

PURINA[®] EQUINE SENIOR[®] HORSE FEED



#1
VETERINARIAN
RECOMMENDED
SENIOR HORSE FEED

- 100% Vitamins and Minerals*
- Highly Digestible Ingredients
- Complete Feed - Forage Built-in

*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

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. With this latest formulation, 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 PROVEN REASONS YOUR HORSE BENEFITS FROM ActivAge[™] PREBIOTIC:

1. Protects against inflammation
2. Strengthens immune function
3. Boosts response to vaccination

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- γ) and tumor necrosis factor-alpha (TNF- α) 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

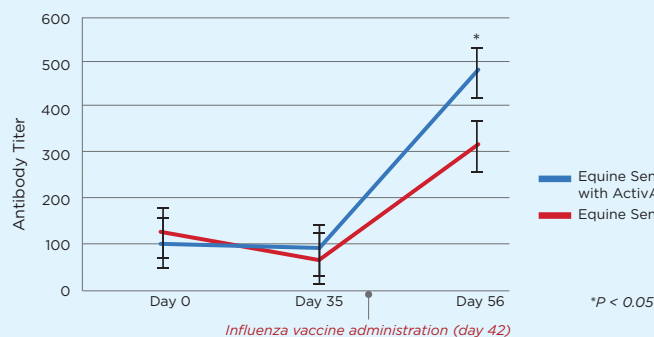
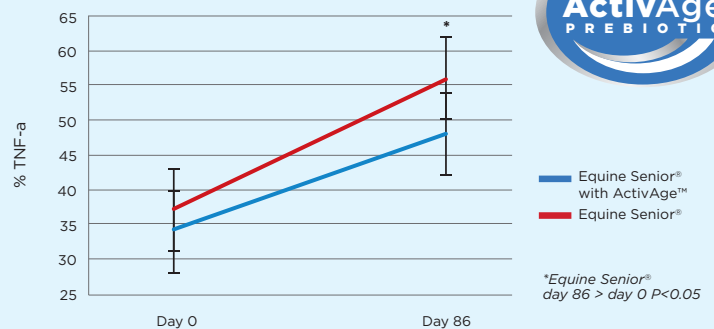


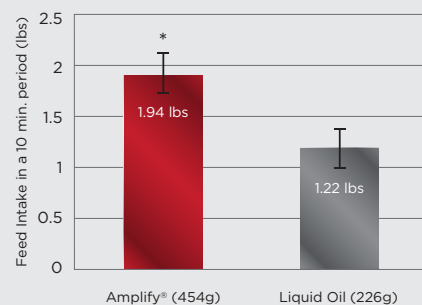
FIGURE 2:
TNF- α LEVELS AT THE BEGINNING AND END OF THE STUDY



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

*P = 0.0039
HR 161, Purina Animal Nutrition Center H-1, 2012



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

DAILY FEEDING CHART 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.

DAILY FEEDING CHART 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

#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 2012.



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.

Purina Animal Nutrition LLC
1080 County Road F West
Shoreview, MN 55126

PURINA® EQUINE SENIOR® ACTIVE



- 100% Vitamins and Minerals*
- Digestible Fibers Including Loose Beet Pulp
- Concentrate Feed - Feed with Hay or Forage

*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

SPECIALLY FORMULATED FOR THE HEALTHY LIFESTYLE OF YOUR ACTIVE, OLDER HORSE

THE RESEARCH BEHIND PURINA® EQUINE SENIOR® AND EQUINE SENIOR® ACTIVE HORSE FEED

Purina® Equine Senior® horse feed, the trusted original senior horse feed, has been helping senior horses live healthy, long lives since its national launch in 1993. Today's horses are staying active longer than ever, and new findings suggest that healthy aging horses may benefit from a higher-calorie diet designed with controlled starch and sugar and balanced nutrients. So Purina introduced Equine Senior® Active Healthy Edge® (now Equine Senior® Active) horse feed, precisely formulated to meet the unique nutritional needs of moderately active senior horses. But Purina's Ph.D. Equine Nutritionists and Veterinarians never stop researching new ways to address the specific needs of aging horses. Amplify® high-fat nugget and ActivAge™ prebiotic are just two of the senior horse nutrition breakthroughs included in Equine Senior® Active horse feed.

