

Research on the power of the gut microbiome for healing via FMT





Review

The Mechanism of Important Components in Canine Fecal Microbiota Transplantation

Kerong Li, Jie Yang, Xiaoxiao Zhou, Huan Wang, Yuxin Ren, Yunchuan Huang, Haifeng Liu, Zhijun Zhong , Guangneng Peng, Chengli Zheng, Ziyao Zhou

In conclusion, it is generally believed that the main components that make FMT effective are commensal bacteria in feces. Nonetheless, other components in feces, such as viruses, fungi, immunoglobulin, and bacterial metabolites, also play important roles in canine FMT. It is important to preserve these components as much as possible in the preparation of fecal material.



ORIGINAL RESEARCH article Front. Vet. Sci., 16 April 2020 Sec. Veterinary Infectious Diseases https://doi.org/10.3389/lvets.2020.00192

Fecal Microbial and Metabolic Profiles in Dogs With Acute Diarrhea Receiving Either Fecal Microbiota Transplantation or Oral Metronidazole

Jennifer Chaitman, Anna-Lena Ziese, Rachel Pilla, Yasushi Minamoto, Amanda B. Blake, Blake C. Guard, Anitha Isaiah, Jonathan A. Lidbury, Jörg M. Steiner, Stefan Unterer, Jan S. Suchodolski

Despite a similar improvement in fecal scores, dogs treated with MET still had altered microbial and metabolic profiles at day 28 compared to dogs treated with FMT or healthy dogs. This would suggest that use of metronidazole has a negative impact on the fecal microbiota in dogs with acute diarrhea, similar as previously reported in healthy dogs.



The Role of the Canine Gut Microbiome and Metabolome in Health and Gastrointestinal Disease

Rachel Pilla and Jan S. Suchodolski



In conclusion, the composition of the gut microbiome in dogs is correlated with overall health. The gut microbiome is stable in adult healthy dogs, but age, diet, and many other environmental factors may influence the maintenance of a healthy microbiome. The alterations found in diseased animals however are marked, and when they impact the transcriptome, proteome, or metabolome they are termed dysbiosis. Dysbiosis should always be considered when Gl tract pathologies are present.

Journal of Veterinary Internal Medicine

Standard Article 🖞 Open Access 🕼 🚱

Fecal microbiota transplantation in puppies with canine parvovirus infection

Giorgio Q. Pereira, Lucas A. Gomes, Iago S. Santos, Alice F. Alfieri, J. S. Weese, Marcio C. Costa

Fecal microbiota transplantation was associated with more rapid clinical recovery and decreased time of hospitalization in survivor puppies with acute hemorrhagic diarrhea caused by CPV.