

# comments on fine-tuning your herd ration

"The money invested must be justified. I don't think it's labor saving at all, that's an illusion. I'm on a conventional method. I don't know if I'd go on TMR if someone gave me all the equipment. You might save money on feed, but your costs on equipment and interest may or may not be justified. In this area, the variability of soils, climate, hay fields ... it's hard to produce a consistently high quality TMR. If you mix it properly, cows may do very well," he concluded.

The Heindel herd is fed grain twice daily, hay four times a day, and corn silage once a day.

**QUESTION: Does the percent of roughage intake correlate with protein and butterfat tests? Does it help to cut silage coarser, or feed longer hay?**

**Brown:** "Normally high levels of roughage intake are desirable ... and butterfat increases. I don't think you're going to see much difference in protein."

In silage, according to Brown, "we can get it too coarse. I'm seeing it swing a little the other way, too much whole cob, and it is not getting the proper fermentation."

Too much oxygen is getting mixed with it, Brown says. "It doesn't make a difference feeding long hay. It all depends on the program and the quality of hay. Normally, hay will help butterfat tests."

**Kissling:** "In order to maximize the butterfat test, the proper amount of fiber and energy in the correct form must be present in the ration. If the energy is too high, and the fiber too low, you will have a low test. If the fiber is too high and the energy too low for the early lactation cow, the butterfat will not go very high because there is insufficient energy to digest the fiber. Silages must be cut coarse so that the fiber in the ration is effective in the rumen. Long baled hay is not needed if the silages are coarse enough to give effective fiber. At home, we have not fed a single bale of long hay to anything except small calves since April of 1981."

**Seidel:** "I definitely think the coarser is the better. A cow was meant to chew her cud. The more roughages we feed, the better off we are," but he adds, "you can't make 20,000 pounds of milk on less grain." "Healthwise, it's better for long hay, but it doesn't make much difference in milk production."

**QUESTION: How would you mix the ration, the grain to roughage ratio, so that a high producer gets sufficient energy and protein needs and maintains health?**

**Brown:** "A high producer should be on a roughage to grain ration that would be about 50-50 on a dry matter basis. When we balance a ration, we look for a net energy lactation value." (obtained from forage and grain analysis.) For high producers, Brown continues, "we don't like to see the acid detergent fiber level drop below 20%. We use protein levels from NRC." (National Research Council) We like to go to an adjusted solubility feed to make sure we have adequate bypass protein, such as in our 38 Milkmaster or 30 Hi-Moisture Balancer. This is particularly important in a high haylage ration."

**Kissling:** "Rations properly balanced will give an adequate amount of nutrients for high production while maintaining animal health. I do like to use animal fat as an addition to the high ration for energy to replace some of the starch in corn and allow for more room in the rumen for forages."

**Seidel:** "The grain to milk ratio is more important." "I don't like to go above one pound of grain to two and one-half pounds milk, not to exceed 30 pounds per cow and all

the highest quality forages you can get into them."

**QUESTION: How do you get enough feed into high producers?**

**Brown:** "First of all, have a palatable feed. Another problem that I see as far as high producers are concerned, is too much moisture in rations. I like to see total moisture levels falling between 45% and 65%. Also, too much dry material can reduce appetite. The guys that are successful feeding high producers are offering a variety of forages that are high in quality."

**Kissling:** "Feed them only high quality feeds and have them available 24 hours a day."

**Seidel:** "You don't. A cow can only eat so much and then she is full. Their genetic ability to produce milk exceeds their ability to consume the proper nutrition."

**QUESTION: Can a cow digest and utilize certain grains better than others?**

**Brown:** "Yes. Basically we use the information from various universities to balance this out." He concludes, "there is some year to year variation of digestibility of home grown grains ... because of growing conditions, mold problems."

**Kissling:** "As long as adjustments are made for the different protein and fiber levels in the different grains, I don't feel there is a whole lot of difference in utilizations."

**Seidel:** "Sure, but they all have their disadvantages and advantages."

**QUESTION: Do different breeds demand different rations?**

**Brown:** "Probably, but research is scanty." Stating that there is a lack of good quality research with breeds other than Holsteins, Brown comments, "They have a different requirement for milk protein production that may not be adjusted for, using NRC values. The smaller breeds require heavier nutrient density because of their smaller body size...a higher proportion of protein per pound of dry matter."

**Kissling:** "No, I do not feel there is any difference in nutrient concentration requirements among the different breeds. The major difference will be in the total amount of feed consumed based on body size."

**Seidel:** "No, but...a good example was last year." "We bought hay and corn." Seidel stated that the Holsteins dropped from an average of 800 pounds butterfat to 711 pounds fat, on the

poorer quality hay. The Ayrshire herd dropped from 608 pounds butterfat to 605 pounds fat on the same hay. "The Holstein is the workhouse of the dairy industry. She's fine-tuned, but...the Ayrshires don't need as high quality feed to maintain their production."

