

PURINA® EQUINE SENIOR® HORSE FEED



Specially Formulated
for the Nutritional
Needs of Older Horses

THE RESEARCH BEHIND PURINA® EQUINE SENIOR® HORSE FEED

Purina's Ph.D. Equine Nutritionists and Veterinarians continually research new ways to address the specific needs of aging horses, helping your senior horse live a long, healthy life. Purina® Equine Senior® horse feed has been scientifically studied at the Purina Animal Nutrition Center for over 20 years. Our nutritionists have combined all the benefits of the trusted original Equine Senior® horse feed together with discoveries from the most cutting-edge equine science.

THREE REASONS HORSES BENEFIT FROM EQUINE SENIOR® HORSE FEED:

- 1. Supports Digestion & Health** easy to chew, highly digestible ingredients including quality fiber sources to support optimal digestion and overall health
- 2. Supports Immune Function** Exclusive **ActivAge®** prebiotic supports optimal function of the aging immune system
- 3. Healthy Appearance** contains **AMPLIFY** high-fat nugget to help maintain body condition, shine & bloom

PROPRIETARY ActivAge™ PREBIOTIC: IMMUNE SUPPORT

In a series of experiments completed in 2014, conducted by Purina Animal Nutrition in collaboration with the Gluck Equine Research Center at the University of Kentucky, senior horses were fed either current Equine Senior® (control) or Equine Senior® feed supplemented with ActivAge™ prebiotic and administered an influenza vaccine. Preliminary results show that horses fed ActivAge™ prebiotic had a higher influenza antibody titer following vaccination vs

control horses (Figure 1), which is one of the markers of a healthy immune response. In addition, ActivAge™ prebiotic helped protect against inflammation associated with aging. A gradual rise in inflammatory cytokine levels is expected as horses age and also during the winter months (when this study took place), but levels of the key inflammatory cytokines interferon-gamma (IFN-g) and tumor necrosis factor-alpha (TNF-a; Figure 2) increased significantly in horses fed Equine Senior® but did not change in horses fed Equine Senior® with ActivAge™ prebiotic.

FIGURE 1:
INFLUENZA ANTIBODY TITERS THROUGH 14 DAYS POST-VACCINATION

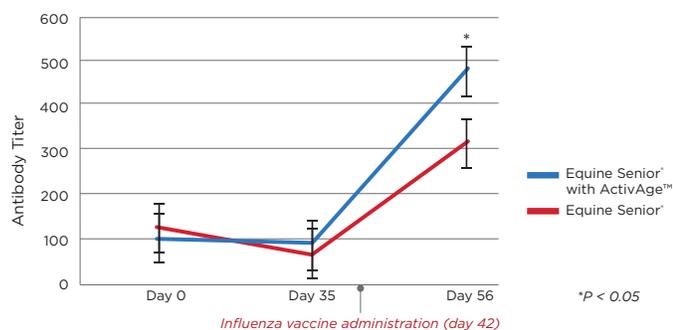
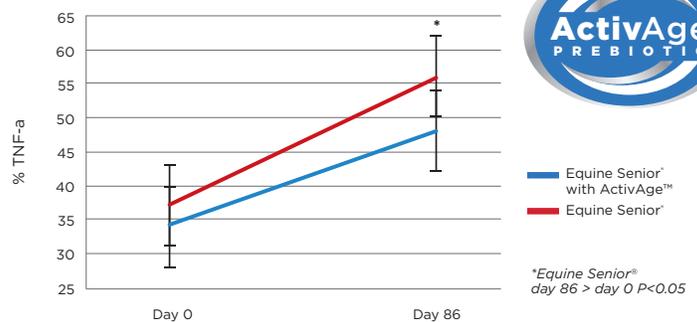


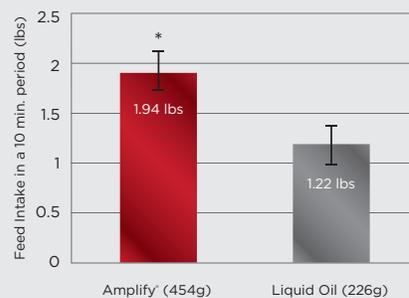
FIGURE 2:
TNF-a LEVELS AT THE BEGINNING AND END OF THE STUDY



