

# REVIEW >

# Purina<sup>®</sup> Strategy GX<sup>®</sup> Horse Feed is Preferred by Horses Compared to a Majority of the Competitive Brands of Horse Feed Tested

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A SUMMARY OF RESEARCH CONDUCTED AT THE PURINA ANIMAL NUTRITION CENTER, EXAMINING THE PALATABILITY OF STRATEGY GX® HORSE FEED COMPARED TO COMPETITORS' PRODUCTS.<sup>1</sup>

# < INTRODUCTION >

Extensive research at the Purina Animal Nutrition Center has consistently indicated the importance of palatability in the development of equine diets. Purina<sup>®</sup> Strategy GX<sup>®</sup> is a pelleted concentrate diet that is formulated to meet the nutritional needs of all classes of horses in all of their different life stages. In addition to the optimal nutrient profile delivered by the high-quality ingredients, Purina<sup>®</sup> Strategy GX<sup>®</sup> is also highly palatable and readily consumed, while not promoting overconsumption or consumption at an elevated pace. Previous research has shown Purina<sup>®</sup> Strategy GX<sup>®</sup> Horse Feed to be more palatable than competitor's feed, such as Nutrena<sup>®</sup> SafeChoice Original<sup>®</sup>.<sup>2</sup> To that end, with an updated formula of Purina<sup>®</sup> Strategy GX<sup>®</sup> with Outlast<sup>®</sup> technology launching in 2018, additional research was needed to determine if Purina<sup>®</sup> Strategy GX<sup>®</sup> remains the preferred option by horses. Therefore, the objective of the study was to test the hypothesis that Purina<sup>®</sup> Strategy GX<sup>®</sup> would retain a preference advantage over competitors' products.

## < MATERIALS AND METHODS >

The study was designed to test the palatability of Purina<sup>®</sup> Strategy GX<sup>®</sup> vs. Nutrena<sup>®</sup> SafeChoice Original<sup>®</sup>, Tribute<sup>®</sup> Kalm N EZ<sup>®</sup>, and Tribute<sup>®</sup> Solutions 14<sup>®</sup>. To conduct this test, a two-choice palatability test was designed, which gave a group of horses the option to consume one of the two diets at both an AM (0700) and PM (1300) feeding daily. At each feeding, the location of the diet was switched from left to right to eliminate any potential biases dictated by the location of the feed. At each feeding, the horses were provided with 4 lb of each feed and provided with 10 min to consume the diets. At the end of the feeding period, the remaining feed was weighed and data was utilized to determine consumption. All data were analyzed utilizing a Student's T-test with significance set at  $P \le 0.05$ .

<sup>1</sup>Jacobs, RD, Gordon, et al., HR 271. Palatability of Strategy GX vs. competitive products. <sup>2</sup>Gordon, MB, Jerina, ML. HR 131. Palatability of Strategy GX vs. Nutrena SafeChoice.

#### < RESULTS >

For each trial, the consumption amounts for each feed were averaged and analyzed together with any appropriate outliers being removed. A ratio of consumption was calculated based on the averages. All data are presented in the figures below. When Purina<sup>®</sup> Strategy GX<sup>®</sup> was compared to Nutrena<sup>®</sup> SafeChoice Original<sup>®</sup>, horses preferred to consume Purina<sup>®</sup> Strategy GX<sup>®</sup> at a rate of 2.56:1 (P=0.0004). Horses preferred to consume Purina<sup>®</sup> Strategy GX<sup>®</sup> over Tribute<sup>®</sup> Kalm N EZ<sup>®</sup> at a rate of 2.90:1 (P=0.01). While there was a numerical preference for horses to consume Tribute<sup>®</sup> Solutions 14<sup>®</sup> over Purina<sup>®</sup> Strategy GX<sup>®</sup> of 1.35:1, this value was not statistically significant (P=0.23).

#### FIGURE 1

Preference results of Purina<sup>®</sup> Strategy  $GX^{@}$  vs. Nutrena<sup>®</sup> SafeChoice Original<sup>®</sup>. Differing superscripts indicate significance at  $P \leq 0.05$ .



#### FIGURE 3

Preference results of Purina<sup>®</sup> Strategy GX<sup>®</sup> vs. Tribute<sup>®</sup> Solutions 14<sup>®</sup>. Differing superscripts indicate significance at  $P \le 0.05$ .



#### FIGURE 2

Preference results of Purina<sup>®</sup> Strategy GX<sup>®</sup> vs. Tribute<sup>®</sup> Kalm N EZ<sup>®</sup>. Differing superscripts indicate significance at  $P \leq 0.05$ .



### < IMPLICATIONS >

Taken together, these data indicate that Purina® Strategy GX® maintains a preference advantage over multiple competitors' products when evaluated by horses during a controlled trial. Two of the three trials showed a very strong preference for Purina<sup>®</sup> Strategy GX<sup>®</sup>. When compared to Tribute<sup>®</sup> Solutions 14<sup>®</sup>, the lack of difference in palatability was not surprising as Tribute® Solutions 14<sup>®</sup> contains more ingredients higher in sugar and starch, known drivers of palatability in horses. For Purina® Strategy GX® to have equal palatability to Tribute<sup>®</sup> Solutions 14<sup>®</sup>, is actually quite the accomplishment, considering the sugar and starch content of Purina® Strategy GX® averages 22.4%, while the sugar and starch content of Tribute<sup>®</sup> Solutions 14<sup>®</sup> is 28.9%. In conclusion, in addition to nutrient content, palatability continues to be an important consideration in the development of new horse feeds. Encouraging horses to maintain an appetite is critical in the development of feeding programs and the results of this study can help provide insight and support into the utilization of Purina<sup>®</sup> Strategy GX<sup>®</sup> as a component of an equine ration.

< AVAILABLE UPON REQUEST > Contact your local Purina representative if you would like more information about this study.

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