

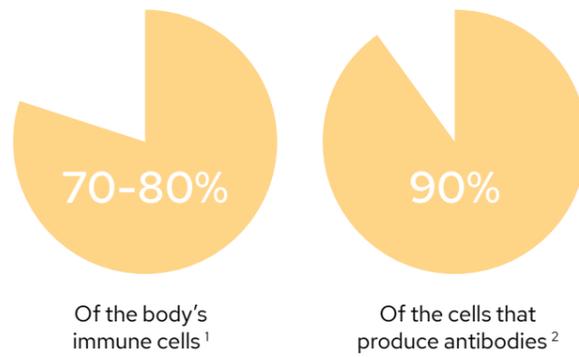
PURINA®
PRO PLAN®
VETERINARY DIETS
& RELATED PRODUCTS

MAKE A DIFFERENCE
TO **GUT HEALTH** WITH
EARLY NUTRITIONAL
SUPPORT



Gastrointestinal (GI) health is pivotal for pets' overall health

The gut contains the largest immune system in the body, having:



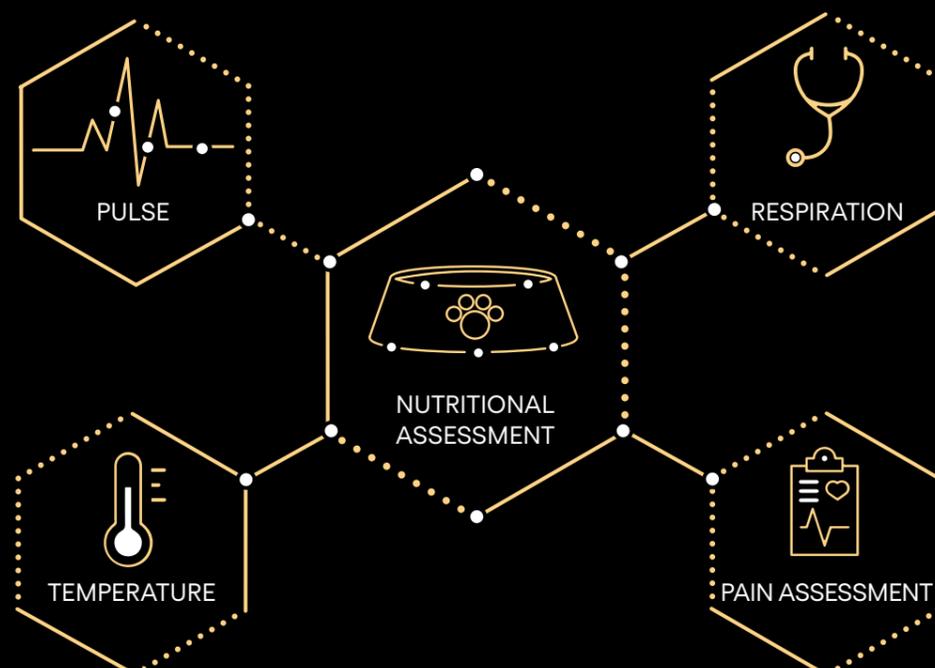
"Perhaps no other organ system is so directly and immediately affected by nutrition than the gastrointestinal tract".

Dr. Nick Cave PhD, MVSc, BVSc.³
Diplomate ACVIM (Nutrition)

In dogs, the majority of chronic enteropathies have been seen to respond and benefit from dietary modification.⁴

We need to talk about nutrition

The World Small Animal Veterinary Association (WSAVA) incorporated nutritional assessment as the 5th vital sign in the standard physical examination⁵



What are the key requirements for the nutritional support of GI disturbances?



Efficacious to rapidly provide support for cases of loose stools.



Highly digestible to help reduce the workload of the compromised gut and facilitate recovery.⁶



Low-moderate amounts of fat and tailored levels of fibre for each specific case, while maintaining a moderate to high energy level.⁶



Microbiome support with prebiotics or added probiotics to rapidly restore the natural equilibrium, helpful in case of dysbiosis.⁶



Highly palatable, as pets may have a loss of appetite.



Increased electrolytes to compensate for the vomit and diarrhoea losses.⁷



High content of vitamins and minerals like cobalamin (B12), folate (B9) and magnesium to prevent deficiencies and help in intestinal function.³



Complete and balanced for long-term support if needed.



