

Probiotics – Choosing the Right Product for Your Practice

By Teresa McComb - Biochemist & Product Formulator

Over the last 15 years, much has been made of the importance of probiotics for increased health, not just for people, but for animals, too. Substantial research has been conducted with the findings clearly indicating that probiotics can induce a beneficial change in the intestinal microbiota when pathogenic bacteria dominate the GI tract.¹ In their role of promoting digestive health, probiotics also have been found to have a positive impact on immunity.² Other benefits of probiotics beyond GI health and immunity have been discovered, and clinical research is still being conducted.

The Difference Between Probiotics, Prebiotics and Synbiotics

Probiotics, prebiotics and synbiotics have been the focus in the media and many products on the market today, with much touting of their individual or combined benefits. So what are they and how do they work?

Probiotics are live, beneficial bacteria that confer a health benefit to the host.³ They promote healthy digestion, boost the immune system, and contribute to general health and wellbeing. *Prebiotics* are non-digestible food ingredients that stimulate the growth and/or activity of bacteria in the digestive system. They are actually the food source for probiotics. When probiotics and prebiotics are used synergistically in nutritional supplements, they are referred to as *synbiotics*.

And while many pet owners may not completely understand how probiotics and prebiotics work together or which product may be best for their pet, they are becoming more interested in exploring how a synbiotic product will benefit their dog or cat.



Lactobacillus casei Rosell-11
Lactobacillus helveticus Rosell-52



Bifidobacterium longum Rosell-175



Saccharomyces boulardii 1-1079

Maintaining Balance

The microbiota in an animal's GI tract is a complex ecosystem made up of beneficial and pathogenic bacteria living together in a delicate balance. Many factors can disrupt this balance, including antibiotic use, change in diet, illness, age, and stress. These factors can permit pathogenic bacteria to overpopulate and produce toxins. When this kind of imbalance occurs, the overgrowth of pathogenic bacteria causes irritation to the intestinal lining and results in one or more of these symptoms: diarrhea, excess gas, abdominal pain, constipation, and lethargic behavior.

With 70% of an animal's immune system located in the GI tract, these factors compromise an animal's ability to fend off pathogens. Introducing a synbiotic supplement to an animal's diet can help consistently maintain proper GI microbial balance.

Not all Probiotics are Equal

Probiotics are categorized by genus and species using Latin names such as *Lactobacillus helveticus* and *Bifidobacterium longum*. The

probiotic selected by a manufacturer for a supplement product is very important because not only are there different genera and species, but also different strains – for example, *Lactobacillus helveticus* Rosell-52. Research has shown that each probiotic strain has unique benefits, even though the genus and species may be the same.

“Choosing the right strain for the proper indication is paramount,” said Dr. Thomas Tompkins, lead research scientist at Institut Rosell Inc. “In mixed strain probiotic products it is important to consider the compatibility between the strains selected. In some probiotic products strains can compete and reduce the efficacy of the others present—so it is important to choose strains that not only happily coexist but act synergistically.”

Because each strain has unique benefits, using the right combination of different strains may provide a greater impact on an animal's health. In one study involving four microbial strains, the combination of all four strains was proven more effective than each individual strain at reducing weight loss and maintaining fecal consistency due to infection.⁴

Viability and Quantity Matter

The viability and quantity of probiotics in a supplement are also important to the performance of the product. Microencapsulation is vital to protecting the viability when the product is introduced to the acidic environment of the stomach. Stomach acidity can destroy and damage some probiotics.

The quantity of probiotics in a pet supplement can also affect product performance. Probiotics are measured in CFUs, colony-forming units. “The important point is to ensure the supplement contains an adequate amount of probiotics to provide health benefits,” says Dr. Tompkins, adding, “If a product contains less than 1 billion CFUs, it may not provide enough beneficial bacteria to properly balance the GI tract.”

The Importance of Prebiotics

Once the probiotics become rehydrated and active in the GI tract, an adequate food source can aid their survival. Prebiotic fibers provide a source of nutrition for the live probiotics. Prebiotics also provide a food source for the beneficial bacteria already in the GI tract. However, pathogenic bacteria, such as *Salmonella* and *E. coli* are unable to utilize these fiber sources. By combining a food source—prebiotics—to the supplement, the survival of the beneficial bacteria—probiotics—may be improved.

Introducing a New Kind of Synbiotic Supplement – Synacore

Synacore, a new synbiotic supplement manufactured by Van Beek Natural Science, is a unique combination of probiotics, prebiotics, enzymes, and vitamins. Van Beek specifically formulated Synacore with probiotic strains backed by independently conducted and published clinical studies of their individual efficacies. The chosen combination of Synacore's strains is based on the synergistic actions of well-documented bacteria and yeast strains that offer optimal intestinal support.

In addition, Synacore's probiotics are microencapsulated with a patented process to withstand the acidic environment of the animal's stomach. The total probiotic bacteria count in the Synacore dog formula is 6 billion CFUs. Synacore's cat formula is 1 billion CFUs. These counts are high enough to deliver the right amount of probiotics to promote the health benefits desired.

More than Just a Probiotic

The Synacore formulas also contains 2 prebiotics, 13 enzymes, and 3 vitamins to form a complete daily supplement. Synacore includes the prebiotics inulin and FOS. Not only do these prebiotics provide the right food for the probiotics, they significantly reduce fecal odor.⁵

Enzymes are needed for an animal to break down food. Some animals are not able to produce enough of the right enzymes. This puts stress on the digestive system, interfering with nutrient absorption and causing chronic digestive problems. Since most dog and cat foods contain little or no enzymes, Synacore contains enzymes to improve nutrient absorption, increase energy levels, enhance an animal's metabolism, and promote weight loss.

Synacore also contains vitamins A, D & E. Vitamin A protects the intestinal mucosa against adhesion and invasion by pathogens. Vitamin D helps with the absorption of calcium and phosphorous,

important in bone formation. Vitamin E has antioxidant properties to bind radical oxygen molecules, maintaining healthy tissue.

Synacore is a granular product administered by being added to a pet's food. Clinical trials have shown Synacore to be pleasant tasting and readily accepted. The stick pack single dose packaging is also sanitary and easy to use.

As the number of products available on the market grows, more and more concerned pet owners will turn to their veterinarian for answers on which product is best for their pet. Synacore's formulations are designed to provide maximum health benefits, ease of dosing and successful administration.

References

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Introducing SYNACORE™ Digestive Support

Maintenance Formulas for Dogs & Cats

THE BENCHMARK OF QUALITY


More than Just a Probiotic!

So what is it then? Synacore is a uniquely formulated synbiotic supplement containing both probiotics and prebiotics that work together to support the growth of "friendly flora" in the GI tract. Synacore's formula also includes enzymes and vitamins to aid in digestion and support overall health.

Features

- Synergistic benefits - ingredients work together to enhance their individual effectiveness
- Advanced micro-encapsulation to prolong shelf life & ensure survival to the intestine
- Each individual strain, identified by a number, has a unique action and location in the GI tract. Synacore's strains have been specifically chosen for their particular action and location. Look for the strain!

Lactobacillus helveticus **Rosell-52**

Genus Species Strain

Buy **5** boxes & receive **1 FREE!**

Must purchase 5 boxes of same formula to receive 1 free box of like kind. This promotion runs from February 1 thru April 30, 2011. Synacore will be available and ready to ship March 1st.

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