

# Dairy sanitarians conference puts milk under microscope

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it was one solution to insure antibiotic-free, quality milk.

While dairymen should exercise care in the handling of their milk, Kocher said that laboratory directors should follow the ACE - Accuracy, Communication and Education - program.

Under accuracy, lab directors should be completely sure to get accurate test results and to follow state standards, Kocher said. He suggested the use of triplicate sampling as opposed to single sample testing.

"I don't see how anyone can get around with a single sample," he said.

Once test results are compiled, the farmer needs to be informed of any problem and given some idea how to correct it. "Don't look for dirty udders when it's a cooling process," Kocher said.

Following up on accuracy and communication is education. Kocher added that it's the job of lab sanitarians to help farmers understand test results.

Further defining the role of a sanitarian, Donald Lerch said the person works with and checks approved inspectors. They also work closely in maintaining state sanitation standards and in informing farmers of their responsibilities in this area.

Lerch noted a few points from a "check list" geared to farmers. These included: all milking equipment must be cleaned and properly stored; separate stalls for horses must be provided; adequate lighting is needed in the milking area and non-electric farms should have lighting for night pick-ups.

Also mentioned were the need for ventilation in the milkinghouse; properly maintained hose ports; the cleanliness of the milkinghouse; and quality bulk tank washers and hoses.

In conclusion, Lerch said, "The name of the program is quality milk that we'd all like to drink."

Taking the quality milk issue one step further, Sterling White said flavor is an important characteristic. Farmers need to watch for feed flavors which are passed on from the feed, through the cow's digestive system and into the milk. Unclean odor found in milk could be the result of unclean equipment, White said.

White stressed the management practices of testing cows and cleaning equipment between milkings. He suggested that milk haulers do their part in assuring quality milk by smelling the milk at time of pick-up.

In line with Kocher and Lerch, White said that farmers should be careful not to add milk from treated cows into the bulk tank. "Do not milk treated cows," he said. "Either milk them last or keep them separate to avoid any mistakes."

**BY LAURA ENGLAND**  
UNIVERSITY PARK — All too often, food contaminated with foreign substances is marketed to the public, according to a representative of the Pa. Bureau of Foods and Chemistry, and this is a problem the dairy industry must avoid.

"The milk industry cannot tolerate that type of expose," said William Fouse after describing an incident where a mouse had been baked into a roll. "We need to keep on our toes."

In his message to those attending the Pa. Dairy Sanitarians' and Laboratory Directors' Conference held this week at Penn State, Fouse emphasized the need for farmers and industry personnel alike to keep abreast of health regulations and potential health problems on the farm.

Emergency situations in which cow health poses a threat to the consumer require prompt attention, Fouse said. "If we don't act very quickly, then we're going to have sick people and very serious problems," he said.

Trust and honesty on the farmer's part is an important step in avoiding emergency situations, Fouse indicated. "Some farmers," he said "are interested in getting the milk off their farm and sold before anyone realizes there is a problem."

The key to the problem is to follow state dairy regulations and maintain quality standards on the

farm, Fouse stressed in his talk, "The Latest on Dairy Regulations."

Fouse also talked on milk identity standards and the need for labeling of imitation dairy products. Problems in obtaining this labeling have been met in setting up acceptable standards.

"We want to get as good a standard as we can," Fouse said, "but not go too far that it's not acceptable."

Sharing the talk with Fouse was James Sumner, who gave an update on the Pa. Voluntary Milk Promotion and Marketing Program. The program, which went into effect May 1, is geared to milk producers who do not ship to federally regulated plants. The plan will allow these producers to direct 10-cents of the mandatory 15-cent per hundredweight assessment to state promotion programs.

Pennsylvania currently has three ongoing milk promotion programs, Sumner said. These include the Federal Order 4 promotion program in southeast and south central Pennsylvania; Federal Order 36 program in western Pennsylvania; and the positive letter program authorized for Federal Order 2 producers.

Sumner said an estimated \$9 million will be generated into the state promotion program if all dairymen take advantage of their local programs. If 100 percent of the non-order dairymen par-

## Keep abreast of dairy regulations



Looking over program notes are William Fouse, left, the state Bureau of Foods and Chemistry, and Robert Dietrich, Dietrich Milk Products.

ticipate, \$1.5 million will be directed to the state program.

Sumner said the milk promotion effort will be more effective "if we try to build on the existing promotion programs such as the Dairy Council." This would be a

better approach than to hire an advertising agency, he added.

For those producers with questions on the state promotion program, this toll free number has been established, 1-800-932-0904.

## Changes noted in milk composition

**BY LAURA ENGLAND**  
UNIVERSITY PARK — Fat tests, protein tests and somatic cell count tests all have an important role in determining milk quality, said a professor of dairy science extension at Penn State.

C. William Heald, speaking at the Pa. Dairy Sanitarians' and Laboratory Directors' Conference held Monday through Wednesday at Penn State, said the three tests help determine milk quality and can point out changes in milk composition. But, he added, those running the tests must be aware of variations in results.

Heald outlined the results of a typical fat test run three milkings in a row for three days. The results were 3.8, 3.4, 3.0, 3.9, 3.8, 3.6, 5.1, 3.8 and 3.7, showing a wide variation in fat percentages.

"This is a rather typical situation," Heald said. "The point is, there is extreme variation."

