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**P**ro-Biotics seem to be all the rage now not only for horses but for other animals and humans, too. We may have even heard from our doctor or vet that after a round of anti-biotics, pro-biotics would be good for our intestines to avoid diarrhea. So just what *are* these “pro-biotics?”

## The Role of Pro-Biotics

According to an excellent article in Equus entitled “Managing Microbes” by Kate Krushwitz:

*Most equine feeds do not seem to meet the nutritional ideals of your horse's microbes - the bacteria, protozoa, fungi and yeasts that live side by side in his gut and help him to process fiber. As a result, a number of nutritional supplements have been introduced. Called "probiotics," "direct-fed microbials" and "lactobacillus cultures," they are designed to bolster the ranks and efforts of the tiny inhabitants of the equine digestive system.*

It turns out that horses guts are extremely sensitive (more horses die of colic than any other cause each year) and we need to make sure that their bacterial colonies are working at peak performance to both keep equine guts healthy and so the horse can obtain as many nutrients from their feed as possible.

Horses by nature begin acquiring their own microbes even before birth but additional ones are acquired during the birth process and just from the environment around them. The *cecum*, large colon and associated microorganisms together function like a fermentation vat. The microbes, among numerous other “jobs” are also an important barrier to colonization by their disease-causing relatives (pathogens) making it extremely difficult for pathogens to gain a foothold and cause mischief. Evolution has had over 150 million years to develop a dynamic, interconnected and efficient system.

Unfortunately, modern horses live very different lives than their ancestors, and, as Ms. Krushwitz says, “...[colonies can be disrupted by] feeding practices, behavioral stresses, antibiotics & anti-parasitic chemicals...The idea behind probiotics is that feeding a horse beneficial microbes will help combat stress, aid digestion and fight pathogens. Improved digestive efficiency (indicated by less undigested matter in droppings, weight gains and improvement in appearance and temperament) have been reported as a result of their use.”

The term pro-biotic means “for-life” as opposed to anti-biotics or “against-life” and help to maintain adequate levels of beneficial bacterial colonies so that appropriate digestion can take place regardless of all the modern stressors in

a horse’s life. Various pro-biotic studies have been reported to relieve diarrhea and promote weight gain. In fact, she continues, “*Some of the most striking effects have been on young animals, which may not be surprising, considering how long adult level populations take to establish themselves.*”

In fact, the intestinal tract does not mature in foals until they are at least 2 years old and, following chemical deworming, it will take up to 3 months for the colonies to be able to re-establish themselves enough to really be able to perform their jobs.

Most of the pro-biotics available today insert various live bacteria into perhaps compromised systems. We have had numerous horse owners become very discouraged with pro-biotics because their horses would get very gassy and not function very well. This was due to quick die-off of the newly introduced microorganisms into an “unfriendly” environment unsuited to their well-being.

## A Different Way

Enter **DYNAMITE® DynaPro** which actually is a fermentation product rather than living bacteria. In other words, it is a growing medium which *encourages* the growth and stability of microorganisms plentiful in our environment. By supplying the needs of the bacteria themselves, **DynaPro** jump-starts healthy bacterial colonies so they can grow into workable quantities in less than the three months that is the norm. Instead of going dormant or dying off as in the examples above, bacteria thrive and are thus able to fully perform their functions of keeping equine guts healthy, allowing the horse to gain as many nutrients as possible from feed, and to act as the first barrier against pathogens.

We like to suggest daily **DynaPro** for: all youngsters until 2 yrs of age; all geriatrics; all horses just starting the Program; all horses under stress from training, hauling, competing, breeding, etc.; when introducing new feeds such as hay from a different source or

new grain (each item requires a different bacterium for digestion); following all chemical deworming; if a horse has any digestive difficulty at all; and on and on.....essentially the uses are endless and not confined to horses only but to most living creatures including your dogs!

Once a horse has been on the Program for a number of months, depending on condition, etc., a mature animal under little to no stress, can be reduced to only once or twice a week.

**E**xperience for yourself what **DYNAMITE® DynaPro** can do for the digestion and general health of *your* horse. ■

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