**QUESTION: What are the problems in a dairy herd ration that are the most difficult to correct?**

**Brown:** "The number one problem that I see is when you're locked in with poor quality forages." Working with a herd that has poor feed intake or poor digestibility of feed and the reason cannot be pinpointed, is another problem, according to Brown. "There are variations from farm to farm."

**Kissling:** "The problem I have struggled with the most is instances where there is some kind of factor on a farm that appears to be limiting utilization of feedstuffs in the cow's stomach. Several different water quality problems have been identified and when corrected, have allowed production to increase. "However, there are still several herds where there has to be something interfering with normal function that we just can't get a handle on. Mother Nature continues to play her games."

**Seidel:** "It's having poor quality forages, because what do you do? You feed it."

**QUESTION: Besides poor production, are there certain health problems that characterize an incorrect, off-balance ration?**

**Brown:** "Yes and no." "It's too variable to generalize on. Too many other factors come into play, such as management."

**Kissling:** "Excessive percentages of milk fever, retained placenta, ketosis, fat-cow syndrome, twisted stomach, and off-feed problems are all signs of incorrect feeding at one stage or another of lactation. These problems can basically never be eliminated, but can be minimized."

**Seidel:** "Yes, there could be thousands." "You don't get something for nothing," he notes referring to high producers that are stressed by the higher production and could have more problems. "It's best to not react, rather than over-react," Seidel cautions.

"Don't go shooting in the dark if you don't know what you're looking for." "A balanced ration is taking

educated guesses and you don't always guess right," he concludes.

**QUESTION: How do you advise feeding dry cows?**

**Brown:** "Keep the dry cows on the same forage that the milking cows are on, except at a much lower level of intake. Use a lower quality of roughage to make the difference." With this method, the dry cow will be adapted to the milking cow ration and less problems will occur at freshening, according to Brown. "The same ration balancing techniques are just as important as for the milking cow ration."

**Kissling:** "Cows should be fed adequately during the last one-third of the lactation so that they are neither fat nor thin at the time of drying off. Cows that are in proper body condition when they go dry need only to have their weight maintained when they are dry."

**Seidel:** "The best feeding program for dry cows is to have a 60-day dry period." "Separate them and keep them on a similar ration as fresh cows."

**QUESTION: What do you suggest as the feed requirements for open heifers?**

**Brown:** "Basically the need for open heifers is probably about a 14% protein feed of adequate energy so that they maintain body condition up to freshening without getting overweight." Balance the minerals according to the forages you're using, Brown adds. "I find that it is best to keep them on some grain. We provide a ration balancing service for people who want to fine-tune their heifer program."

**Kissling:** "Open, growing heifers need adequate amounts of protein and energy to maintain a decent amount of bodyweight and not have growth stunted. With good quality corn silage and hay or haylage, this can be done entirely with roughages from about nine months of age and older. Heifers should not be overfed."

**Seidel:** "Whatever we can't put someplace else, we put into a heifer. We try to freshen them before they are two years old." A good quality, palatable feed would be ideal, Seidel adds.

**QUESTION: In years of drought, what are the best cheaper alternatives to incorporate in a dairy ration to maintain production and herd health?**

**Brown:** "The availability and prices are so variable from year to year. Generally, it's important to

stock up on roughages early in the year - either by buying haylage or corn silage, so that you can see yourself through the year with at least half of your forage dry matter intake being supplied. Your traditional roughages are normally your best forages."

**Kissling:** "Wet brewers grains and other by-products are often economical ration additions when feedstuffs are in short supply and expensive. I personally feel that animals should not be short-changed on feedstuffs regardless of the price. Underfeeding will only drop production and decrease income."

**Seidel:** "There aren't any." "The problem is, everything adjusts. The market immediately compensates."

**QUESTION: What testing procedures and service schedules do you advise for a dairyman?**

**Brown:** "Our salesmen make regular visits to clients, either monthly or semi-monthly. We test forages and split the cost with our clients. Our ration balancing programs are free. Dr. Walter Kennett, F.M. Browns Sons nutritionist, is responsible for formulating the rations. He or myself are available as requested for additional consultations."

**Kissling:** "I have no set schedule with my clients and basically rely on them to watch for feed changes and pull forage samples and call me when changes in the ration occur. I do like to visit farms every two to three months just to check on body conditions and forage appearances." Charges for Kissling's services are on an hourly basis, as needed.

**Seidel:** "I don't test forages. The number one thing you can do is DHIA testing. That will tell you more of what's going on with your herd than anything else. DHIA test for yourself. Know where your cattle are as compared to each other." Although registered herds have other reasons for DHIA, Seidel states, "if you have a commercial herd, DHIA is the best thing you can do."

Each member of the panel appreciated the chance to air his views in Lancaster Farming. As one of their final comments they stressed that it all comes down to a need for better management in details. Perhaps Glenn Seidel summed up the advice for many dairymen when he concluded, "do the best job with what you have before you start looking for other answers."

