



RESEARCH >

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Horses Preferentially Consumed Purina® Amplify® High Fat Extruded Nugget over Rice Bran

A SUMMARY OF RESEARCH CONDUCTED AT THE PURINA ANIMAL NUTRITION CENTER, EXAMINING THE PALATABILITY OF AMPLIFY® EXTRUDED HIGH FAT NUGGET AS COMPARED TO RICE BRAN TOP-DRESSED ON FEED FOR ADDED CALORIES.¹

< INTRODUCTION >

The utilization of high fat supplements in horse feed is widely accepted as beneficial to those horses requiring additional calories. Benefits of fat-added diets for horses include improved hair coat, improved fatty acid profile and a concentrated source of calories. However, the inclusion of fat into the diet of horses can be problematic as many horses find fat to be unpalatable. Purina® Amplify® high fat extruded nugget is a supplement developed through numerous research studies as a concentrated source of calories while maintaining a balanced nutritional profile. In addition, its blend of rice bran, flax seed and vegetable oil provides an optimal array of fatty acids for the horse. Previous research at the Purina Animal Nutrition Center has established Amplify® nugget as more palatable than top-dressed soybean oil², and the objective of this project was to determine the palatability of Amplify® nugget as compared to rice bran, another widely used fat supplement for horses.

< MATERIALS AND METHODS >

Ten mature Quarter Horses (average BW 550 kg) were housed individually and assigned to one of two experimental protocols. The experimental protocols were defined as follows. Experiment 1 evaluated 226 g of either Amplify® nugget or rice bran top-dressed on 2 pounds of Purina® Strategy GX® horse feed, while experiment 2 evaluated 454 g of either Amplify® nugget or rice bran top-dressed on 2 pounds of Purina® Strategy GX® horse feed. All diets were isocaloric. Horses were presented daily with their assigned rations in specially designed palatability slips with data recorded continually during the six-minute feeding period. Location of diets were switched daily from left to right to ensure horses did not become accustomed to a preferred side. Horses remained on treatment for a period of seven days. Additionally, horses consumed 1.5-2.0% BW of grass hay to maintain appropriate BCS throughout the course of the experimental protocol.

¹Gordon, M.E., Jerina, M.L., et al., 2014. HR207. Palatability of rice bran vs. Amplify®.

²Gordon, M.E., Jerina, M.L., et al., 2013. HR161. Palatability of soy oil vs. Amplify®.

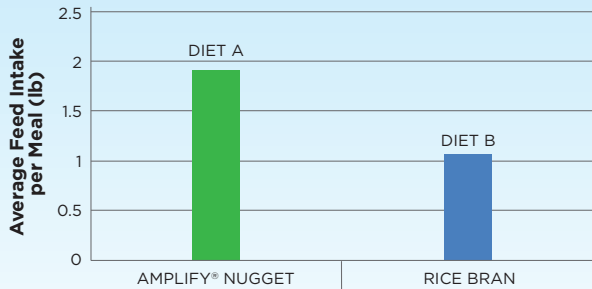
< RESULTS >

Data are presented in Figures 1-2 below. Horses preferred to consume Purina® Amplify® high fat extruded nugget compared to an isocaloric amount of rice bran ($P < 0.0001$).

< IMPLICATIONS >

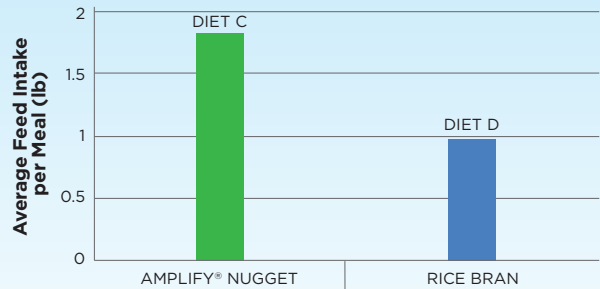
The utilization of high fat supplements in horse feed is growing as the number of horses requiring supplemental sources of concentrated calories increases. The palatability of these fat-added diets can become an issue. Identifying a highly palatable yet nutritionally balanced high fat supplement is of utmost importance. Purina® Amplify® high fat extruded nugget provides a balanced blend of vegetable oil, rice bran and flax seed in addition to a balanced level of protein, vitamins and minerals that is lacking from other high fat supplements. Additionally, this data demonstrates that Amplify® nugget is highly palatable and preferred by horses over rice bran.

FIGURE 1 Feed Intake of Amplify® nugget vs. Rice Bran fed at a rate of **226 g** top-dressed on 2 pounds of Strategy GX® Horse Feed



DIET A: 226 g Amplify® nugget top-dressed on 2 pounds of Strategy GX® horse feed
DIET B: 226 g Rice Bran top-dressed on 2 pounds of Strategy GX® horse feed

FIGURE 2 Amplify® nugget vs. Rice Bran fed at a rate of **454 g** top-dressed on 2 pounds of Strategy GX® Horse Feed



DIET C: 454 g of Amplify® nugget top-dressed on 2 pounds of Strategy GX® horse feed
DIET D: 454 g of Rice Bran top-dressed on 2 pounds of Strategy GX® horse feed

< **FOR MORE INFORMATION** > Contact your local Purina representative if you would like more information about this study.