

# Equine Nutrition Conference Gathers International Audience for Information-Packed Program

BY ROBIN STANBACK

Kentucky Equine Research (KER) hosted its 11th annual Equine Nutrition Conference for Feed Manufacturers April 30 through May 1 in Lexington, Kentucky. Over 170 veterinarians and feed industry professionals from 16 countries and 27 states attended the conference that provided information on equine diseases and the role nutrition plays in the prevention of these maladies and its assistance in the rehabilitation of the horses affected by them. A cadre of internationally respected speakers presented talks that were described by delegate Ola Gronvold, Alpharma, Oslo, Norway as being “an excellent program with a lot of practical information I can take home and share with my clients.”

KER's conferences have traditionally been opportunities for the presentation of the latest discoveries in research. Innovative approaches to solving equine nutrition-related questions are a hallmark of the event and this year's program was no exception. One of the first speakers, Dr. David Nieman of Appalachian State University in North Carolina, talked about groundbreaking human research studies in exercise physiology that may have a direct impact on the development of future equine research programs. Dr. Nieman revealed that people who participate in near-daily physical activity experience fewer illnesses. However, strenuous physical activity that occurs when athletes push themselves beyond their limits can expose them to a greater risk of upper respiratory problems. Dr. Nieman addressed the questions of the influence of nutritional supplements by stating that research data have not revealed any reason to support the use of antioxidants and glutamine products. Instead, he recommended that all athletes eat a varied and balanced diet in accordance with the food pyramid and energy needs, making certain that vitamin and mineral intake is adequate for both health and immune function.

Equine nutritionists have long supported a similar approach to a healthy feeding program for their clients, but the influx of supplemental products on the market has raised a great many questions. KER's West Coast nutritionist Dr. Stephen Duren discussed oral joint supplements, loosely classified as nutraceuticals, that have flooded the market in recent years. While he agreed that there were many reasons to give horses some relief for sore or damaged joints, Dr. Duren questioned whether oral joint supplements actually contained the amounts



Photo by Robin Stanback

of active ingredients indicated on their labels. He pointed to human over-the-counter products of a similar nature that have been shown to be seriously lacking in the substances their labels claim they contain. Also, he pointed out that many of the claims made about these products are purely anecdotal with not enough research to warrant their use.

KER founder and president Dr. Joe D. Pagan revealed a recent breakthrough in the prevention of developmental orthopedic disease (DOD). DOD is a term that encompasses a number of bone diseases affecting primarily young horses including physitis, osteochondrosis, osteochondritis dissecans (OCD), wobbler syndrome, and acquired flexor deformities. Dr. Pagan stated that hyperglycemia and hyperinsulinemia have been implicated as causes of DOD. Using a patented test that checks for glucose tolerance developed by Dr. Sarah Ralston at Rutgers University and licensed for use by KER, Dr. Pagan and his staff conducted a large study involving 218 Thoroughbred weanlings to evaluate the test's effectiveness in identifying individuals at risk for developing skeletal disease. The study was unique in the sheer number of horses it encompassed, but it also yielded very useful information for the farms housing the horses and for KER. Dr. Pagan stated, “Based on the results of this study, it would be prudent to feed foals concentrates that produce low glycemc responses.”

Dr. Ray Geor, former director of research at KER, brought the other end of the equine age spectrum to the forefront when he discussed diseases that affect older horses. He outlined the general problems of aging such as poor dental health which causes a decrease in feed

## Featured Speaker Connects Nutrition and Success



Olympic gold medalist David O'Connor was the luncheon speaker for the first day of the 2001 Equine Nutrition Conference for Feed Manufacturers. Mr. O'Connor stated, "Research into equine nutrition has exploded in the last eight to ten years and my wife, Karen, and I (the leaders of Team O'Connor) have directly benefited from it."