THREE PROVEN REASONS YOUR HORSE BENEFITS FROM ActivAge™ PREBIOTIC:

1. Protects against inflammation
2. Strengthens immune function
3. Boosts response to vaccination

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 demonstrated a significantly greater increase in influenza antibodies 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-γ) and tumor necrosis factor-alpha (TNF-α; Figure 2) increased significantly in horses fed Equine Senior® but did not change in horses fed Equine Senior® with ActivAge™ prebiotic.

FIGURE 1:
CHANGE IN IMMUNE RESPONSE FOLLOWING VACCINATION

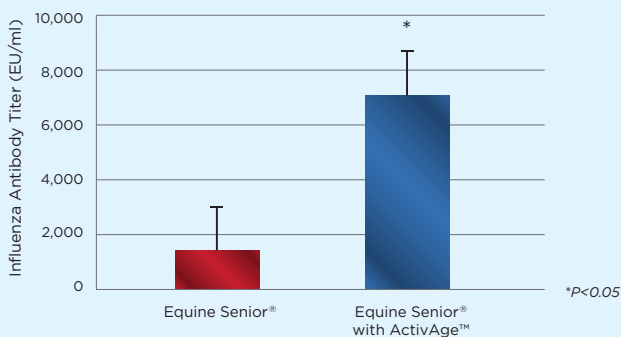
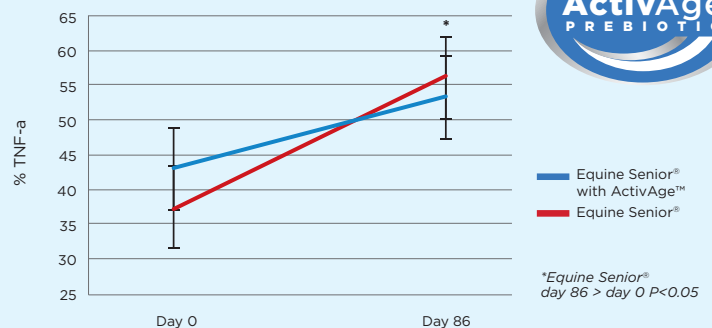


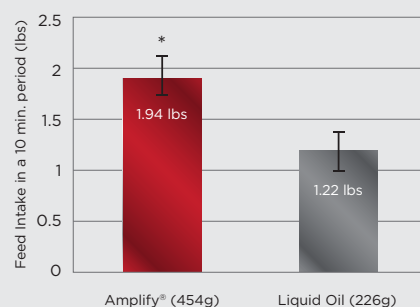
FIGURE 2:
TNF-α LEVELS AT THE BEGINNING AND END OF THE STUDY



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.

DAILY FEEDING CHART

| LIFESTYLE | WEIGHT OF HORSE IN POUNDS | | | | |
|-------------------------------------|--|---------|-----------|-----------|-----------|
| | 600 lbs | 800 lbs | 1,000 lbs | 1,200 lbs | 1,400 lbs |
| | (lbs/day) | | | | |
| Minimum Hay or Equivalent Pasture** | 7.00 | 9.50 | 12.00 | 14.50 | 17.0 |
| | <i>Equine Senior® Active horse feed (lbs/day)***</i> | | | | |
| Maintenance – Minimum Activity | 2.00 | 2.50 | 3.25 | 3.75 | 4.50 |
| Maintenance – Average Activity | 2.75 | 3.50 | 4.25 | 5.00 | 5.75 |
| Maintenance – Elevated Activity | 3.25 | 4.25 | 5.25 | 6.25 | 7.25 |
| Light Work | 4.00 | 5.25 | 6.50 | 7.75 | 9.00 |
| Moderate Work | 5.50 | 7.25 | 9.00 | 10.75 | 12.50 |
| Early Gestation (first 250 days) | 2.75 | 3.75 | 4.50 | 5.50 | 6.25 |
| Late Gestation (last 90 days) | 4.25 | 5.50 | 6.75 | 8.00 | 9.25 |
| Breeding Stallion | 4.75 | 6.25 | 7.75 | 9.50 | 10.75 |

**This is the recommended minimum amount of hay to be fed. If feeding more hay, reduce the feeding rate of Equine Senior® Active horse feed by 1.0 lb for every additional 2.0 lbs of hay fed. EXAMPLE: Using the chart above, if feeding 14 lbs instead of 12 lbs of hay to a 1,000 lb maintenance-elevated activity level horse, reduce Equine Senior® Active horse feed offered by 1.0 lb from 5.25 to 4.25 lbs per day (2.0 lbs of additional hay divided by 2.0 lbs = 1.0 lb less of Equine Senior® Active horse feed).

