



RESEARCH >

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Purina® Omega Match™ Ahiflower® Oil is a Highly Palatable Source of Omega-3, 6, and 9 Fatty Acids, that Serves as an Alternative to Fish Oil

A SUMMARY OF RESEARCH CONDUCTED AT THE PURINA ANIMAL NUTRITION CENTER EVALUATING THE PALATABILITY OF PURINA® OMEGA MATCH™ AHIFLOWER® OIL VS. COMPETITIVE FISH OIL SUPPLEMENTS.^{1,2}

< INTRODUCTION >

Purina® Omega Match™ Ahiflower® Oil is a unique plant-derived fat source that originates from the *Buglossoides Arvenis* plant. This plant is grown exclusively in the United Kingdom and processed on Prince Edward Island in Canada to produce an oil with a unique fatty acid profile; one that is high in omega-3 fatty acids such as alpha-linolenic acid and stearidonic acid, and the omega-6 fatty acid gamma linolenic acid. Typically, when horse owners want to provide increased omega-3 fatty acids to their horse, they do so utilizing either plant-derived products such as flaxseed or camelina, or via marine-derived products such as fish oil. Fish oils contain high levels of omega-3 fatty acids but are unpalatable to many horses. Most fish-derived products for horses contain strong flavors to enhance palatability and encourage intake. The objective of this trial was to evaluate the palatability of Purina® Omega Match™ Ahiflower® Oil compared to a variety of fish-derived omega-3 products designed for horses.

< MATERIALS AND METHODS >

In a series of trials, Quarter horses (n=5; 568.18 ± 12 kg BW) underwent intake testing to determine palatability differences between Purina® Omega Match™ Ahiflower® Oil and commercially derived fish oil products designed for horses. Briefly, horses were offered a two-choice preference testing daily at AM (0700) and PM feeding (1500) consisting of 0.90 kg of Purina® WellSolve L/S® as a base feed top-dressed with oil. At each feeding, one pan of base feed was top-dressed with 30 mL of Purina® Omega Match™ Ahiflower® Oil while the other was top-dressed with 30 mL of the desired comparison oil. Feed was mixed well in the pans to ensure uniform coating of the pellets. Each comparison oil was tested against Purina® Omega Match™ Ahiflower® Oil for a total of nine feedings resulting in 45 individual feedings. Pan location was switched from left to right between feedings so that oils were tested in all feeding orientations. Four comparisons were made during the series of tests. Horses were housed in individual stalls with free-choice access to water and turned out in drylots from approximately 0730-1430 daily. All horses were offered 2.0% BW mixed grass hay daily.

¹HR 330 - Ahiflower oil palatability part 1. Internal Research, PANAC. 2020

²HR 292 - Ahiflower oil palatability vs. fish oils. Internal Research, PANAC. 2020

< RESULTS >

All data are expressed as mean \pm SEM. Horses preferred Purina® Omega Match™ Ahiflower® Oil over 3 out of 4 tested products. Purina® Omega Match™ Ahiflower® Oil was preferred 3.42 : 1, 1.78 : 1, and 28.9 : 1 for brands A-C respectively (**Figures 1-3**). Purina® Omega Match™ Ahiflower® Oil was numerically preferred over brand D at 1.38 : 1, however this result was not statistically significant (**Figure 4**).

< IMPLICATIONS >

The objective of this trial was to evaluate the palatability Purina® Omega Match™ Ahiflower® Oil compared to a variety of fish-derived omega-3 products designed for horses. Fish and marine-derived oil sources, while high in omega-3 fatty acids, can be highly unpalatable for some horses. Providing omega-3 fatty acids to horses in a palatable and readily consumed fashion is necessary to ensure they receive all the potential benefits of these compounds. These data show that Purina® Omega Match™ Ahiflower® Oil is a highly palatable alternative to fish oils. The natural composition of Purina® Omega Match™ Ahiflower® Oil, along with the fact that it is a plant-derived oil eliminate the need for the addition of any flavoring components, providing a pure, unadulterated source of omega-3 fatty acids for horses.

FIGURE 1

Purina® Omega Match™ Ahiflower® Oil preferred over brand A at a rate of 3.42 : 1 ($P=0.001$).

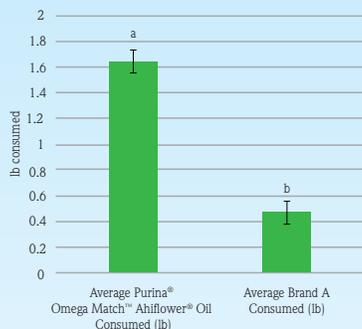


FIGURE 2

Purina® Omega Match™ Ahiflower® Oil preferred over brand B at a rate of 1.78 : 1 ($P=0.03$).

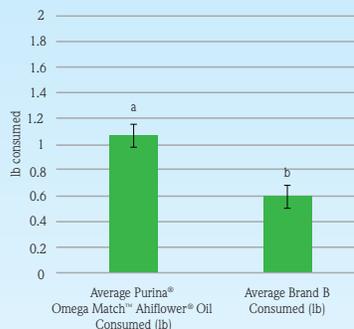


FIGURE 3

Purina® Omega Match™ Ahiflower® Oil preferred over brand C at a rate of 28.9 : 1 ($P<0.001$).

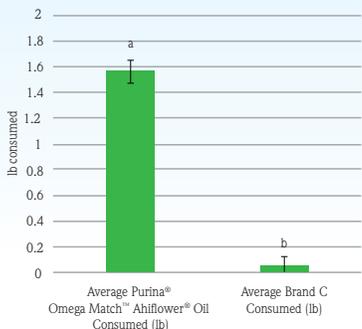
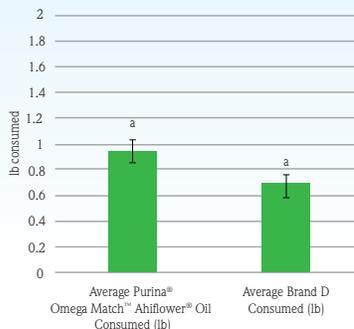


FIGURE 4

Purina® Omega Match™ Ahiflower® Oil preferred over brand D at a rate of 1.38 : 1 ($P=0.45$).



< FOR MORE INFORMATION > Contact your local Purina® representative if you would like more information about these studies.