## Pipeline

(Continued from Page D19)

fibrous when harvested, and once harvested, were subject to more weathering. Consequently, fiber content is higher and digestibility is lower. The reduced digestibility of these forages, combined with prolonged plant respiration due to slow drying and the loss of soluble carbohydrates due to excessive leaching, resulted in lower energy values for these forages. The energy content of feeds is further reduced by the presence of mold organisms. Reduced digestibility slows down the passage of feed through the rumen. This reduces dry matter intake and the yield of microbial protein. Poor quality, less digestible forage also hogs up valuable space in the rumen, similar to a dry cow occupying a stall that could be filled by a high producer. In other words, less energy and protein are available to the cow, and production suffers.

As the winter feeding program progresses, it is not uncommon to see a weakening of cows' immune systems; infections increase, cows respond more slowly to treatments, conception rates may decline, etc. Part of the reason for this is, the level of soluble vitamins and minerals is lower in stored feeds and cows' body reserves become depleted before they receive fresher feeds.

Because more soluble nutrients, including some vitamins and minerals have been leached out of our forages this year, cows may show signs of weakened immune systems much earlier than usual. Additional vitamins and minerals may be needed in some situations this year.

Options and Concerns

There simply is no substitute for good quality forage in the ration for high producing cows! It sure would be nice to see more truckloads of good quality, green hay moving down the road to fill dairymen's needs! What can you do if you don't have good forages or if prices exceed quality? I certainly don't have all the answers --only a few ideas.

Focus on the basics first such as feeding adequate amounts of forage, saving good forage for the best producers, feeding adequate levels of rumen degradable and rumen undegradable protein and energy, increasing the nutrient density of the ration, improving feeding techniques such as using TMR's or feeding more frequently and offering feeds in proper sequ-

ences, reducing parasite loads, etc. Try to get some good alfalfa for your high producers. How much EXTRA can you afford to pay for good alfalfa over normal-year prices or over this year's prices for junk hay? An EXTRA \$100 per ton increases the price by \$0.05 per pound. If 10 pounds are fed per day that's an increase in feed cost of \$0.50 per day. If this helps high producers improve milk production by 10 pounds (not guaranteed) income is increased about \$1.60 (\$16 milk); that's a pretty good return!

I wouldn't be surprised if some of the corn fodder that's been baled for bedding would have a higher feed value than some of the junk hay I see on trucks moving down our highways.

Also be concerned about the mold content of feeds and products of abnormal fermentation. You may have your rations properly balanced, but some of these off quality feeds could be keeping

your ration from doing the job you expect of it.

If you have off quality feeds, what do you do with them? You might be able to feed them in reduced amounts to lower producers, dry cows and heifers, but be very cautious. Remember, your dry cows and heifers are tomorrow's producers. Don't sacrifice the future by making poor decisions today.

This is a good year to rely more heavily on corn silage, but remember that a lot of our late planted silage corn wasn't as well eared and doesn't have quite the energy and protein value of normal-year silages.

Feeding generous amounts of corn silage along with generous amounts of grain, especially high moisture grains, can cause acidosis. To help prevent this problem, add buffers to the ration, feed less barley or corn, and feed grain more frequently. Barley and corn are high in starch. They break down quickly in the rumen and can contribute to acidosis problems if fed in large quantity.

Corn silage could be a better buy than high priced, low quality hay. Expect to lose some quality in the transfer process as it goes through a second heat. To reduce this risk, purchase well-preserved silage and transfer it when it is cold.

When you buy silage, consider its moisture content, quality, transportation and convenience. The drier the silage, the more it is worth unless it is too dry to ferment well. If 70% moist silage (let's call this our reference silage) is priced at \$25 per ton, how much is 60% moist silage worth? Divide the dry matter of the silage you are buying by the dry matter of the reference silage and multiply this by the price of the reference silage. In this case it would be  $40 \ge 30 \times $25 = $33$ .

If decent forage simply is not available, look for other sources of

digestible fiber; work closely with your nutritionist. Increasing the forage content of the grain ration can help, but it won't have the same impact as fiber from long stemmed or coarse-chopped forages which stimulate cud-chewing activity.

Production vs. Profit

Although we desire to make more milk now to cash in on the high milk prices, this may be a year when less means more. In other words, look carefully at the cost of getting the extra production, the long range impact of your decisions, and the affect it has on profit margins.

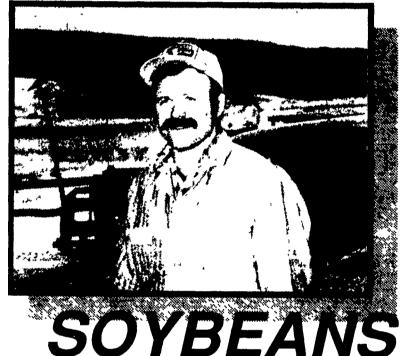
High milk prices encourage farmers to hang onto cows and milk them longer, and to increase cow numbers. Some of these long lactation cows may have high cell counts. If they carry contagious infections, they also are a risk to other cows in the herd.

Recently, I was in a 50-60 cow herd where 4 cows were responsible for 67% of all the somatic cells in the bulk tank; some of them were chronic cows. If two of these cows kept the farmer from getting a \$0.10 quality premium payment on 3000 pounds of milk produced that day, that's a \$30 loss in exchange for about 100 pounds of milk worth \$15.17, not counting the risk of infecting other cows.

If you are buying cows to make more milk, be careful not to expose other cows to new infections. Until you have a chance to culture the new cow and know that she is free of contagious infections, milk her last to minimize the risk. Ideally, she should also be housed separate from the herd for observation, or until she or the rest of the herd has had time to be properly immunized. Work closely with your veterinarian on these herd health concerns.

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