

What's Going on in Your Dog's Belly?

Understanding your pet's digestive health is key to optimal health. Remember these telltale symptoms that your pet's gut may be in trouble, plus tips on how to keep it well-balanced.

Reviewed by Dr. Arielle Walton

STORY AT-A-GLANCE

- The gut microbiome is crucial to your dog's health, influencing digestion, immunity, and mood. Imbalances can cause tummy issues, itching, and even behavioral changes you may not expect
- Balanced gut bacteria help dogs absorb nutrients, fight disease, reduce inflammation, and regulate stress. A thriving microbiome boosts both physical and emotional well-being in noticeable ways
- Common disruptors like poor diet, medications, stress, and toxins can harm your dog's gut. Even routine habits and environmental exposures may quietly contribute to digestive imbalance
- Support gut health naturally by testing for imbalances, replenishing with probiotics and whole foods, eliminating toxins, and maintaining long-term with a clean, protein-rich diet
- Consult your vet when symptoms persist, and consider raising gut-specific questions to uncover hidden problems

Gut health is one of the most important — yet often overlooked — aspects of your dog's overall well-being. Like yours, your pet's gut is a thriving community with trillions of bacteria, fungi, and viruses — working together to keep your dog healthy. However, balance is everything; if things get out of order, problems start popping up. These can manifest as tummy troubles, skin issues, or even changes in behavior.

In this article, you'll learn what the gut microbiome is, why it matters so much, and the simple, natural steps you can take to support it. Whether you're a new pet owner or have one or a few dogs at home, these tips will help you build a foundation for a healthier, happier pup.

What Is the Gut Microbiome?

The gut microbiome refers to an ecosystem of microorganisms, bacteria, fungi, viruses, and protozoa that reside in your dog's digestive tract, primarily in the intestines. Although invisible to the naked eye, this microbial environment functions like a biological control center, regulating digestion, modulating immune responses, and contributing to neurological and emotional health.¹

Each dog possesses a unique microbiome shaped by factors such as breed, age, genetics, environment, diet, and medication history. When balanced, this internal ecosystem supports health and resilience. However, imbalances — known as dysbiosis — can impair critical bodily functions and result in various clinical symptoms.²

The Health Benefits of a Balanced Gut Microbiome

Since it affects every aspect of your dog's health, having a well-regulated gut microbiome provides many vital advantages for their physiological and behavioral health, such as:³

- **Better nutrient absorption** — Beneficial bacteria aid in breaking down food and releasing vitamins and minerals essential for metabolic processes.
- **Strengthened immune function** — Around 70% to 80% of your dog's immune system resides in the gut.⁴ A robust microbiome enables the body to mount appropriate immune responses and defend against pathogens.
- **Reduced inflammation** — Good microbes help maintain intestinal lining integrity and lower inflammation,⁵ which is linked to conditions such as allergies and joint pain.
- **Better emotional health** — The gut-brain connection is increasingly recognized in veterinary science. A stable microbiome positively influences mood, behavior, and stress responses.

When dysbiosis occurs, unpleasant health effects may arise, and you may notice symptoms such as:⁶

- Gastrointestinal discomfort, such as diarrhea, gas, and constipation
- Skin issues, such as persistent itching
- Bad breath or excessive licking
- Poor mental health

What Factors Can Harm Your Dog's Gut?

Certain factors can put a strain on your pet's digestive health and their gut microbiome. Some of these are found all around your pet's environment, but these are also elements brought on by modern-day "conveniences."^{7,8}

1. **Poor diet** — Feeding the same dry kibble daily, especially filled with fillers, preservatives, or byproducts, can reduce good bacteria and encourage harmful microbes to take over. High-carb foods are tough on the gut.
2. **Medications** — Antibiotics can be life-saving, but they wipe out good bacteria along with the bad. Other meds like steroids and pain relievers (NSAIDs) can also mess with gut balance.
3. **Stress** — Dogs feel stress from loud noises, changes in routine, or being left alone. Stress changes the gut environment, making survival harder for good bacteria.
4. **Environmental toxins** — Pesticides, herbicides, and even cleaning products can harm your dog's gut flora. Contaminated water is another often-overlooked source.
5. **Aging and chronic illness** — As dogs age, they naturally lose some beneficial bacteria. Health issues like inflammatory bowel disease (IBD) or allergies can further damage gut health, making recovery harder.

