Fat is not where it's at

Proper dry cow feeding can prevent ketosis

BY DONNA TOMMELLEO

LANCASTER — Your top producer is due to freshen in a couple of weeks. She's projected at better than 20,000 pounds of milk and you want to give her a head start so you make sure she's well fed during her dry period.

She's been consuming large amounts of corn silage and grain, basically the same ration she's been on since late in her last lactation. Gradually her dairyness is becoming obscured by a fatty brisket that sways like a pendulum, rounded thighs and shoulders and a tailhead that would look more at home on a beefy little Hereford instead of a tall upstanding dairy cow.

But you're not worried that your best cow is turning into a four-legged pork sausage because you know once she starts milking, the excess flesh will start falling off as fast as fleas on a wet dog.

This ficticious example is similar to a children's puzzle, "What's wrong with this picture?" But it really asks the more serious question, "What is going to happen?"

Let's back up and review the facts. You've got one fat cow about to freshen. According to your records she should milk quite well so she'll need a lot of energy to fill that weigh jar. She's been eating well right along and so once she freshens you'll really pour it to her Right? Wrong?

You're sitting on a powder keg just asking for a host of metabolic diseases to run amuck and ketosis may be at the top of the list.

According to large animal veterinarian Dr. Robert Hutchison of Reinholds, a proper dry cow feeding program is critical in reducing the incidence of ketosis which generally follows calving.

"We just don't see much ketosis in a well managed herd," says Hutchison.

Ketosis or acetonemia is caused by an elevated level of ketone bodies in body fluids and a drop in blood glucose. Characterized by a distinct odor on the breath or in the urine, the condition generally occurs in high producers that must mobilize body fat to meet their increased energy needs.

"A cow milking 100 pounds a day cannot eat enough without depleting her own reserves," emphasizes Hutchison.

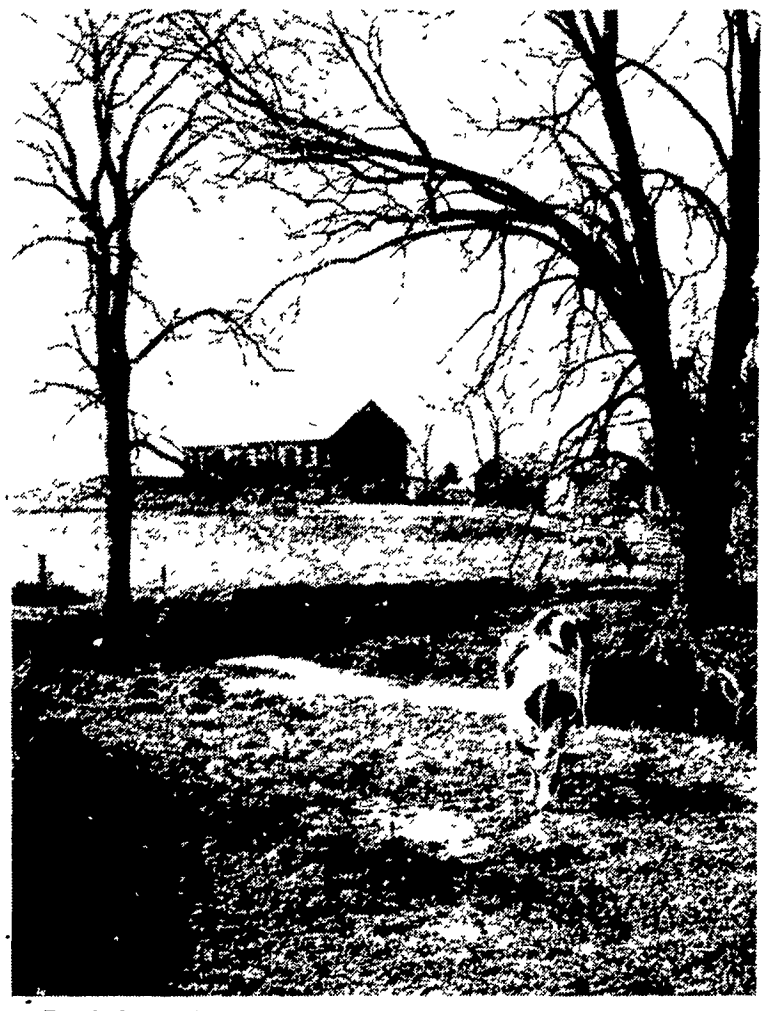
Instead of getting high production, a farmer may see an abrupt drop. In addition, the cow may go off feed and exhibit coordination problems.

But often times, says Hutchison, ketosis may just be the tip of the iceberg.

"It (ketosis) usually follows hand in hand with other diseases."

Hutchison, whose large animal

(Turn to Page A 32)



Don't let lush pasture fool you. Your dry cow may still not be meeting her needs. Pennfield ruminant nutritionist Tim Horn, investigated one ketotic herd only to find the dry cows needed a supplement in addition to pasture feeding.

To complete this happy beginning, the birth of a healthy calf, farmers should follow recommended nutritive and management guidelines to insure the cow a healthy post-partum period.

This dry cow may be looking for her next meal, but make sure it's balanced. Nutritionists and veterinarians recommend periodic forage samples and light grain feeding in late lactation cows and dry cows.

Good management for ketosis prevention

The following trouble shooting guide to ketosis was prepared by the Penn State Cooperative Extension specialists, Dr. Lawrence Hutchinson and Richard Adams. More information is available at local extension offices.

Problem Situations:

1. When over 10 percent of the cows are afflicted on an annual basis.
2. When a high proportion of cows in a sizable group of freshenings is afflicted.

Control Suggestions:

- Make certain that the following forage tests are available:
  - a Standard on all forages
  - b. Mineral on all forages
  - c. Non Protein Nitrogen on all silages
  - d. Sulfur on all forages
- Pending completion of tests and feed programming:
  - a. Check protein and mineral supplementation.
  - b. Check forage intake carefully:
    1. Are fresh cows getting at least 1.5-2.0 lbs. of hay equivalent per cwt. of bodyweight daily?
    2. Is the ratio of forage: grain dry matter wider than 50:50 or 45:55 for fresh cows?
  - c. *Reduce levels of suspected silages by about 50 percent* and increase dry hay accordingly. Maintain a minimum of 2.0 lbs. of hay-equivalent per amount of bodyweight for average cow, including dry ones.
- Check flesh on all cows, including dry ones.
  - a. If over 10 percent are too fat, caution against overfeeding and a possible ration problem.
  - b If over 10 percent are too thin caution against under feeding and a possible ration problem
- Check for stress items in the herd and complicating conditons in afflicted cows Be sure to test water for bacterial pollution.
- Check grain feeding rates for violation of suggested *maximums:*
  - a Before freshening 2.0-2.5 percent of bodyweight, at least one forage should be fullfed.
  - c. Daily increase in grain:
    1 First-calf heifers - 1.0 lbs. per head daily
    2 Older Cows - 1.0-2.0 lbs. per head daily
- Feed grain to high-grain cows more than twice daily to minimize rumen acidosis, or use a complete ration (forage and grain mixed).
- *Avoid feeding or limit amounts of smelly silage for 2 weeks* before and 6-8 weeks after calving. Gradually put cows on full corn silage feeding.
- Encourage off-feed cows to eat by offering strange feeds (such as whole oats, different hays, cracked corn, beet pulp) and concentrating on any forages that they obviously still relish