

Penn State Cooperative Extension Capitol Region Dairy Team

WATER — AN IMPORTANT
NUTRIENT IN
DAIRY RATIONS
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If I asked you to name important nutrients in a cow's ration, chances are you would list protein, energy, vitamins, and minerals. But would you include water?

When balancing rations and feeding cows, do you focus on water quality and water intake as much as you focus on forage quality, energy and carbohydrate fractions, proteins, amino acids, vitamins, minerals, various feed additives, dry matter intakes, etc.?

Water is a key nutrient that performs a variety of important functions. Cow need plenty of good, quality water for normal rumen function and metabolism, proper flow of feeds through the digestive tract, good digestion and absorption of nutrients, maintaining normal blood volume, and to satisfy a variety of tissue needs.

We think nothing of weighing and testing feeds, but do we test water and monitor intakes? We should, because water intake problems can affect dry matter intake and milk production as well as the health and growth of cattle.

Consider using water meters to help you monitor intake.

What can you do to help encourage cows to consume adequate intakes of water?

• Provide good, quality water. Clean waterers frequently. Install easy-to-clean systems to help make this job easier to perform.

• Provide convenient and easy

access to water. Place waterers at the end of freestall rows and in crossover alleys to shorten walking distances. Position waterers close to feeding and shade areas. Place large water tanks near parlor exits. Place waterers in well-lit areas --- avoid dead-end alleys, stray voltage problems, and other situations that threaten cows and discourage usage. Position water bowls so cows have sufficient head and throat clearance and sufficient chain length, enabling them to position their heads in a manner that allows them to operate water bowl valves easily and to drink comfortably. Cows shouldn't have to work to get their water.

• Prevent boss cows from ruling the drinking area. Provide more than one waterer per group. Large-volume watering devices with ample walking distance around them can be helpful.

 Provide an adequate supply of water to water bowls and tanks. Have adequate wells and/ or reserve tank capacities, adequate pump capacity and pressure, adequate pipe size (and unclogged pipes), good water flow to critical distribution points in the water delivery system, and nonclogging water valves that have good flow rates.

How much water should cows consume? It depends on such things as size of animal, milk production, stage of pregnancy, moisture content of the ration, and temperature — the higher the temperature, the greater the intake. Some of a cow's water intake comes from the feed she consumes. If a cow is consuming 100 pounds of feed per day, and the moisture content of her ration is 50 percent, she is consuming 50

Lancaster Conducts 4-H Presentation Night



Blue ribbon winners from the presentation contest at the Lancaster County 4-H Presentation Night Tuesday at the Farm and Home Center.

pounds of water per day from her ration. At 8.34 pounds per gallon of water, that amounts to 6 gallons of water (50 divided by 8.34).

Holstein calves consume about 1.3 to 2 gallons of water per day at 1 month of age. At 5 months, they may consume 3.8 to 4.6 gallons. The intake increases from 5.9 to 7.1 gallons at 15-18 months of age. Prior to calving, expect them to consume 7.3 to 9.6 gallons.

In their last trimester of pregnancy, Holstein cows will consume 9 to 13 gallons. Lactating cows may consume 4 to 4.5 pounds of water per pound of 4 percent fat corrected milk. The higher range of these intakes pertain to cattle fed rations consisting of dry forges and grains.

Additional information on water intake, water quality, and water testing is available at http://www.das.psu.edu/dcn.



LANCASTER (Lancaster Co.) — Thirty-two 4-H members from various Lancaster County 4-H community clubs participated in Presentation Night Tuesday evening here at the Farm and Home Center.

The event is a prelude to State 4-H Achievement Days July 30-Aug. 1 at Penn State, University Park.

Speech and presentation winners can advance to competition. The Presentation Night also included visual award winners. Winning blue ribbon awards at the night were, from left, Reid Fellenbaum, photo contest winner; Bonnie Johnson, essay contest winner; and Katrina Smith, poster contest winner.

Photo by Andy Andrews, editor

First John Schwartz Golf Outing A Success

STEVENS (Lancaster Co.) — "The inaugural John Schwartz Memorial Golf Outing was a great success, raising more than \$2,000 to benefit the John Schwartz Foundation," according to Lancaster County Poultry Association President Andy President

According to Bradford, the Lancaster County Poultry Association would like to thank all of the participants, sponsors, and especially the weatherman for another successful golf outing at Fox Chase Golf Course. The fierce thunderstorms predicted for the day did not materialize until well after play ended. More than 80 golfers participated.

"The support for this year's event was a standing tribute to John's contributions to the industry he so dearly loved," said Bradford.

Hole sponsorships more than doubled and participant numbers grew by double digits as compared to previous years. The winning foursome fired a 23 under par 60 to capture the top prize, hile two other groups were nipping at their heels with 61s.

The day was capped off by the participation of John Schwarts



The first annual John Schwartz Memorial Golf Outing, sponsored by the Lancaster County Poultry Association here at Fox Chase Golf Course recently, was a resounding success. Winning foursome, from left, Ron Kreider; John Schwartz Jr., presenter of awards; Bob Randall; and Barry Shaw. Not pictured: Jeff Musser.

Jr. John played in a foursome sponsored by York Ag Products and also greeted participants at the registration table by handing out the gift pack of balls and tees by the same sponsor.

Bradford noted that several players were overheard saying, "Having John Jr. here really brings the message home as to why we are here today."

To learn more about the John Schwartz Foundation, contact Jim Shirk at PennAg Industries, (717) 651-5920.

The poultry association, Bradford noted, "would also like to thank Chip Kappesser, head professional and all of his staff at Foxchase Golf Club for having the course in perfect condition for acceptable event."

Office Closed July 4

On Thursday, July 4, Lancaster Farming office is closed. The office will reopen Friday, July 5.

For the July 6 issue, there are some deadline changes:

Public Sale and Mailbox ads, 5 p.m., Monday, July 1.

Classified, Section D ads — 5 p.m., Tuesday, July 2.

Classified, Section C, Farm Equipment ads, 9 a.m., Wednesday, July 3.

General News — noon, Wednesday, July 3.