***Do not feed less than 0.3 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 3 lbs per day (10 x 0.3 = 3.0 lbs per day). If your horse gains too much weight at that minimum feeding rate, then you should replace Equine Senior® Active horse feed with Purina® Enrich Plus® Ration Balancing Feed.

IMPORTANT CONSIDERATIONS

- Any feed changes should be made gradually over a period of 7 to 10 days. Changes in the rate of feeding should not exceed 1 pound per day for each horse. Feed at regular times — at least twice daily — with three daily feedings preferred. Be sure to weigh your feed using a scale. A small scale can be purchased in the fishing department of many sporting goods stores.
- Reduce and/or delay feeding a horse which is hot, excited or showing pain, has fever or diarrhea. Consult your veterinarian if any problems arise. Prevent rapid eating.
- Let horses feed in a natural position from large feed containers.
- Have plenty of fresh, clean water available at all times. Supplemental salt should be added to the feed or provided free-choice.
- Store in a dry, well-ventilated area protected from rodents and insects. Do not feed moldy or insect-infested feed to animals as it may cause illness or death.
- Observe horses daily. Consult your veterinarian for proper preventive health. Maintain a regular deworming and vaccination program.
- Feeding added selenium resulting in total diet levels in excess of 0.3 ppm is prohibited.

NUTRIENT COMPOSITION

| | | | |
|----------------------------|--------|---------------------------|-------------|
| Crude Protein (Min) | 14.00% | Chloride (Cl) (Min)..... | 0.54% |
| Lysine (Min) | 0.90% | Sulfur (S) (Min) | 0.23% |
| Methionine (Min)..... | 0.25% | Cobalt (Co) (Min)..... | 0.55 ppm |
| Threonine (Min) | 0.40% | Copper (Cu) (Min)..... | 80.00 ppm |
| Crude Fat (Min) | 10.00% | Iodine (I) (Min)..... | 3.00 ppm |
| Crude Fiber (Max) | 18.00% | Iron (Fe) (Min)..... | 200.00 ppm |
| Starch (Max)..... | 9.00% | Manganese (Mn) (Min)..... | 200.00 ppm |
| Sugars (Max) | 7.00% | Selenium (Se) (Min) | 0.60 ppm |
| Calcium (Ca) (Min)..... | 0.95% | Zinc (Zn) (Min) | 280.00 ppm |
| Calcium (Ca) (Max)..... | 1.45% | Vitamin A (Min) | 3,000 IU/lb |
| Phosphorus (P) (Min) | 0.60% | Vitamin D (Min) | 800 IU/lb |
| Magnesium (Mg) (Min) | 0.75% | Vitamin E (Min)..... | .125 IU/lb |
| Potassium (K) (Min)..... | 0.75% | Thiamin (Min) | 6.35 mg/lb |
| Sodium (Na) (Min)..... | 0.24% | Riboflavin (Min)..... | 2.49 mg/lb |



CONCENTRATE FEED

Formulated to be fed with hay or forage.



HIGHLY DIGESTIBLE

Special blend of fiber sources including loose beet pulp helps maintain the senior horse's body condition and support normal digestive function.



SUPPLIES 100% OF REQUIRED VITAMINS AND MINERALS

Precisely formulated 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



MULTIPLE ENERGY SOURCES

with more calories from fat, less from sugar to provide a diet lower in nonstructural carbohydrates that may help aging horses with difficulty managing blood sugar levels.



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 E to provide additional support for a healthy immune system.



HIGH QUALITY PROTEINS

Formulated for a proprietary amino acid profile to support strong muscle growth, shiny coat and healthy hooves.

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

Purina Animal Nutrition LLC

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