

## Ask the Experts

Q: What is BioMos and why is it good for my horse?

A: BioMos is a source of mannose oligosaccharide, a five carbon sugar complex derived from yeast cell walls. This compound has been shown to have positive effects on the immune function in a variety of animals. It seems to have two functions. First, it helps prevent pathogenic organisms from attaching to the wall of the intestine, thus reducing the opportunity for these organisms to cause enteritis and other digestive problems. The second effect of mannose oligosaccharide seems to be a stimulant of the immune system. Animals apparently develop higher concentrations of IgG and other antibodies in response to natural stimulations. This provides the animal with more protection when challenged by disease organisms. Although there is only limited research available on horses, studies that are available suggest that the horse responds, as do other animals. Gestating mares receiving 10 g of BioMos daily had higher levels of IgG in their colostrum when they foaled, and their foals had higher IgG levels in their blood, giving the foals added protection against pathological organisms.

Q: What are the pros and cons of feeding sweet feed vs. pellets?

A: Sweet feeds, sometimes referred to as “textured feeds,” and pelleted concentrates with the same nutrient content have virtually the same value to most horses. Pellets hold a small advantage in digestibility, especially for those animals that do not chew their feed well. Sweet feeds can be mixed with medications or feed additives better because the molasses binds the ingredients together. In reality, the choice depends primarily on what the feeder prefers. Let’s look at other differences. Sweet feeds look like horse feeds. You can see the oats, corn and other major ingredients. They are very palatable and are generally accepted by all horses. Sometimes horses will pick and choose the ingredients that they like and reject other parts of the feed. Sweet feeds do attract flies. Pelleted concentrates are more uniform. Every bite is the same and the horse cannot pick and choose because every bite tastes the same. Pelleted feeds store better if kept dry and are more suitable for automatic feeders.

Q Why is yucca included in equine feeds? What are the benefits of yucca to my horse?

A Yucca, a plant grown in the Southwest, contains saponins, detergents that might have beneficial effects on the animal. The first benefit of yucca is the absorption of ammonia produced in the hindgut of the animal. Ammonia is produced by the breakdown of protein. Yucca apparently

binds the ammonia in the manure and prevents it from being released into the air. High levels of ammonia in stalls can have detrimental effects on horses and farm workers. Yucca also apparently suppresses protozoa in the digestive tract. Protozoa can be detrimental to the desired microbial population, and therefore reducing the protozoa will improve hind gut digestion. It has been proposed that yucca might be beneficial to horses exposed to equine protozoal myeloencephalitis (EPM), a disease caused by the protozoa *Sarcocystis neurona*, but there is no research data supporting that relationship. There is also some evidence in humans that yucca may benefit patients with arthritis. However, because yucca saponins are not absorbed, the mechanism by which the patient might benefit has not been established. We use yucca primarily for their beneficial effects on digestion and binding ammonia. The other reported benefits are still waiting research support