

# Reducing farm sales of milk

**Editor's Note** — This article was written by Richard S Adams, Penn State Professor of dairy science.

**UNIVERSITY PARK** — It is important for a dairyman to determine how he might reduce milk sales on his farm to qualify under the milk diversion program. This needs to be done to determine the economic feasibility of entering the program. In addition the methods to be used in attaining the reduction in milk sold must be given when applying for the program.

Several methods are presented here for consideration. Some allow for greater control of production or sales than others. It is difficult to assess the production response of cows under a wide range of farm conditions or to precisely indicate the degree of risk involved with some methods. In some cases a combination of methods may need to be employed to attain reduction goals.

## Culling of producing cows

This provides the dairyman with one of the more precise methods of reducing production. It also provides him with a means of maximizing savings in production costs. This is particularly true when forage and grain supplies are lacking due to drought or limited crop acres.

Since cows culled frequently are not producing at herd average, one usually must cull more cows than the reduction desired would indicate. Perhaps 20% of the cows in a herd may need to be culled to obtain a reduction of 15% in milk yield. Cows that have staph infections in the udder or have serious foot or leg problems make good candidates for culling. Likewise cows that are problem breeders and must stand dry for a long period should be considered for culling. Dairyman who are not enrolled in a production testing program should weigh milk from cows to obtain an indication of their production level for use in culling. A poorer alternative might be to cull on the basis of days fresh, as discussed under premature drying off.

Savings in forage which may accrue from culling cows may need to be discounted, if it is

largely in a non-saleable form such as silage in some areas. It may not generate any cash income on some farms, but could contribute to an increased inventory. Dry grains and sometimes in high-moisture grains can be marketed.

## Premature drying-off

—If it does not appear to be in the best interest of the dairyman to cull cows or culling schedules under the diversion program are too tight, other methods must be explored to reduce milk sales. One of these is drying cows off sooner than usual. This enables one to harvest normal levels of milk during the flush of production. Then cows may be dried off at the end of 180 days to obtain a 30% reduction or about 235-240 days for a 15% drop in production.

All concentrates may be removed from the ration and forage fed in limited amounts for several days to reduce production. Then most cows could be dried off by complete cessation of milking. A dry-cow infusion product should be given at the last milking to protect against mastitis during the dry period. Savings in feed costs may result from less concentrate being fed and a reduction of 10-30% in forage feeding which often is possible during the dry period.

## Decreased concentrate feeding

It is difficult to predict how much an across-the-board cut in concentrate intake may reduce milk flow. This stems from a tendency to overfeed concentrate in many herds and the tremendous will of today's cows to produce in early lactation. Further, it is important to maintain good health and reproduction if cows are not to be culled. Thus it is recommended that any reduction in concentrate feeding be considered only after the cow has been fresh for 120-150 days and is safe with calf. Then the amount of concentrate fed may be reduced by 50 to 60%. This generally will result in a substantial decline in production, compared to an unpredictable one if it is done earlier in the lactation. A drop in production of 10-20 lb per cow may result. Both the level of concentrate feeding and the number of cows with curtailed

concentrate intake can be used to obtain desired reductions in production.

Since it is difficult to maintain health and fertility on a ration that is not properly balanced it is recommended that proper levels of protein and mineral supplementation be used during the first 4 to 5 months of the lactation. This also will enable more efficient production of milk during the flush of lactation. Feed savings are largely limited to less concentrate intake. Forage intakes may increase somewhat as cows compensate for less concentrate intake.

## Vealing calves

It takes about 10 lb of milk to obtain 1 lb of gain on a calf. Thus a large-breed calf fed to 200 lb of bodyweight will require about 1000 lb of milk. A vealer fed to 300 lb may need 2000 lb of milk etc. Veal calves generally are fed milk at the rate of 10% of bodyweight, adjusted on a weekly basis. Unless extra magnesium oxide is fed in the milk and an injectable selenium and vitamin E preparation is used, calves should be raised only to 180-220 lb weights to avoid problems related to these nutrients.

