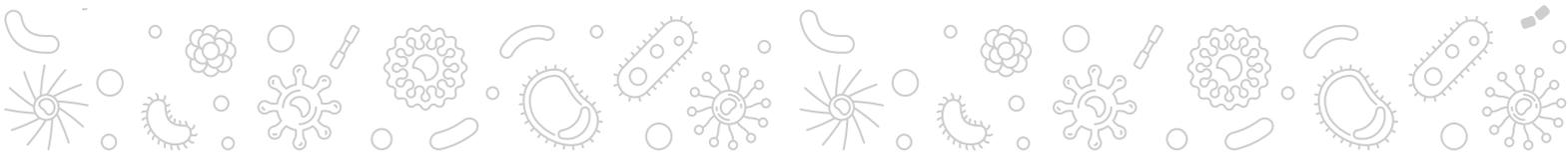
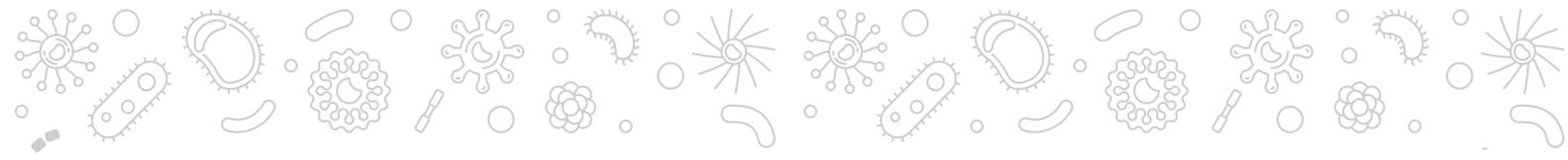




Shaping the Future of Animal Probiotics.
Building Health. Inside Out.





Building gut health through the Microbiome



The **Microbiome** is a community of microorganisms living together. The Gut Microbiome is the microbial population residing in the intestine. It consists of billions of bacteria and other organisms that co-exist in the large intestine.

These microorganisms include both desirable and undesirable bacteria **unique to each species**.

All animals, pets & livestock, thrive when they have a balanced gut Microbiome. Gut Microbiota helps with digestion, metabolism, immune function, and brain function.

Species-Specific Probiotics can help balance the gut Microbiome of pets & livestock and positively impact health. Gut Microbiome can be disrupted by several factors, negatively impacting health. Studies confirm the use of **Species-Specific Probiotics** support and maintain this gut “ecosystem” — the Microbiome.

Species-Specific Probiotics bolster the immune system in pets and **helps inhibit pathogen growth** in livestock, reducing the use of antibiotics.



“ We build animal health by providing innovative, 100% natural, Species-Specific Probiotics to pet food & livestock feed manufacturers. ”

We are a business with a passion to be, and do, better. We want the best health for pets and livestock - backed by science.

We started at a small lab at the University of Alberta, and today we are known for quality, experience, and vision.

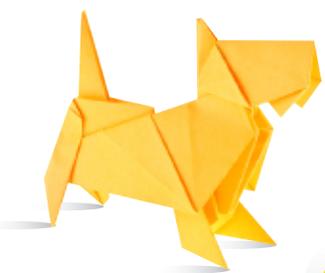
We are Species-Specific. The Probiotics we offer have been isolated from their host species and tested to optimize their contribution to overall animal health.

We offer multiple inclusion methods for pet food and livestock feed. Our Probiotics can be delivered via feed, liquid, or applied as top-dress supplements.

We provide customer support services to collaborate with our customers to help them determine the best solution for their pet food or livestock feed Probiotic requirements.

