming close to meeting their predicted values. Samples are submitted in "Seal a Meal" hermetically sealed bags. They are tough, conveniently sized and prevent wide dry matter variations. In addition to sending samples in for laboratory analysis, we run our own dry matters as well to insure accurate values when computing the amount of "as fed" ration to feed. Small errors in dry matter evaluation can lead to really bad waste or decreased production. We use the Kooster tester for most of our forages and the Fromont tester for the grains. When the forage tests results are returned, we usually have the client come in with a completed feed sheet so that we can evaluate and formulate the ration. It usually works best to have the client present when doing a ration so that questions regarding cattle groups, feeds, minerals, costs etc. can be answered. Our program software was developed by Loren Bennett and we have a second analysis program that was developed by Dr. Tim Millsap of our clinic. They are both easy to use and will run on any of the three microcomputers in our practice.

The second service is that of diagnostic ration evaluation analysis. For those clients experiencing increased incidence of parturition related diseases such as milk fever, ketosis, retained placenta, LDA's, or those with chronic laminitis, depressed milkfat etc. the diagnostic ration evaluation can be very helpful. It has been my experience that correction of problem areas here do not resolve in an overnight manner.

When providing these services, there are some important factors which should not be overlooked. I suppose that they should be called common sense tips, but if they were so common then no one would ever fail to do them.

- 1. Speed of analysis and evaluation is of paramount importance. Clients don't want to wait 4-6 weeks for analysis results or formulations. Chose a lab that can meet your needs!
- 2. Dry Matter. Be certain to get accurate dry matters and have clients run tests with some degree of regularity. When DM changes, have clients use the formula as follows: old %

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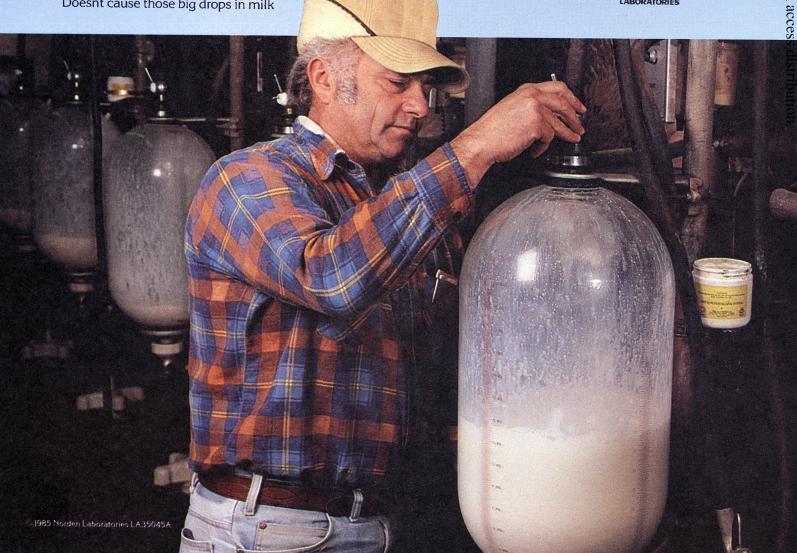
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DM x old lbs. as fed divided by the new % DM = new lbs. as fed. When cows are cleaning up the bunk very early or they are leaving too much wasted feed in the bunk, have the dry matter compared right away.

- 3. You must get accurate feed weights to the right cows! This is particularly important in stanchion barns. It is very difficult for high producers to receive the nutrients they need when no one in the barn knows who or where they are!
- 4. Sequence of feeding is important as well as what is fed. Feeding of roughage before grain, and protein before energy can make significant differences in how well cows utilize their ration.
- 5. Frequency of feeding will play a role in keeping the rumen pH and flora more stable, as well as influence the total DM intake. Going from twice a day feeding to four times a day may be a very beneficial practice.
- 6. Division of the herd by production is important, so as to only feed the cows that are in need of the feed for production or to increase body condition.
 - 7. Magnet feeders. If you have to live with the older style

that cannot be computer controlled, then increase the number of cows with magnets on them so that competition for time at the feeder increases and/or limit the number of hours each day that it is operational with a timer switch.

- 8. Overly fat fresh cows that are prone to developing ketosis may benefit from the addition of 5-10 gms of Niacin daily to their feed for the first 3-4 weeks. DO NOT feed to thin cows!
- 9. For "special" fat fresh cows with a tendency to ketosis, the daily oral administration of propylene glycol 2-4 oz. will have a sparing effect on rapid fat mobilization, hence ketosis. Palatibility is a problem.

Nutritional consultation has provided our practice with an opportunity to expand into different areas of veterinary medicine, improve our patients therapeutic response, and give us new insights into herd disease problems. It has provided us with additional income, while at the same time, usually has saved our clients substantial sums of money. Its application can be a very rewarding experience.

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