PROPRIETARY AMPLIFY® HIGH-FAT NUGGET: PALATABILITY OF FAT

High levels of fat can affect the palatability of horse feeds, so delivering optimal palatability is crucial for encouraging intake. The Amplify® nugget has been scientifically formulated with rice bran, flaxseed and vegetable oils for an optimal fatty acid profile and nutritional balance while maintaining strong palatability. Trials at the Purina Animal Nutrition Center showed significantly higher palatability for Amplify® nugget, compared to top-dressed liquid oil.

AMPLIFY® SUPPLEMENT VS. LIQUID OIL



Amplify® or liquid oil were top-dressed on 3 lbs of Strategy® GX Horse Feed, with amounts calculated to deliver similar calories

HR 161, Purina Animal Nutrition Center H-1, 2012



To learn more about our research, visit our web site at purinamills.com/horse-feed.

FEEDING EQUINE SENIOR® HORSE FEED WITHOUT FORAGE

Amount to be fed daily when **no forage** is fed along with Equine Senior® horse feed.

LIFESTYLE	WEIGHT OF HORSE IN POUNDS				
	600 lbs	800 lbs	1,000 lbs	1,200 lbs	1,400 lbs
Maintenance	8.00 lbs	10.75 lbs	13.50 lbs	16.25 lbs	18.75 lbs
Light Work	9.00 lbs	11.75 lbs	14.75 lbs	17.75 lbs	20.75 lbs
Moderate Work	10.25 lbs	14.00 lbs	17.25 lbs	20.75 lbs	24.25 lbs
Lactating Broodmare	14.00 lbs	18.75 lbs	23.50 lbs	28.25 lbs	33.00 lbs
Breeding Stallion	9.75 lbs	13.00 lbs	16.25 lbs	19.50 lbs	22.50 lbs

Feeding recommendations are based on average daily requirements for horses of different body weights. Actual feeding rates required to adequately maintain good condition of individual horses will be affected by individual metabolism of the horse and progression rate of the aging processes. Therefore, feeding rates may need to be gradually adjusted in some horses according to body condition. Aging horses unable to maintain adequate body condition when being fed the recommended amount of Equine Senior® horse feed should be examined by a veterinarian to determine the presence of potential health issues. Do not feed more than 0.8 lbs per 100 lbs of body weight in one meal. Equine Senior® can be blended with other feeds or oats for a short time while transitioning to Equine Senior®, but for the long term, Equine Senior® should not be mixed with oats or other grains because these grains will dilute the nutritional balance of Equine Senior® and are more difficult for the aging horse to chew and digest. Do not feed free-choice.

FEEDING EQUINE SENIOR® HORSE FEED WITH FORAGE

Amount to be fed daily when **forage** is fed along with Equine Senior® horse feed.

Purina® Equine Senior® horse feed is designed to replace all or a portion of the required forage in a horse's diet. If forage replacement is not needed, consider feeding Equine Senior® Active or another Purina® concentrate feed designed to be fed along with forage.

LIFESTYLE	WEIGHT OF HORSE IN POUNDS				
	600 lbs	800 lbs	1,000 lbs	1,200 lbs	1,400 lbs
	(lbs/day)				
Hay or Equivalent Pasture*	6.00	8.00	10.00	12.00	14.00
	Equine Senior® horse feed (lbs/day)**				
Maintenance	4.25	5.50	7.00	8.25	9.75
Light Work	5.00	6.50	8.25	10.00	11.50
Moderate Work	6.50	8.75	10.75	13.00	15.00

Feeding recommendations are based on average daily requirements for horses of different body weights. Actual feeding rates required to adequately maintain good condition of individual horses will be affected by amount and quality of hay, individual metabolism of the horse, and progression rate of the aging processes. Therefore, feeding rates may need to be gradually adjusted in some horses according to body condition.

*Make sure your horse is free of dental problems and can effectively chew and utilize the forage. If feeding more hay, reduce the amount of Equine Senior® horse feed by 1 lb for every additional 1.5 lbs of hay offered the horse (do not feed less than 0.6 lbs Equine Senior® horse feed per 100 lbs of body weight per day). If feeding less hay, increase the amount of Equine Senior® horse feed by 1 lb for every 1.5 lb decrease in hay offered to the horse.

**Do not feed less than 0.6 lbs per 100 lbs of body weight per day. EXAMPLE: A 1,000 lb horse has ten 100 lb increments (1,000 divided by 100 = 10). So for this horse, do not feed less than 6 lbs per day (10 x 0.6 = 6.0 lbs per day). If your horse gains too much weight at that minimum feeding rate, then you should replace Equine Senior® horse feed with Equine Senior® Active horse feed, Purina® Enrich Plus® Ration Balancing Feed, or another appropriate Purina® feed (consult your Purina retailer, Purina salesperson, or contact Purina Customer Service).

NUTRIENT COMPOSITION

Crude Protein (Min)	14.00%	Sulfur (S) (Min)	0.23%
Lysine (Min)	0.70%	Cobalt (Co) (Min)	0.60 ppm
Methionine (Min)	0.18%	Copper (Cu) (Min)	55.00 ppm
Threonine (Min)	0.40%	Iodine (I) (Min)	3.30 ppm
Crude Fat (Min)	5.50%	Iron (Fe) (Min)	220.00 ppm
Crude Fiber (Max)	18.00%	Manganese (Mn) (Min)	220.00 ppm
Starch (Max)	12.00%	Selenium (Se) (Min)	0.30 ppm
Sugars (Max)	7.00%	Zinc (Zn) (Min)	220.00 ppm
Calcium (Ca) (Min)	0.50%	Vitamin A (Min)	3,500 IU/lb
Calcium (Ca) (Max)	1.00%	Vitamin D (Min)	700 IU/lb
Phosphorus (P) (Min)	0.40%	Vitamin E (Min)	140 IU/lb
Magnesium (Mg)	0.33%	Vitamin C (Min)	226.00 mg/lb
Potassium (K) (Min)	1.60%	Thiamin (Min)	11.34 mg/lb
Sodium (Na) (Min)	0.24%	Riboflavin (Min)	9.07 mg/lb
Chloride (Cl) (Min)	0.54%		

#1 VETERINARIAN RECOMMENDED SENIOR HORSE FEED

Four out of five Equine Veterinarians recommend Purina's Equine Senior® horse feed to their clients with senior horses.*

According to an independent study conducted in November 2015.

EASY TO CHEW

Easy-soak™ pellet technology creates a mash in 5 minutes with warm water,** breaking down the pellet quickly to make it easy to chew and swallow for horses with dental problems or missing teeth.

***Add 5 quarts warm water (100° F) to every 6 pounds of feed. Soaking time will vary depending on water temperature.*

BUILT-IN FORAGE

Complete feed with quality hay built in helps senior horses get the fiber they need when dental problems or missing teeth prevent them from eating forage.

HIGHLY DIGESTIBLE

Scientifically formulated with a blend of fiber sources including beet pulp and top quality hay to help maintain the senior horse's body condition and support normal digestive function.

SUPPLIES 100% OF REQUIRED VITAMINS AND MINERALS

Designed to meet the specific nutritional needs of senior horses to support immune function and overall health.***

****When fed as directed, with free-choice or added salt, based on Nutrient Requirements of Horses Sixth Revised Edition - 2007, published by the National Research Council*

HIGHLY PALATABLE WITH LESS SUGAR

Instead of using straight cane molasses which is higher in sugar, Purina® Equine Senior® horse feed contains a unique blend of molasses and soy oil for a higher fat molasses that encourages optimal intake.

CONTROLLED STARCH AND SUGAR

Formulated to provide a diet lower in nonstructural carbohydrates that may be suitable for aging horses with carbohydrate sensitivities.

ADDED ANTIOXIDANTS

Contains Vitamin C and Vitamin E to provide additional support for a healthy immune system.



For more information on this or other Purina® horse feeds, visit purinamills.com/horse-feed or call 1-800-227-8941.

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