Use of Human Derived Probiotics v/s Species-Specific Probiotics

Parameters	Human Derived Probiotics Used in Animal Foods/Treats/Livestock feeds/Supplements	CanBiocin Species-Specific Probiotics Used in Animal Foods/Supplements/Treats
GI physiology	✘ Uncertain ability to adapt to host species-specific GI physiology	Proven palatability, safety and ability to survive gastric digestion, locate in large intestine (adhere and colonize) and proliferate
Dietary habits	✘ Uncertain ability to adapt to host species specific dietary habits	Proven ability to “shift” Microbiome microbial populations
Ability to Colonize	✘ Uncertain ability to adhere and colonize to host intestinal epithelial cell lining	Proven preferable health effects <ul style="list-style-type: none"> • Increased production of SCFA (short-chain fatty acids) • Positive impact include defense against pathogenic bacteria, reduced infection, reduced inflammation, increase nutrient absorption, immunomodulation
Health effects	✘ Unknown health effects	Proven positive effect on gut epithelial barrier function
Immune system effects	✘ Unknown Immune system effects	Proven positive impact on interleukin (cytokine) production which regulates immune response



1 Bolster pet's immune system

2 Dietary nutrients more readily available

3 Help protect against bacteria causing major gastrointestinal illnesses.

Leap by adding the strength of our probiotics to your pet food formulation

We offer

Lactobacillus casei K9-1



Lactobacillus fermentum K9-2



Parameters	Specifications	Test Methods
Product	Pure Stain Probiotic Blend	Pure Stain Probiotic Blend
Appearance	Off-white to tan powder	Organoleptic
Moisture Content	<5%	Air Oven
Probiotics	Custom activity (CFU/g)	In-house
Yeast/Mould	<100 CFUg	MFHPB-32
<i>Staphylococcus aureus</i>	<100 CFUg	MFHPB-21
<i>Escherichia coli</i>	Negative in 1 g	MFHPB-34
<i>Salmonella spp</i>	Negative in 10 g	MFHPB-20
<i>Coliform</i>	<100 CFUg	MFHPB-31
<i>Bacillus cereus</i>	<100 CFUg	MFLP-42

Product	Pure Stain Probiotic Blend
Ingredient	<i>Lactobacillus casei K9-1, Lactobacillus fermentum K9-2</i>
Country of Origin	Canada
Storage Condition	Sealed containers stored under refrigerated and dry environment
Expiration	Two and half years from the date of manufacture under the recommended storage conditions.

Choose your application method

"IN"
 Incorporate CanBiocin probiotic-prebiotic premix into your pet food, frozen meals, cold processed treats, and liquid supplements during the manufacturing process.

"ON"
 Coat CanBiocin probiotics on the surface of kibble or treats via tumbler mixing or surface spray application.

"OVER"
 Used as a top-dress supplement for pet food.

Leap by adding the strength of our probiotics to your livestock feed formulation

Increase performance and profitability by improving nutrient uptake

1

Reduce the use of antibiotics in food animals

2

Reduce the impact of production stresses

3



We offer

Carnobacterium maltaromaticum



- *Carnobacterium maltaromaticum* is a known bacteriocin producer which inhibits pathogen growth (*Listeria monocytogenes*)

Lactobacillus reuteri,
Pediococcus pentosaceus,
Pediococcus acidilactici &
Enterococcus faecium blend



- Co-fermented probiotic blend
- Bacteriocin producers to inhibit growth of *Clostridium perfringens* (cause of necrotic enteritis) in production poultry



Choose your application method

"IN"

Incorporate CanBioCin probiotic-prebiotic premix into livestock feeds during the manufacturing process.

Incorporate CanBioCin Probiotic blends into the water supply for production livestock.

"OVER"

CanBioCin Probiotic-prebiotic blends as a feed supplement for production livestock.

Why us

1. Species-Specific Focus
2. Clean labelling – avoid use of chemicals or antibiotics to control pathogens in food preparations
3. 'Label integrity' – viable Probiotics in food/treats/supplements
4. Ability to incorporate into existing manufacturer production lines
5. Proprietary & science based
6. Regulatory compliant across North America.



Certifications



1. We Are 100% Natural with no added GMO's
2. Our Products meet North American standards and Health Canada has provided recognition under VHP program
3. Our probiotics are produced under strict Good Manufacturing Practice (GMP) quality system to ensure consistency and high quality in our products.
4. We are AAFCO approved. Our probiotics are monitored closely to ensure uniform quality.

Our supporters



CanBiocin Inc.
#4170 – 10230 Jasper Avenue
Edmonton, Alberta
Canada T5J 4P6

E info@canbiocin.ca
T +1 780-436-5228
www.canbiocin.ca