4 Steps to Naturally Restore and Support Your Dog's Gut

Fortunately, natural interventions are available to help rebalance your dog's microbiome and promote long-term wellness. The following four-step strategy will give a clear and practical path to improved gut health:⁹

1. **Test to identify the root cause of the imbalance** — Start by learning what's going on inside your dog's gut. A microbiome test (done using a stool sample) gives you a report on which bacteria are present and in what quantities. You'll also know what your dog might be missing. Consider this step if your dog has frequent infections, skin problems, or stomach issues.
2. **Introduce beneficial bacteria and supportive nutrients** — Replenishing the beneficial microbes in your pet's gut and nourishing them through appropriate dietary support will help keep their microbiome healthy.
 - **Prebiotics** are fibers that feed good bacteria found in chicory root, mushrooms, dandelion greens, or garlic.
 - **Probiotics** — Probiotics introduce beneficial bacteria directly into the gut. While many commercial probiotics may contain strains not native to dogs, one yeast-based strain, *Saccharomyces boulardii*, has proven especially safe and effective.
 - **Whole foods** — Feeding fresh, fibrous vegetables helps nourish your dog's gut bacteria while providing antioxidants and anti-inflammatory compounds. Carrots, broccoli, and leafy greens are good choices; they improve digestion and offer antioxidants.
 - **Get outdoors** — Time spent outdoors exposes your dog to beneficial microbes in soil, water, and even other animals. Encourage regular outdoor activities like walking in the woods, digging in the yard, or going on "sniffaris."
3. **Eliminate harmful bacteria and toxins** — Sometimes, you must remove what's hurting your pet's gut. Avoid giving your pets unnecessary antibiotics and chemical-filled foods.

Another strategy is to do bacteriophage therapy. Bacteriophages are naturally occurring microorganisms that eradicate harmful bacteria like *E. coli*. You can also ask your vet about fecal microbiota transplant, where fecal material from a healthy donor animal is introduced into the GI tract of a sick patient.

4. **Rebalance and maintain long-term gut health** — Ongoing dietary and lifestyle adjustments are key to preserving that balance. Feed your pet a high-protein, low-carb diet with fiber for smooth digestion. If needed, do an elimination diet to determine which foods are causing your pet's symptoms.

When to Consult Your Veterinarian

While many gut health strategies can be implemented at home, it is important to involve your veterinarian when needed. If you frequently notice discomfort in your pet, consider raising these questions:

- Are my dog's current symptoms connected to gut health?
- Is a microbiome test appropriate at this time?
- What diet would best support my dog's digestive and immune systems?
- Can we use natural alternatives before turning to medications?

An integrative vet will help you develop a comprehensive plan that integrates dietary changes, supplements, and lifestyle modifications tailored to your dog's needs.

A Well-Balanced Gut Is the Foundation of Optimal Canine Health

Nearly every aspect of your dog’s health is influenced by their gut microbiome. By understanding how this internal ecosystem functions and how to support it naturally, you can take meaningful steps toward improving your dog’s quality of life. With thoughtful care and consistent attention to gut health, you can help your dog live longer and thrive.

Sources and References

^{1,2,7} [Animal Wellness Magazine, April 29, 2025](#)

^{3,6,8} [Thrive Dog Kitchen, February 24, 2023](#)

⁴ [Union Lake Veterinary Hospital and Pet Services, January 4, 2023](#)

⁵ [Microorganisms. 2023 Sep 29;11\(10\):2452](#)

⁹ [Animal Biome, March 21, 2023](#)