- Vighi G, Marcucci F, Sensi L, et al. (2008). Allergy and the gastrointestinal system. *Clinical and Experimental Immunology*, 153(Suppl 1): 3-6. DOI: 10.1111/j.1365-2249.2008.03713.x
- Blake AB, Suchodolski JS (2016). Importance of gut microbiota for the health and disease of dogs and cats. *Animal Frontiers*, 6(3): 37-42. DOI: 10.2527/af.2016-0032
- Cave N, Delaney SJ, Larsen JA (2024). Nutritional Management of Gastrointestinal Diseases. Book chapter in *Applied Veterinary Clinical Nutrition*, Second Edition. John Wiley & Sons. ISBN: 9781119375142
- Fritz J, Suchodolski JS (2023). The importance of a digestible diet for management of diarrhea. *Today's veterinary practice*.
- Freeman L, Becvarova I, Cave N, et al. (2011). WSAVA Nutritional Assessment Guidelines. *Journal of Small Animal Practice. Journal of Feline Medicine and Surgery*, 13(7): 516-525. DOI: 10.1016/j.jfms.2011.05.009
- Lenox CE (2021). Nutritional Management for Dogs and Cats with Gastrointestinal Diseases. *Veterinary Clinics of North America: Small Animal Practice*, 51(3): 669-684. DOI: 10.1016/j.cvsm.2021.01.006
- Tolbert MK (2023). Small and Large Bowel Diarrhea in Dogs and Cats. *Purina Institute Handbook of Canine and Feline Clinical Nutrition*, Second Edition. Nestlé Purina Petcare. ISBN: 9798987922514

Provide nutritional support for GI disturbances:

Recommended for	Canine	Feline
Acute diarrhoea	EN	EN ^{ST/OX}
Cholangitis	HP	HP ^{ST/OX}
Chronic enteropathies	EN HA	EN ^{ST/OX} HA ^{ST/OX}
Colitis	EN	EN ^{ST/OX}
Copper associated encephalopathy	HP	HP ^{ST/OX}
Elimination diet for food trials	HA	HA ^{ST/OX}
Exocrine Pancreatic Insufficiency	EN HA	EN ^{ST/OX} * HA ^{ST/OX}
Gastroenteritis	EN	EN ^{ST/OX}
Gastroenteritis associated with food intolerance	HA	HA ^{ST/OX}
Hepatic disease with encephalopathy	HP	HP ^{ST/OX}
Hepatic disease without encephalopathy	HP HA	HP ^{ST/OX} HA ^{ST/OX}
Hyperlipidaemia	EN* HA* OM	HA ^{ST/OX} OM ^{ST/OX}
Inflammatory Bowel Disease	EN HA	EN ^{ST/OX} HA ^{ST/OX}
Lymphangiectasia	EN*	HA ^{ST/OX}
Malabsorption / Maldigestion	EN	EN ^{ST/OX}
Pancreatitis	EN* HA*	HA ^{ST/OX}
Portosystemic shunt	HP	HP ^{ST/OX}
Protein Losing Enteropathy	EN*	HA ^{ST/OX}
Recovery	EN** CN	EN ^{ST/OX} CN
Vomiting	EN	EN ^{ST/OX}

* Dry formula only. ** Wet formula only.

HA HYPOALLERGENIC



- Monoprotein (hydrolysed soy)
- Purified carbohydrate
- With Medium Chain Triglycerides (MCTs)* for easy gut digestion and absorption and omega-3



- Hydrolysed diet, soy as the main protein source
- Purified carbohydrates
- High palatability
- With omega-3

HP HEPATIC



- High energy
- Selected and highly digestible protein
- Restricted copper and high zinc
- With MCTs, inulin and omega-3



- High energy and palatability
- Adapted level of highly digestible protein
- Restricted copper and high zinc
- With inulin and omega-3

*Dry formula only.

Specialised nutritional support from PURINA® PRO PLAN® VETERINARY DIETS

EN GASTROINTESTINAL CANINE AND FELINE

Recommend EN gastrointestinal for cats & dogs to help reduce the workload of the gut and to promote good fecal quality. With added prebiotics (purified inulin) to improve microbial balance, stimulate beneficial bacteria and provide short-chain fatty acids for the enterocytes.

