May 24, 2005

RE: Use of PalaMOUNTAINS™ Equine Plus in Race Horses with Equine Gastric Ulcer Syndrome, a field study by Ken P. Reed, D.V.M.

To Whom It May Concern:

Please consider the attached field study for publication

Eleven thoroughbred race horses in training were gastro-scoped for the presence of ulcers. Nine horses were positive (Grade 1 through 4 on a scale of 1 to 5,) and were placed on PalaMOUNTAINS™ Equine Plus. The nine horses that were positive were gastro-scoped at 3 to 4 weeks. Although, the results were not conclusive, they were very encouraging especially in the grade 3 to 4 horses.

If you have any further questions, I may be contacted at (502) 649-3162.

Sincerely

Ken Reed, DVM
Use of PalaMOUNTAINS™ Equine Plus in Race Horses with Equine Gastric Ulcer Syndrome

Ken P. Reed, D.V.M.
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Objective:

Equine Gastric Ulcer Syndrome (EGUS) has been found to be present in up to 93% of racing thoroughbreds\(^1\) and in almost 60% horses in other disciplines\(^2,3\) and more than 50% in foals\(^4\). EGUS is a syndrome that can cause a reduction in performance, loss of appetite, cribbing and pain.

The purpose of this trial was to determine the effect of PalaMOUNTAINS™ Equine Plus food supplement on EGUS in thoroughbred race horses in training. PalaMOUNTAINS™ Equine Plus is an FDA approved supplement for use in horses, consisting of a combination of vitamins, selenium, garlic and yeast suspended in 93% poly-unsaturated oil. The oil is rich in Omega-3 fatty acids, with an Omega-3 to Omega-6 ratio of 1:2, which is close to the recommended ratio in nature.\(^3\)

Essential fatty acids can not be synthesized by the animal; they must be supplied in the diet. Essential fatty acids are required for proper growth, reproduction, normal skin structure, and healthy hair coat. It has been suggested Omega-3 fatty acids help reduce gastric ulceration and secretion as well as reduce stomach bacteria that cause ulceration.

Animals:

Nine thoroughbred race horses in training diagnosed with EGUS, male and female. All horses were privately owned, with no change to their nutrition during the trial. Three of the horses were taking other generic stomach remedies prior to and in conjunction with PalaMOUNTAINS™ Equine Plus during the trial. The horses may have experienced variable training intensity during the trial, (for example the additional stress experienced when racing).

Procedure:

The severity of EGUS was evaluated in each horse with a gastro-scope, photographed and graded from 0 to 5 (Grade 0 indicates no signs of ulcers, Grade 5 is most severe). Each horse was administered 80 cc PalaMOUNTAINS™ Equine Plus for 30-42 days. The stomach ulcers were then re-evaluated with a gastro-scope and photographed.
Results:

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<thead>
<tr>
<th>Case Study 1:</th>
<th>Case Study 2:</th>
<th>Case Study 3:</th>
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<tr>
<td>Before PalaMOUNTAINS Equine Plus:</td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
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<tr>
<td>After PalaMOUNTAINS Equine Plus:</td>
<td><img src="image3" alt="Image" /></td>
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Trial numbers 1-4, using only PalaMOUNTAINS™ Equine Plus showed a reduction in severity of stomach ulcers. These horses were not on any medications before or during the trial. Trial numbers 5 and 6 showed no change in ulcer severity. Notably, trial number 5 was on a generic ulcer medication prior to the study, but not during it. Trial number 6 was on phenyl-butasone before and during the trial and the ulcers did not get any worse.

In contrast, all three of the horses using other generic stomach remedies in conjunction with PalaMOUNTAINS™ Equine Plus showed an increase in severity of stomach ulcers, (see Trial numbers 7-9, below). We have no explanation at this time for these negative results.
Discussion:

Results from this trial show that horses with Equine Gastric Ulcer Syndrome benefit when fed PalaMOUNTAINSTM Equine Plus. When used in conjunction with some other generic stomach remedies it appears PalaMOUNTAINSTM Equine Plus may not be as effective, therefore is better used independent of other generic remedies.

Although there are many factors contributing to the causes of EGUS, a simple dietary addition can allow these horses to train and perform with less discomfort. This preliminary trial using PalaMOUNTAINSTM Equine Plus for horses with EGUS looks very promising, however it is not conclusive and further study is recommended.

References: