

- Penn State's Dairy Cattle Nutrition Group has designed a series of nutrition and feeding management training opportunities that can be modified to meet the needs of various groups of agricultural professionals.
- These programs can be customized for one to five days of training at intermediate or advanced levels.
- Programs may combine lectures, workshops, farm labs, reasearch labs, and computer sessions, all designed to optimize individual and group interactions.
- A standard fee of \$100 per day per person will be charged. Additional costs may be charged as needed for meals, reference materials, and transportation to and from any farm visit.

Check our website for information about upcoming short courses and continuing education programs.

Advanced Dairy Nutrition Lab for individuals will be held July 22 to 24, 2003, at University Park.

Contact Jud Heinrichs at ajh@psu.edu for information.

**DAIRY &
ANIMAL
SCIENCE**

Visit Penn State's Dairy Nutrition Group on the web at www.das.psu.edu/dcn/

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DAIRY NUTRITION AND FEEDING MANAGEMENT WORKSHOPS



For Feed Industry &
Agricultural Professionals

*Programs tailored to your
group's specific needs.*

PENNSTATE



College of Agricultural Sciences

PENN STATE'S DAIRY CATTLE NUTRITION GROUP

Jud Heinrichs

Professor
Dairy and Animal Science

Lisa Holden

Associate Professor
Dairy and Animal Science

Virginia Ishler

Extension Associate
Dairy and Animal Science

Larry Muller

Professor
Dairy Science

Gabriella Varga

Distinguished Professor
Animal Science

Zhiguo Wu

Assistant Professor
Dairy and Animal Science

For additional information on designing a program for your group, contact Jud Heinrichs.

Phone: 814-863-3916

Fax: 814-865-7442

Email: ajh@psu.edu

Web: www.das.psu.edu/dcn/

Workshops will feature faculty and staff from Penn State's Dairy Cattle Nutrition Group, as well as other College faculty where appropriate. Select your workshop's subject areas from those shown below. Emphasis can be placed on any specific topic or a combination of topics within a selected subject area. You also may wish to include a farm visit emphasizing trouble-shooting nutrition problems or a computer session utilizing nutrition-related management software.

Ruminant nutrition

- Physiology of the ruminant
- Digestion of the ruminant
- Factors affecting total dry matter intake
- Forage dry matter intake and forage neutral detergent fiber intake in ration formulation
- Carbohydrate availability and rates of degradation
- Protein, protein fractions, and amino acids
- Carbohydrate and protein interactions in dairy rations

Proper nutrition & feeding management practices

- Focusing on any group or groups from newborns to cows at any stage of lactation

Forage quality

- Proper forage sampling techniques and determining dry matter content of forages
- Interpreting a forage analysis report
- Forage particle size analysis and utilization
- Agronomic side of forage quality
- Pasture management

Feeding management

- Environmental concerns affecting dairy nutrition
- Standard operating procedures
- Ration formulation and evaluation software
- Nutrition aspects of management software (Dairy Comp 305, PCDART, etc.)