

# Digestive Supplements Guide: Probiotics & Prebiotics

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Digestive supplements for horses are used primarily to ensure the digestive and intestinal tracts stay healthy, efficient and disease free. These supplements may contain probiotics, prebiotics or a combination of these ingredients.

## **Probiotics**

Humans and animals normally have billions of beneficial yeast and bacteria living in their intestine that help process food into energy and discourage the growth of disease-causing bacteria. Historically, wild horses grazed and obtained the proper amount and variety of beneficial microorganisms from the various green plants and grasses they consumed. It is believed that today's domestic horses do not ingest enough of these organisms from their environments to reseed their intestines, causing a gradual decline that can put the horse at risk for a number of digestive and immune system problems. That is why many owners choose to supplement.

[Probiotics](#) are thought to:

- Improve the balance of the normal bacteria in the intestine
- Help break down proteins, starches, fiber, fats and sugars for better food digestion
- Promote regularity in bowel movements
- Manufacture certain nutrients, such as some B vitamins
- Protect the lining of the intestine
- Promote healthy immune system function in the intestine

## **Probiotics are often recommended for:**

- Horses receiving antibiotics
- Horses with diarrhea or chronic diseases of the intestine
- Newborn foals
- Horses with allergies
- Geriatric horses

- Horses that chronically develop colic
- Horses that travel a lot, or are otherwise under a lot of stress
- "Hard keepers" - those horses that have a difficult time maintaining weight

### **Common organisms in equine probiotic products include:**

- *Lactobacillus* species
- *Saccharomyces* species (a yeast)

Yogurt is an example of a food that contains some of these organisms.

[Supplements](#) are available that contain large numbers of these organisms. Very large numbers (hundreds of billions) of these beneficial microorganisms are needed to provide a benefit to the horse.

Because probiotics contain living organisms, storage of the product is important. They must be stored in a cool place; refrigeration is necessary for some products. Be sure to use the product before any expiration date included on the label.

### **Prebiotics**

Prebiotics are non-digestible food ingredients that produce health benefits by promoting the growth of beneficial bacteria in the intestine. These ingredients are usually simple sugars called oligosaccharides. Examples include inulin, lactulose, and oligofructose. Prebiotics differ from probiotics in that they do not contain live bacteria. Instead, they work with existing bacteria, either by providing them with food or by improving the environment in the gut to their benefit. Prebiotics can enhance the effect of certain probiotics that contain beneficial bifidobacteria and *lactobacillus*.

### **Prebiotics are:**

- Resistant to digestion
- Fermented by microflora in the colon
- Able to stimulate growth of beneficial bacteria
- Beneficial to the host's health

Mannan oligosaccharides (MOS) are a type of prebiotic made of more complex sugars commonly found in the cell walls of yeast. MOS may prevent harmful bacteria from growing by binding them and carrying them out of the horse's body. MOS may also increase antibody levels in the milk of mares. MOS are commonly used in animal feed to improve digestibility and support gastrointestinal health.

A synbiotic is a product that contains both prebiotics and probiotics. When your horse has had problems with diarrhea, is under stress, has recently been treated with antibiotics, has had difficulty maintaining weight, or suffers from allergies, we recommend supplementation with probiotics and prebiotics. We also recommend digestive supplements for administration after [worming](#), to get the gut

bacteria back into balance.

**A word about psyllium:**

Many horse owners feed [psyllium](#) to their horses, especially if they live in sandy-soiled areas. Psyllium is an effective laxative for humans, so horse owners believe that psyllium husk, from the fleawort plant, can help move small amounts of sand out of the digestive tract of the horse.