

Probiotics can help promote health in our animal companions, including dogs, cats, and horses. They are live microorganisms that may help improve the conditions in the gastrointestinal tract - the system that is responsible for 70 percent of immunity from various diseases.

In a healthy animal, food is broken down in the digestive system so it can be absorbed into the bloodstream and converted into energy. The GI tract has several barriers against invading pathogens - the bad bugs that cause health problems. One of those barriers is made up of beneficial bacteria that help defend the body against potentially disease-causing microorganisms and help the GI tract digest food.

Here's where the power of probiotics comes into play:

- \* Probiotics can help offer protection from pathogens that try to invade the GI tract. It takes more of the "invaders" to have an effect on the GI tract if probiotic bacteria are already present. Probiotic organisms may produce substances that make the environment less favorable for the disease-carrying organisms. That's a powerful defense!

- \* Probiotic organisms may help support metabolic functions that help the GI tract remain healthy. These functions are nutritional benefits that the probiotic organisms pass on to the host animal - you, your horse, or your companion animal. The microorganisms can help with digestion, support the metabolism of some nutrients, and may help adjust absorption of some minerals. They may also manufacture various vitamins and fatty acids. These are powerful functions that help to nourish the GI tract.

- \* Finally, probiotic bacteria may support other parts of the GI tract that help protect the body against invading pathogens. They may also stimulate production of immunoglobulin A - an antibody.

Normally, the GI tract has an ample supply of probiotic bacteria. But even simple things can change the balance of the microorganisms pretty quickly: exposure to potentially disease-carrying microorganisms, changes in diet, traveling, or other stressors. The health of older animals and those with immunodeficiency diseases may also benefit from additional probiotics.

Administering antibiotics or deworming medications also disturbs the balance of organisms in the GI tract. While antibiotics or dewormers are killing the "invaders," they may also be killing the beneficial bacteria in the gut. Administering probiotics may help to restore the normal balance of bacteria in the GI tract, helping to keep the immunology system working correctly.

The bottom line? Probiotics can help support the GI tract - the system that is responsible for 70 percent of immunity from various diseases. That's the power of probiotics!