

**PENNSTATE**  
**College of Agricultural Sciences**  
**DAIRY & ANIMAL SCIENCE**  
**E-I-E-I-O**  
 From Dairy and Animal Science at Penn State

**DAIRY NUTRITION GROUP FORMS**

**Linda L. Smith**  
 Communications Specialist  
 Penn State

When Dick Adams retired nearly three years ago, he cut back his work week from 70 hours to 40. Adams had led Penn State Cooperative Extension's dairy nutrition program for nearly 40 years. Ongoing faculty and staff have had to reorganize to make up for this change.

Make no mistake, Dick Adams was a tough act to follow. He was an innovator, leader, driving force, pioneer, professional-among-professionals, cutting-edge scientist, and a creative leader in the development of modern dairy farming throughout the world (see "Adams Steps Back, Not Down"). To help fill the void left by Adams, his colleagues have come together to continue serving the needs of the dairy industry. With combined expertise of five individuals, the Penn State Dairy Cattle

**Penn State's Dairy Cattle Nutrition Extension Group**  
 Department of Dairy and Animal Science

**A. Jud Heinrichs (814-863-3916)**  
 Professor of Dairy and Animal Science

**Lisa A. Holden (814-863-3672)**  
 Assistant Professor of Dairy and Animal Science

**Virginia A. Ishler (814-863-3912)**  
 Extension Assistant, Dairy and Animal Science

**Gabriella A. Varga (814-863-4195)**  
 Associate Professor of Animal Science

**Lawrence D. Muller (814-863-4205)**  
 Professor of Dairy Science

**Areas of Expertise**

Primary Contracts	Heinrichs, Holden
Calves	Heinrichs
Heifers	Heinrichs
Milking cows	Ishler, Heinrichs, Muller
Dry cows	Heinrichs, Ishler
Forages	Heinrichs, Holden, Ishler
Concentrates	Ishler, Heinrichs
Minerals	Holden
Pastures	Holden, Muller
Additives, forage	Varga
Additives, concentrate	Heinrichs, Ishler
Trouble-shooting	Heinrichs, Holden
Miscellaneous	Heinrichs, Ishler



**Jud Heinrichs**  
 Professor  
 Dairy And Animal Science



**Lisa Holden**  
 Assistant Professor  
 Dairy And Animal Science



**Virginia Ishler**  
 Extension Assistant  
 Dairy And Animal Science

Nutrition Extension Group will use a team approach to support Pennsylvania producers.

According to group leader Jud Heinrichs, "Where this group is concerned, the whole is definitely greater than the sum of the parts."

Others who comprise the group are Lisa Holden, Virginia Ishler, Gabriella Varga, and Larry Muller (see chart for areas of emphasis).

With the coming of the information age and the opening of global markets, the dairy industry is

experiencing many changes. To meet the challenge, methods for education and technology transfer must keep up. According to Heinrichs, the emphasis for this new Penn State group has shifted to empowering educators and professionals who are strategically positioned to work with producers one-on-one. For instance, whereas a few University extension experts used to provide routine dietary information to individual producers, now they will spend more time training feed industry professionals, county agents, and veterinarians.

A prime focus of the group's efforts will be to work with these intermediaries to identify problems in dairy cattle nutrition before they become widespread, seek out solutions, and then provide proactive training for those individuals who interface regularly with producers.

One such problem in particular was identifying proper forage and TMR particle size and characterizing particle-size distribution so feed recommendations could be

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**Gabriella Varga**  
 Associate Professor  
 Animal Science



**Larry Muller**  
 Professor  
 Dairy Science

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