Why does this exist? Weather and environmental conditions are one factor, Heald said. Others include bacteria and disease, the cow's eating habits and the stage of milking.

Using a drawing on a blackboard, Heald explained that the first milk from the cow tests at about 1.0 percent butterfat. The last few droplets of milk range from 8.0 to 9.0 percent, while milk that is hand-stripped might test as high as 15 percent butterfat.

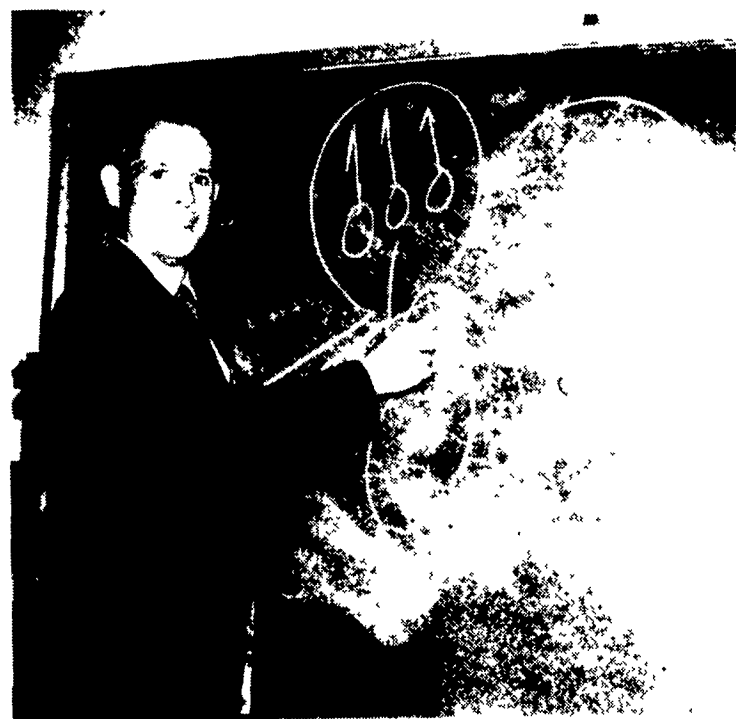
Protein tests do not show as much variation as fat tests, Heald said. "They are more affected by the animal and genetics," he said.

A reason for variation in protein tests is due to dry matter intake versus the cow's body weight. If a cow doesn't have body fat, her tests will go down.

"You have to look at the cow's body efficiency to see if she can meet these demands (protein tests)," Heald said.

Heald pointed out that the highest protein tests will be recorded in January and February, and the lowest in August. Fat runs a pattern similar to protein.

Another factor which can affect protein and fat content is a high somatic cell count. Total solids, lactose and fat will be lower when



C. William Heald, Penn State Dairy Science Extension, explains how butterfat moves through the cow's udder.

the somatic cell count is higher, Heald said.

"A high somatic cell count affects milk taste," Heald said. "The composition of milk is greatly affected by the somatic cell count."

Heald related the following somatic cell count chart in relationship to milk quality: 250,000 is acceptable; 400,000 is slightly rancid; and both 700,000 and 1,000,000 are rancid.

## Dairy hearing scheduled

PHILADELPHIA — Dairy farmers, cooperative associations, milk handlers and consumers may testify at a Wednesday U.S. Department of Agriculture public hearing on proposals to amend the Middle Atlantic federal milk marketing order.

The hearing will start at 9:30 a.m. at the Holiday Inn, 400 Arch St., Philadelphia.

Edward T. Coughlin, dairy official with USDA's Agricultural Marketing Service in Washington, D.C., said the proposed amendments would:

— Increase the percentage of producer milk deliveries that may

be diverted to nonpool plants from 40 to 50 percent.

— Provide that a pool distributing plant meeting the total Class I disposition requirement of the order during one month shall retain its pool status during the immediately succeeding two months regardless of whether its total Class I disposition during such months is less than the minimum percentage specified in the order.

Coughlin said the amendments were proposed by Atlantic Processing, Inc., a federation of four cooperatives, and Inter-State Milk Producers' Cooperative,

which claim the amendments are necessary because the status of plants operating under the order has changed.

Principal cities in the marketing area are Washington, D.C.; Baltimore, Md.; and Philadelphia, Pa.

The hearing notice was published in the May 8 Federal Register. Copies also are available from: Joseph D. Shune, market administrator, P.O. Box 710, Alexandria, Va. 22313 — telephone (703) 549-7000; or, Dairy Division, AMS, USDA, Washington, D.C. 20250.

## Lancaster goat club

### announces 1984 meetings

LANCASTER — The Dutch Country Dairy Goat Club of Lancaster County recently announced its schedule of activities for the year and invites anyone interested in dairy goats to attend.

The schedule is as follows:

May 24 - Housing and Managing Dairy Goats, 7:30 p.m., at the Farm and Home Center.

July 14 - Dairy Goat Field Day, 1-

4 p.m., at the Windy Hill Goat Dairy owned by Jacob Fisher of Manheim.

September 13 - Feeding and Milking Dairy Goats, 7:30 p.m., at the Farm and Home Center.

November 8 - Understanding the Goat as a Ruminant by Pennfield nutritionist Dr. Brian Perkins, 7:30 p.m., at the Pennfield Laboratory, Rohrerstown.