Fresh from his first and third placings at the 2001 Rolex Kentucky Three-Day Event, Mr. O'Connor discussed the benefit Team O'Connor has derived from its long association with Kentucky Equine Research (KER) and Pennfield Feeds, its feed supplier. "We first began working with Drs. Joe Pagan and Kathleen Crandell in 1995 prior to the Olympic Games in Atlanta, and we have been feeding KER-formulated feeds for even longer. We began using some of the KER supplements like Summer Games Electrolytes in 1996, and we feel they have made a tremendous difference," he explained.

Mr. O'Connor showed video clips from his Olympic rides in Sydney last summer and talked about his two seasoned event horses. Speaking of Giltedge, the horse that carried him to the win at this year's Rolex competition and to a bronze medal in the team three-day event competition in Sydney, O'Connor said, "He is a technician. He studies things. He knows where his body is and where his feet are. Giltedge shows up every day to work and you feel that he loves to play the game, maybe more so than any horse I've ever sat on, to the point I have absolutely no idea what I am going to do when I retire him. He absolutely lives for competition."

Custom Made and Mr. O'Connor finished third at Rolex. Mr. O'Connor described him as being "all flair, all movement and all attitude. If Giltedge knows where he is at all times, Custom Made gets somewhere near the fence, leaves, and doesn't really care where he lands. He has so much pure, raw power that it's like sitting on a dragster."

Mr. O'Connor provided the audience with a unique insight into the life of a three-day event stable and the importance such a world-class operation places on quality nutrition for its equine partners. "Team O'Connor could not have achieved all we have without the support of KER and Pennfield Feeds."

intake, chronic inflammatory respiratory disease, and, though not as common, decreased liver and kidney function. Dr. Geor stressed the need for providing good quality dietary fiber in a form that can be easily chewed. He also presented information on Cushing's disease, a syndrome caused by a pituitary gland tumor. Many horses affected by this disease develop long, curly hair coats that fail to shed out in the spring and show signs of weight loss, muscle wasting, lethargy, excessive sweating, and bulging of the orbit of the eye. For horses suffering from this disease, Dr. Geor suggested a low starch diet and possible supplementation with chromium, which has proven helpful in boosting insulin effectiveness.

Dr. Stephanie Valberg, an associate professor at the College of Veterinary Medicine at the University of Minnesota, is also a leading figure in the battle to understand and combat the effects of exertional rhabdomyolysis, or tying-up. She also discussed related diseases such as polysaccharide storage myopathy. Dr. Valberg stressed that any diet for equine athletes needs to have a proper balance of vitamins, minerals, electrolytes, vitamin E, and selenium. Some of these horses, however, need a slightly different balance to keep their problems in check. For horses with recurrent exertional rhabdomyolysis, she pointed to a recent dietary trial done in conjunction with KER that led

to the development of a high fiber, low starch, high fat diet called Re-Leve that has proven to be very helpful.

Some of the other speakers at the conference brought to light recent findings regarding a variety of ailments that plague horses. Dr. Kris Purcell, an equine practitioner in Gardnerville, Nevada who served as a member of the veterinary team at the 1996 Olympic Games in Atlanta, discussed colic. Dr. Ric Redden of the International Equine Podiatry Center in Versailles, Kentucky highlighted the causes and effects of laminitis. Dr. Kathleen Crandell, KER's East Coast nutritionist, talked about managing the underweight horse. Dr. Jonathan Foreman, an associate professor at the University of Illinois in the Department of Veterinary Clinical Medicine, spoke about nutrition-related diseases of the central nervous system. Dr. Mike Murphy, an associate professor in the Department of Veterinary Diagnostic Medicine at the University of Minnesota, presented an overview of problems caused when horses ingest certain molds and mycotoxins.

The complete proceedings from this conference can be obtained by contacting Kentucky Performance Products at 1-800-772-1988. Proceedings from previous conferences are also available as two volumes titled *Advances in Equine Nutrition I & II*. A compact disk containing both books is also available. 