- Limited fat
- With MCTs, omega-3 and inulin*
- Suitable for all life stages (incl. puppies)



- High energy and protein content
- Suitable for all life-stages (incl. kittens)
- With inulin (except pouches) and omega-3

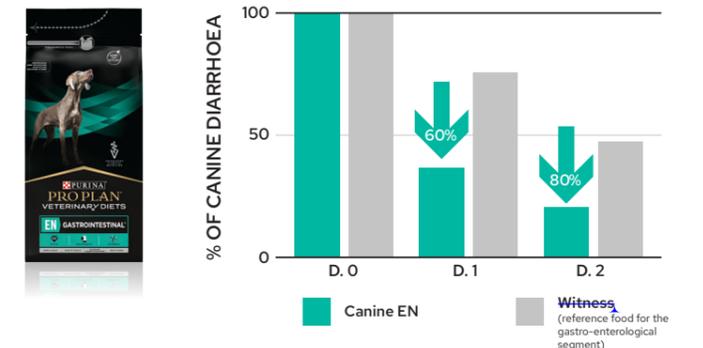
* Dry formula only.

PROOF OF NUTRITIONAL EFFICACY



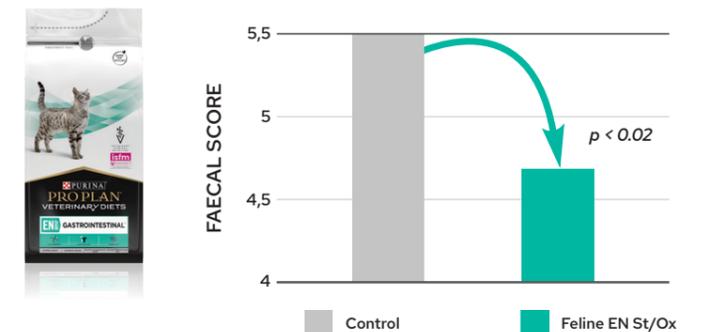
PRO PLAN® VETERINARY DIETS CANINE EN has proven effectiveness on acute small intestinal diarrhoea from 24 hours onwards.¹

N = 24 dogs. Duration: 14 days. Randomized study.



PRO PLAN® VETERINARY DIETS FELINE EN ST/OX significantly improved faecal consistency in cats suffering from chronic refractory diarrhoea.²

N = 16 cats. Duration: 10 weeks. Randomized study.



1. Wennogle SA et al. (2016). Randomized Trial to Evaluate Two Dry Therapeutic Diets for Shelter Dogs with Acute Diarrhea. Intern J Appl Res Vet Med. 14(1): 30-36.
2. Xu H, et al. Internal report 2012

Support GI disturbances with probiotics



FortiFlora® is a complementary pet food for dogs and cats of all ages to help support intestinal health and balance.



LEADERSHIP IN THE MICROBIOME

As part of Nestlé, Purina draws on the unequalled culture collection and decades of microbiome research to evaluate potential probiotic strains of value to veterinary medicine and pet health.

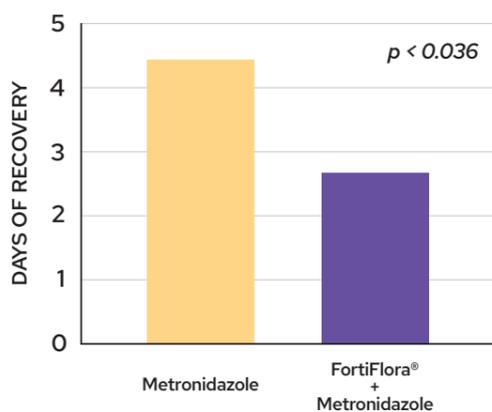
Recommend FortiFlora® for:

- **Gastrointestinal issues:**
 - Acute and chronic
 - With antibiotic use
 - During stressful situations
 - With diet changes
- Enhancing the body's natural defenses
- To help reduce loose stools
- As a palatability enhancer

PROOF OF EFFICACY

Supplementation with **FORTIFLORA®** (*Enterococcus faecium* SF68) significantly reduced the days with abnormal stools in shelter dogs with non-specific diarrhoea that were administered metronidazole.³

N = 33 dogs. Duration: 7 days. Randomized study.

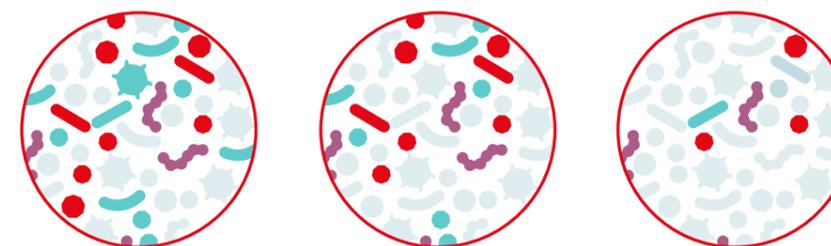


Supplementation with **FORTIFLORA®** (*Enterococcus faecium* SF68) significantly reduced the number of cats with abnormal faecal scores (69.2% in cats with antibiotic +SF68 vs 85.7% in cats with only antibiotic) when administering amoxicillin-clavulanate.⁴

N = 34 cats. Duration: 14 days. Randomized study.



In a study¹ of 25 commercially available probiotics marked for use in animals,



Only 15 of 25

had the bacteria numbers claimed on the label

Only 4 of 15

that had specific label claims met or exceeded them

Only 2 of 25

had an acceptable label properly describing the contents

Problems identified with the probiotics included:

Inadequate description of contents

Low bacteria numbers compared to label and claims

Misleading label

Misspelled contents on label

Purina was the **first to offer a shelf-stable probiotic proven to promote a healthy immune system and provide dietary support for dogs or cats with loose stools.** This probiotic, *E. faecium* SF68, remains the most studied probiotic in the veterinary field based on publications to date.

In addition, Purina has **advanced publications demonstrating the safety and positive impact of selected prebiotics such as inulin** in healthy, diseased or dysbiotic animals.

Meet the Purina Institute At the Purina Institute, we believe science is more powerful when it's shared. That's why we're on a mission to unlock the power of nutrition to help pets live better, longer lives. A global professional organization, the Purina Institute shares Purina's leading-edge research, as well as evidence-based information from the wider scientific community, in an accessible, actionable way so veterinary professionals are empowered to put nutrition at the forefront of pet health discussions to further improve and extend the healthy lives of pets through nutrition.

Sign up for scientific communications from Purina Institute
PurinaInstitute.com/sign-up



3. Fenimore A, Martin L, Lappin MR (2017). Evaluation of metronidazole with and without Enterococcus faecium SF68 in shelter dogs with diarrhea. Topics in Companion Animal Medicine. 32(3): 100-103. DOI: 10.1053/j.tcam.2017.11.001

4. Torres-Henderson C, Summers S, Suchodolski J, et al. (2017). Effect of Enterococcus faecium strain SF68 on gastrointestinal signs and fecal microbiome in cats administered amoxicillin-clavulanate. Topics in Companion Animal Medicine. 32(3): 104-108. DOI: 10.1053/j.tcam.2017.11.002

1. Cunningham, M., Azcarate-Peril M. A., Barnard, A., Benoit, V., Grimaldi, R., Guyonnet, D., Gibson, G.R. (2021). Shaping the future of probiotics and prebiotics. Trends in Microbiology, 29(8), 667-685. doi: 10.1016/j.tim.2021.01.003.

GI disturbances with the FortiFlora® range



FortiFlora®

FortiFlora® is a complementary pet food containing the probiotic SF68 for dogs and cats of all ages to help support intestinal health and balance.



FortiFlora® PLUS

FortiFlora® PLUS pairs the probiotic SF68* with the prebiotic psyllium for synbiotic action to help maintain a healthy gut microbiome and long-term pet health.



*Enterococcus faecium SF68 NCIMB 10415 (4b1705)

Recommend FortiFlora® for GI issues, to enhance the body's natural defenses, during stressful situations, with antibiotic use, with diet changes and to help reduce loose stools. Additionally, **FortiFlora® PLUS** can help with GI transit, defecation issues and mild/moderate cases of constipation.

PROOF OF EFFICACY



Supplementation with **FORTIFLORA®** (*Enterococcus faecium* SF68) significantly reduced the days with abnormal stools in shelter dogs with non-specific diarrhoea that were administered metronidazole.³

N = 33 dogs. Duration: 7 days. Randomized study.



Supplementation with **FORTIFLORA®** (*Enterococcus faecium* SF68) significantly reduced the number of cats with abnormal faecal scores (69.2% in cats with antibiotic +SF68 vs 85.7% in cats with only antibiotic) when administering amoxicillin-clavulanate.⁴

N = 34 cats. Duration: 14 days. Randomized study.



