



TruMune™

A Healthy Outside Starts on the Inside

Manufacturers Meet Growing Demands & Nutritional Needs

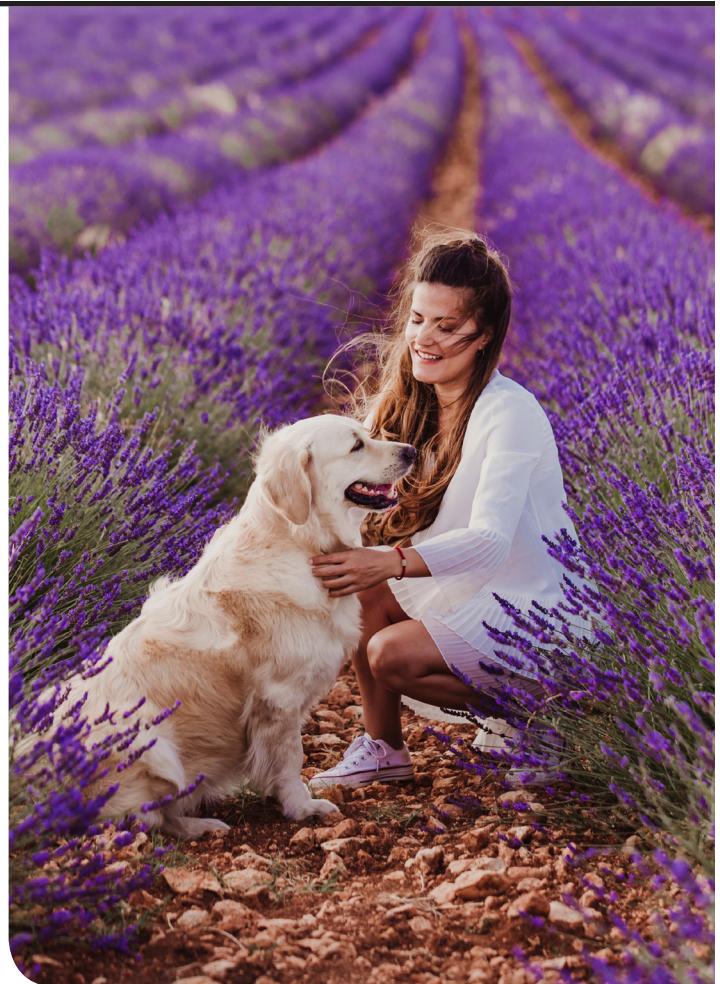
Need for Nutrition

Today's pet food manufacturers and nutritionists serve increasingly demanding customers. It is estimated that 76% of dog owners believe that in order to achieve optimal health for their pets it is essential to feed them high quality food¹. This pet parent focus on nutrition has driven market growth of both natural and functional pet food ingredients. With many food options available, pet food manufacturers must be on the lookout for new ways to help differentiate their brands, keeping pet parents in mind when doing so.

TruMune™ fermentate is a research-proven postbiotic ingredient that helps to optimize pet health and overall wellbeing. It is an advanced, natural² immune support product manufactured in the United States and designed specifically for dog diets. **TruMune** contains unique bioactive compounds that work with a pet's biology to support beneficial bacteria and balance the gut microbiome.

Emerging research has linked gut health to immune health, which is why postbiotics should be considered an essential part of pet nutrition. Simply put, prebiotics + probiotics = postbiotics. Postbiotics work to sustain a healthy immune system, promote good bacteria, and maintain gut balance.

TruMune is a leader in fermentation and postbiotic technology. This natural way to foster overall wellness delivers more healthy days for your customers' four-legged friends.



TruMune Supports Pet Health & Wellbeing

Research demonstrates that feeding **TruMune** to dogs supports:



Immunity



Digestibility



Vitality

TruMune has been tested and validated in controlled scientific studies conducted at universities and an internationally recognized independent canine research center.

¹ Source: American Pet Products Association (APP)

² Natural as defined by AAFCO

Supports Immunity

A Strong Immune System

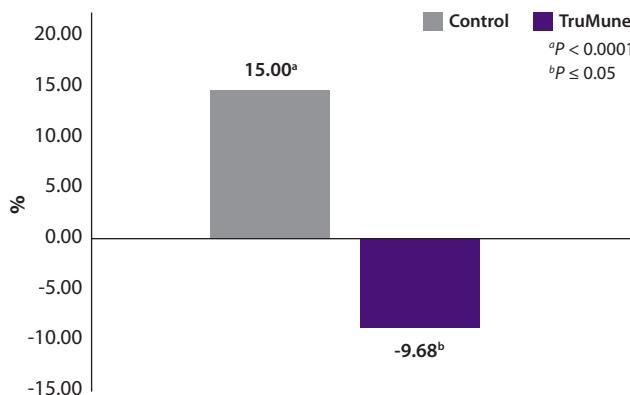
White blood cells, Neutrophils, TBARS, and TNF-a are key indicators of immune function. Immune response indicators were improved in dogs fed **TruMune™** fermentate.

Indicator	TruMune	Control	P
White Blood Cells ($10^9/l$)	11.01	11.88	<0.05
Neutrophils ($10^6/ml$)	8.25	9.06	<0.05
Neutrophil : Lymphocyte Ratio	4.58	5.12	<0.05
TBARS (nmol//ml)	7.58	12.76	<0.03
TNF-a (pg/ml)	8.03	9.83	<0.05

Response to Environmental Sensitivities

When exposed to potential environmental irritants via Intradermal Skin Testing, dogs fed **TruMune** showed less reaction than Control dogs. Feeding **TruMune** also resulted in no change or a decreased reaction to all 32 potential environmental irritants versus baseline.

Change in Response from Baseline

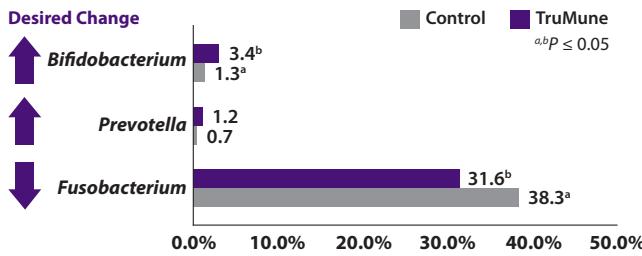


Promotes Digestive & Gut Health

Fecal Microbiota

In dogs that were fed **TruMune** there was a beneficial shift in the gut microbiota compared to Control fed dogs.

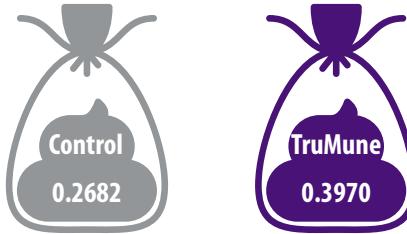
General



Fecal Stool Score

Dogs fed **TruMune** were over 50% more likely to receive a desirable fecal score compared to dogs fed a control diet ($P = 0.128$).

Probability of Desired Score



Optimizes Overall Health

Dogs fed **TruMune** demonstrated greater overall activity per kilometer ($P = 0.0012$) as well as greater overall average moving speed ($P = 0.3492$) compared to Control dogs.



The Trusted Experts in Animal Nutrition & Health

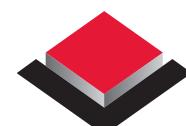
Diamond V Mills, LLC, is a leading global animal health business based in Cedar Rapids, Iowa, USA. Diamond V conducts research in many species and manufactures immune support products for animal health, animal performance, and food safety worldwide. With more than 75 years of science, innovation, technology, and quality, we have earned the reputation of the Trusted Experts in animal nutrition and health.

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