Chill Out Brings Doubt

Researchers in Australia are warning that there “is an urgent need for research” to confirm the efficacy and safety of L-tryptophan supplementation in horses. A naturally occurring amino acid found in human foods such as turkey, chicken, pork and cheese, L-tryptophan is also a main ingredient in several equine calming supplements on the market today. It’s long believed that L-tryptophan has a calming effect in animals, including humans and horses.

However, the warning out of Australia cites that L-tryptophan’s calming effect is “species-dependent, and there are no scientific publications that confirm the efficacy of L-tryptophan as a calmative in excitable horses. The few studies where L-tryptophan has been administered to horses suggest that low doses (relative to those contained in commercial preparations) cause mild excitement, whereas high doses reduce endurance capacity and cause haemolytic anaemia [destruction of red blood cells] if given orally.”

In 1989 the Food and Drug Administration issued a nationwide recall, which is still in place today, of all over-the-counter dietary supplements for humans containing 100 milligrams or more of L-tryptophan, and in 1990 it prohibited importation of the substance. The ban was issued after a link was established between L-tryptophan supplementation and Eosinophilia-Myalgia Syndrome, a potentially deadly disease in humans that can lead to congestive heart failure.

When it comes to equestrian sport, the United States Equestrian Federation’s assistant executive director, John G. Lengel, DVM, says that under the USEF’s Drugs and Medications Rule, L-tryptophan is considered a nutrient, not a drug, and therefore is not a forbidden substance. However, he says, “L-tryptophan, when administered for the purpose of calming a horse in competition, violates the spirit of the USEF’s rule.” Many calming supplements that contain L-tryptophan also contain other ingredients that are banned under USEF rules, and in these instances the supplement would not be allowed.

“Calmatives for the excitable horse: A review of L-tryptophan.” Grimmett A., Sillence M.N., School of Agriculture, Charles Sturt University, Australia