Supplementation with **FORTIFLORA® PLUS** (*Enterococcus faecium* SF68 + psyllium) increased microbial diversity and significantly reduced fecal events during a naturally-occurring stress.⁵

N = 40 dogs. Duration: 14 days. Randomized study.



Supplementation with **FORTIFLORA® PLUS** (*Enterococcus faecium* SF68 + psyllium) resulted in clinical resolution in 100% of cats experiencing amoxicillin-clavulanate-associated diarrhoea within five days. In contrast, only 75% of cats in the control group (without FortiFlora® Plus) achieved clinical resolution.⁶

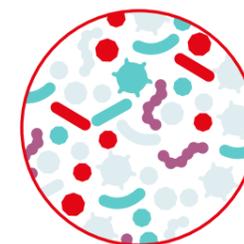
N = 16 cats. Duration: 5 days. Randomized study.

3. Fenimore A, Martin L, Lappin MR (2017). Evaluation of metronidazole with and without Enterococcus faecium SF68 in shelter dogs with diarrhea. Topics in Companion Animal Medicine. 32(3): 100-103. DOI: 10.1053/j.tcam.2017.11.001
 4. Torres-Henderson C, Summers S, Suchodolski J, et al. (2017). Effect of Enterococcus faecium strain SF68 on gastrointestinal signs and fecal microbiome in cats administered amoxicillin-clavulanate. Topics in Companion Animal Medicine. 32(3): 104-108. DOI: 10.1053/j.tcam.2017.11.002
 5. Nestlé Purina, Internal data 2020.
 6. Kiene JA, Dobesh K, Lappin M (2020). Use of a Synbiotic for Treating Antibiotic-Induced Diarrhea in Cats. ACVIM Forum 2020 Proceedings.

LEADERSHIP IN THE MICROBIOME

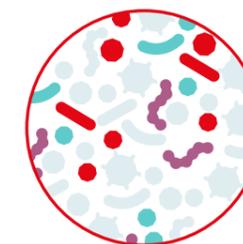
As part of Nestlé, Purina draws on the unequalled culture collection and decades of microbiome research to evaluate potential probiotic strains of value to veterinary medicine and pet health.

In a study¹ of 25 commercially available probiotics marked for use in animals,



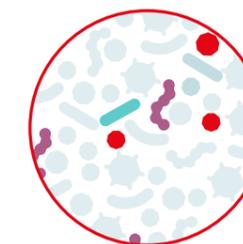
Only 15 of 25

had the bacteria numbers claimed on the label



Only 4 of 15

that had specific label claims met or exceeded them



Only 2 of 25

had an acceptable label properly describing the contents

Problems identified with the probiotics included:

Inadequate description of contents

Low bacteria numbers compared to label and claims

Misleading label

Misspelled contents on label

Purina was the **first to offer a shelf-stable probiotic proven to promote a healthy immune system and provide dietary support for dogs or cats with loose stools**. This probiotic, *E. faecium* SF68, remains the most studied probiotic in the veterinary field based on publications to date.

In addition, Purina has **advanced publications demonstrating the safety and positive impact of selected prebiotics such as inulin** in healthy, diseased or dysbiotic animals.

Meet the Purina Institute At the Purina Institute, we believe science is more powerful when it's shared. That's why we're on a mission to unlock the power of nutrition to help pets live better, longer lives. A global professional organization, the Purina Institute shares Purina's leading-edge research, as well as evidence-based information from the wider scientific community, in an accessible, actionable way so veterinary professionals are empowered to put nutrition at the forefront of pet health discussions to further improve and extend the healthy lives of pets through nutrition.

Sign up for scientific communications from Purina Institute
PurinaInstitute.com/sign-up



1. Cunningham, M., Azcarate-Peril M. A., Barnard, A., Benoit, V., Grimaldi, R., Guyonnet, D., Gibson, G.R. (2021). Shaping the future of probiotics and prebiotics. Trends in Microbiology, 29(8), 667-685. doi: 10.1016/j.tim.2021.01.003.



PURINA®
PRO PLAN®
VETERINARY DIETS

Discover PRO PLAN® Veterinary Diets and related products
for nutritional support of digestive health.



SCAN THE CODE TO DISCOVER MORE

Please contact your PURINA® representative or visit
<https://www.vet-center.eu/eu> for more information