Vealing of male calves born in the herd can reduce milk sales considerably. Preferably they should not be fed any forage and be bedded only on straw, shavings or sawdust to avoid discounts for red-cutting meat. If calves are purchased for vealing, the utmost care must be taken to avoid disease problems. Preferably they should not be in a separate facility to isolate them from replacement calves.

## Replacement calves

Considerable amounts of milk may be diverted from market if replacement calves are raised on whole milk rather than milk replacer. Calves may be fed milk at a level equal to 10% of their birthweight daily for as long as 8-10 weeks. For example a Holstein calf weighing 100 lbs at birth could be fed 10 lbs of milk daily for 8 weeks. This would remove 560 lb of milk from the market and reduce purchased feed replacer costs. Forage and concentrate also

should be provided to enable rumen development.

## Milk feeding of cows

Some inquiries have been received about this possibility. We know of no studies or experience with this. Skim milk, however, has been fed to cows in past years. It was not relished, unless it was mixed with concentrates at the rate of about 2 lbs of skim milk per lb of concentrate fed. Possibly cows might consume appreciable quantities of milk from a tank, if it were acidified or "preserved" with an organic acid, such as propionic, used at a 1% level. When liquid whey has been tanked to cows, intakes have approached 40 to 90 lb per head daily without appreciable

adjustment in rations. Milk contains about 12.8% dry matter. It has a relatively high content of protein (25%) and fat (29%) on a dry matter basis. Thus some savings in concentrate costs could result, if cows drank an appreciable quantity of milk. Penn State dairy specialist would appreciate learning of any experiences with this approach.

Regardless of methods used, it is important to thoroughly study the economic impact of any diversion on both a short-run (15 months) and long-run basis (27 months or more). This needs to be done on an individual farm basis using work sheets, computer programs etc. that are available to dairyman from various sources.

# Winter is Fixit Time

**NEWARK, Del.** — There's a cold wind blowing, the clouds are dark and heavy, and every now and then a snowflake flashes past the window. Typical winter weather. And a tempting time for a farmer to say, "Today I think I'll just sit back and relax by the fire, and work on my equipment later."

Farming is full of pitfalls — many of which can't be prevented. But a good manager can take steps to avoid production problems during the growing season, and winter's a good time to do so, says University of Delaware Extension Agent Dean Belt.

"I'm talking about equipment maintenance, repairs, storage and alterations," he says. "I'm talking about being ready to go out next spring when the time is right for planting, without having to wait for a part you forgot to order, fix a pump that's frozen up, or alter some machinery you planned to tend to but put off and then forgot"

Many ideal planting, plowing, spraying or harvesting days are lost because equipment's not ready, Belt says. "As a county agent I've seen this happen. Breakdowns can't be completely avoided, but if something was broken six months ago, it could have been fixed and ready by spring. Now's the time to make those changes you were planning, too, such as putting drop nozzles on the sprayer or building that wick

applicator you've always wanted. Or maybe you've intended to attach spray nozzles to your corn planter so you could spray and plant in one operation next spring."

Before setting down too comfortably by the fireside, take a mental inventory, he advises. Was equipment stored in good condition? Has it been greased, cleaned and repaired? Do parts need to be ordered? Some may take weeks to get here.

"Did you clean that grain drill, or will it be full of germinated seed the next time you pull it out of the shed? And how about your sprayer?" asks Belt. Drain and clean the tank and lines, clean and soak the screen and nozzles in light oil. Cover nozzle openings to keep dirt and insects out of the lines. And protect the pump by draining, cleaning and filling it with antifreeze.

"I know it's easy to sit here and give you a list of things to do. That could be endless," he says. "But be honest with yourself and think back. Haven't you gone to do a job and found something wrong that you forgot to fix when you had time during winter? Making changes and repairs now just might save your hours or even days next spring when conditions are ready and you're still waiting for parts. Winter is the time to prepare for spring."

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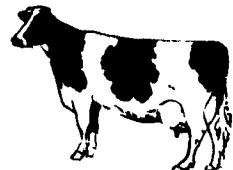
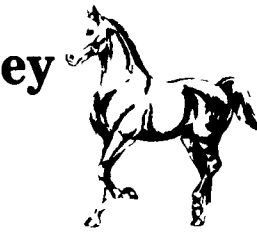
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