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MARYLAND COOPERATIVE EXTENSION

UNIVERSITY OF MARYLAND
COLLEGE PARK • EASTERN SHORE

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Meet This Month's Expert **Dr. Amy Burk**

Dr. Amy Burk (nee Ordakowski) grew up in Anne Arundel County, Maryland riding and competing horses while a member of the Maryland 4-H Horse Program and the U. S. Pony Club. She enjoyed showing in the hunter ring, but found her passion lie in eventing. She, like many young woman who spent every waking moment with horses, wanted to become an equine veterinarian. She headed off to James Madison University in VA to major in Biology and pursue a Bachelor of Science degree. In September of her last year, she placed her first vet school application into the mailbox after giving it a kiss for good luck. It turns out that she needed more than luck to get into vet

school and so she took a job soon after graduation at John's Hopkins University as a research technician. Although she enjoyed conducting auditory testing on male baboons, she felt that she had begun to stray from her initial career goals. So, she headed back to school to Virginia Polytechnic Institute and State University where she pursued a Master's degree in Equine Nutrition.

She earned a fellowship towards her PhD at Virginia Tech the week before she learned she had gotten into the Virginia Maryland Regional College of Veterinary Medicine. After pondering her next career move for all of 10 minutes, she quickly abandoned her initial dream of becoming a veterinarian, accepted the fellowship, and continued to bury her head in equine nutrition books and journal papers.

At Virginia Tech, she worked

and conducted studies on a 420-acre working Thoroughbred farm where she helped raise 25-30 foals and yearlings each year. Her PhD work focused on folate status and supplementation of lactating mares, young growing foals, exercising horses, and horses receiving anti-folate drugs used to treat Equine Protozoal Myeloencephalitis. She also assisted with studies aimed at investigating the glycemic index of feeds, the benefits of a high fat and fiber diet on growth and milk composition, and antioxidant supplementation in Arabian endurance horses.

After earning her PhD, the newly "Doctored" Ordakowski joined the faculty as a Lecturer and State Horse Extension Specialist in the Animal and Avian Science Department at the University of Maryland. She initially focused her efforts on rejuvenat-

ing the undergraduate equine curriculum and on enhancing the Maryland 4-H Horse Program while serving as the co-advisor for the 70+ member Equestrian Club.

The then Dr. Ordakowski took a short break from working in August of 2003 to marry J. Robert Burk, the Executive Director of the Maryland Horse Industry Board and to teach her new husband, a native Californian, how to properly eat the Maryland blue crab. She is currently an Assistant Professor teaching two equine courses, giving national and statewide talks on equine science and management, and overseeing the graduate research program in equine nutrition. She's gone back to eventing with her 6 yr old Thoroughbred, Chief, a horse that she foaled and raised while conducting her PhD research. ■

EXTENSION HAPPENINGS

Anne Arundel Co. (410-222-6757): 4-H Horse Meeting at A.A. County Extension Office, Oct. 4, 7 pm.

Carroll Co. (410-386-2760): Horse Pasture Walk at "Persimmon Tree Farm", Westminster, MD, October 23, 10:00am - Noon with refreshments at 9:30 am.

QuickBooks for the Equine Business - time and date TBA
Business Planning workshop - time and date TBA

For updates on above mentioned workshops, check the web at www.agnr.umd.edu/Carroll

Harford Co. (410-638-3255): Open House, Extension Office, Oct. 3, 1-5 pm

Q. I have an 8 yr old quarter horse gelding with HYPP (Hyperkalemic Periodic Paralysis) and my vet recommended that I feed him a low potassium diet. What types of forages and/or grains are low in potassium?

A. It's important to feed horses affected with HYPP a diet low in potassium because the diet can increase blood potassium levels that are already high due to the muscle condition. Abnormally high levels of blood potassium may increase the occurrence of HYPP episodes that include muscle tremors, stiffness, involuntary recumbency, and death.

The requirement for potassium in horses at maintenance is 0.6% of the total daily dietary intake, but forages and feed fed to horses are often two or three times more what is needed. Horse owners should try to feed their horses with HYPP a diet containing 1-1.5% potassium in order to decrease the risk of HYPP episodes in their horse.

Selecting a diet low in potassium is a challenge because concentrations in forages especially vary depending soil type, growing area, and forage maturity. It is best to have your diets tested for potassium concentration or offer a commercially

available complete feed specially formulated to be low in potassium for horses with HYPP. You can also visit the forage library at Dairy One (www.dairyone.com) where nutrient composition of various forages and feed ingredients are posted.

In general, forages are higher in potassium than whole grains and other feed ingredients like brewer's grains. Horses with HYPP should be maintained on pasture because it contains high amounts of water and therefore dilutes the concentration of potassium ingested over the course of the day. If hay is fed, avoid feeding hay containing legumes like alfalfa. Also, feed good quality mature hay over immature hay because allowing the hay to mature before cutting lowers the potassium concentration. Timothy and fescue hay are lower in potassium than orchard grass or reed canary grass hays. However, do not feed broodmares with HYPP fescue that contains endophyte because reproductive problems may occur.

Specially formulated commercially available grains have been developed for HYPP horses that are balanced for other important nutrients including vitamins and minerals. You may want to discuss this option with a local feed sales representative. If you decide to mix your own

grain, select from feed ingredients that are low in potassium like fats and oils (0%), steam flaked corn (0.4%), brewer's grains (0.4%), wheat (0.5%), barley (0.6%), oats (0.6%), beet pulp (0.7%), flaxseed (0.9%), distiller's grains (1%), and wheat bran (1.4%). Avoid feeding ingredients that are high in potassium like molasses (4.1%), soybean meal (2.2%), and rice bran (1.4%).

Other important things to remember when managing an HYPP horse are 1) avoid feed supplements like electrolytes that may be high in potassium. 2) avoid sudden dietary changes that may affect potassium concentrations, 3) feed smaller meals more frequently throughout the day to spread out the intake of potassium over the course of the day, 4) offer clean fresh water at all times, 5) allow free choice access to plain white salt without potassium, 6) regularly exercise your horse, and 7) provide ample rest and water when trailering. Make sure to consult with your veterinarian to prepare an HYPP treatment and management plan to ensure your horse remains healthy and happy.

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