

INTRODUCING  
**procanicare™**

## THE FIRST GI SUPPORT PRODUCT DEVELOPED FROM THE INTESTINAL BACTERIA OF HEALTHY DOGS

Procanicare™ will be launched onto the veterinary market by Animalcare Group plc in early 2020 with the goal of helping dogs with gastrointestinal issues maintain good digestive health. Procanicare™ is the first product of its kind to be developed from the intestinal bacteria of healthy dogs and contains 3 strains of live *Lactobacillus* 'good' bacteria.<sup>1</sup> Procanicare™ supports a dog's gastrointestinal microbiota by reducing deleterious bacteria and by helping a dog's own beneficial bacteria grow.<sup>1-3</sup>

## AN INTERVIEW WITH THE SCIENTIST BEHIND PROCANICARE™

We recently sat down with Dr. Shea Beasley to discuss the innovation Procanicare™ brings to the management of gastrointestinal disturbance in dogs. Dr. Beasley is the leader of the lactic acid bacteria (LAB) research project at Vetcare Oy and has spent the last 20 years focusing on canine LAB strains and their potential for incorporation into canine GI Support products.



**Shea Beasley, PhD**

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### **Dr. Beasley, can you explain what makes Procanicare™ different from currently available veterinary products?**

Procanicare™ contains Proccanius® bacteria, which is 3 canine strains of beneficial live *Lactobacillus* bacteria. Up until now, common veterinary GI Support products contained a human strain of *Enterococcus faecium*. Adhesion of bacteria to the gastrointestinal epithelium is species-specific. Thus, in order for a probiotic bacterial strain to have the best chance of colonisation and growth, it must also be species-specific.<sup>4</sup>

### **What motivated your team to develop Proccanius®?**

Well, it all started with my first dog Denny. She was a Border Collie with a very sensitive stomach. I got fed up constantly cleaning the rugs and carpets. I knew that I needed to do something to help her and other dogs with the same problems. That led to my PhD research on human and animal probiotics. I found that the gastrointestinal tracts of healthy dogs are populated by several LAB strains,<sup>1</sup> whereas we could not isolate any LAB strains from Denny's faeces. It has since been shown that *Lactobacillus* numbers decrease in dogs with gastrointestinal sensitivities.<sup>5</sup>

The 3 LAB strains my team at Vetcare developed into Proccanious® survived the low pH of the stomach and promoted the growth of the dog's own beneficial *Lactobacillus* bacteria, while reducing canine pathogens.<sup>1-3</sup>

Our other reason for developing Proccanious® was data published in 2003 regarding the use of probiotics containing *E. faecium* in dogs. While there have been no reports since to suggest this is a problem clinically, two papers published that year showed that several strains of *E. faecium* can promote *Campylobacter jejuni* adhesion, colonization and growth in canine intestines.<sup>6,7</sup> Since then, some *Lactobacillus* strains have been shown to inhibit *C. jejuni* adhesion and colonization.<sup>8,9</sup> Thus, for me, *Lactobacillus* bacteria were the logical choice for development into a GI Support product.

### Have you published your data on the benefits of Proccanicare™ for dogs?

Yes. In 2014, we published an *in vitro* study showing that Proccanious® bacteria exclude canine pathogenic bacteria.<sup>10</sup> In 2016, we published the results of a study using Proccanious® bacteria in dogs with acute gastrointestinal disturbance.<sup>3</sup> During the 7-day course, the dogs that received Proccanious® had enhanced well-being compared with the dogs that received a placebo. After the 7-day course, the Proccanious® group had improved stool consistency and lower numbers of *Clostridium* compared with the placebo group. What was really exciting was that the improvement in stool consistency remained throughout the further 1-month observation period. This shows that the Proccanious® bacteria really do help keep the gastrointestinal microbiota stable.

### Am I to understand that the product is already being used in Scandinavia?

Yes. It has been commercially available in Scandinavia for 2 years. In addition to using it for GI Support in dogs with gastrointestinal issues like Denny, Scandinavian vets are also recommending it in 3 other situations where the gastrointestinal microbiota can become unstable: following antibiotic use, in breeding bitches and in stressful situations such as travelling and kennelling. Proccanicare™ comes in a powder formulation that makes the product easy to give as it can be sprinkled on to food or mixed into water. It could even be useful in anorexic, hospitalised patients—once it's mixed into water, it can be given through a feeding tube.

### Are you excited for the launch in Europe?

I am very excited to have seen this product through from conception to launch! I hope Denny is proud of the legacy she has left behind and of how she has inspired me and my colleagues to help improve the health of dogs with similar issues. It is tremendous to know that starting in January 2020, Proccanicare™ will be on clinic shelves ready to help dogs just like Denny!



Visit [proccanicare.com](http://proccanicare.com) to learn more.



**References:** 1. Beasley SS, Manninen TJ, Saris PE. Lactic acid bacteria isolated from canine faeces. *J Appl Microbiol.* 2006;101:131-138. 2. Manninen TJ, Rinkinen ML, Beasley SS, Saris PE. Alteration of the canine small-intestinal lactic acid bacterium microbiota by feeding of potential probiotics. *Appl Environ Microbiol.* 2006;72:6539-6543. 3. Gómez-Gallego C, Junnila J, Männikkö S, et al. A canine-specific probiotic product in treating acute or intermittent diarrhea in dogs: a double-blind placebo-controlled efficacy study. *Vet Microbiol.* 2016;197:122-128. 4. Kumar S, Pattanaik AK, Sharma S, et al. Comparative assessment of canine-origin *Lactobacillus johnsonii* CPN23 and dairy-origin *Lactobacillus acidophilus* NCDC 15 for nutrient digestibility, faecal fermentative metabolites and selected gut health indices in dogs. *J Nutr Sci.* 2017;6:e38. 5. Xu J, Verbrugghe A, Lourenço M, et al. Does canine inflammatory bowel disease influence gut microbial profile and host metabolism? *BMC Vet Res.* 2016;12:114. 6. Rinkinen M, Jalava K, Westermarck E, et al. Interaction between probiotic lactic acid bacteria and canine enteric pathogens: a risk factor for intestinal *Enterococcus faecium* colonization? *Vet Microbiol.* 2003;92:111-119. 7. Vahjen W, Männer K. The effect of a probiotic *Enterococcus faecium* product in diets of healthy dogs on bacteriological counts of *Salmonella* spp., *Campylobacter* spp. and *Clostridium* spp. in faeces. *Arch Tierernähr.* 2003;57(3):229-233. 8. Kobierecka PA, Wyszynska AK, Aleksandrak-Piekarczyk T, et al. In vitro characteristics of *Lactobacillus* spp. strains isolated from the chicken digestive tract and their role in the inhibition of *Campylobacter* colonization. *Microbiologyopen.* 2017;6:5. 9. Lehri B, Seddon AM, Karlyshev AV. *Lactobacillus fermentum* 3872 as a potential tool for combatting *Campylobacter jejuni* infections. *Virulence.* 2017;8:1753-1760. 10. Grześkowiak Ł, Collado MC, Beasley S, Salminen S. Pathogen exclusion properties of canine probiotics are influenced by the growth media and physical treatments simulating industrial processes. *J Appl Microbiol.* 2014;116:1308-1314.



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