10 Gut-Wreckers That Can Make Your Pet Feel Miserable

These everyday factors are sometimes unavoidable, but there's a solution that can help straighten things out and prevent more serious issues like obesity, diabetes and liver disease from developing. But there's one caveat. The human version of this doesn't work for pets.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Many types of physical and emotional stressors can throw off the good-to-bad bacteria balance in your pet's GI tract; the right balance is necessary for optimal digestion and immune system function
- A gut bacterial imbalance can trigger digestive and nutritional issues, can lead to dysbiosis and can ultimately create a host of other health problems
- Another major influence on your pet's gut bacteria are veterinary drugs, specifically antibiotics and steroids
- Studies show the earlier in life an animal receives antibiotics, the greater the risk of obesity, diabetes and liver disease
- Ensure your pet has a healthy microbiome through a nutritionally balanced, species-appropriate diet including fermented vegetables, and a high-quality probiotic supplement

Editor's Note: This article is a reprint. It was originally published April 29, 2018.

Probiotics are the beneficial bacteria that dogs and cats need to not only maintain healthy levels of friendly bacteria in the gut, but also to discourage potentially pathogenic bacteria from overtaking the gastrointestinal (GI) tract. Your pet's digestive tract is the largest immune organ in his body, and home to an impressively large population of bacteria. The digestive tracts of canines and felines are specially designed to handle a tremendous bacterial load from the food they consume.

Your pet's GI tract must maintain a healthy level of good bacteria in order to support the immune system. If populations of bad bacteria grow unchecked, your dog or cat will develop digestive issues and at some point other health problems as well. Studies show animals without colonies of friendly bacteria in their gut, or with a poor balance of good-to-bad gut bacteria, are at high risk of developing disease.

Factors That Can Disrupt Gut Bacterial Balance

The bacteria in your pet's GI tract can be influenced by a number of factors — everything from emotional stress to an unhealthy lifestyle. Stressors that can throw your dog's or cat's gut bacteria out of whack include:

- Sudden change in diet
- Vaccinations

- Poor-quality or biologically inappropriate diet
- Surgery
- Pica (eating nonfood items such as feces, sticks, rocks, etc.)
- GI disease (e.g., inflammatory bowel disease)
- Drinking contaminated water
- Travel or boarding
- Ingestion of fertilizers, insecticides or pesticides
- Emotional stress (often caused by a change in routine or environment)

When physical or emotional stress upsets the bacterial balance in your pet's gut, it can trigger a cascade of nutritional problems, including poor nutrient absorption and intermittent or chronic diarrhea. It also opens the door to leaky gut syndrome (dysbiosis), which means partially digested amino acids and allergens are able to enter the bloodstream. This in turn can create a host of other health problems, from allergies to autoimmune disease.

Antibiotics and Other Drugs Wreak Havoc on the Microbiome

Another tremendously significant factor in upsetting gut bacterial balance in pets is the overuse of antibiotics and corticosteroids in veterinary medicine. These two drugs, which are among the most frequently prescribed medications in traditional veterinary practices, can decimate the friendly bacteria in your pet's gut.

Laura Cox, Ph.D., of New York University's Langone Medical Center, has studied the impact of early-life antibiotic therapy on body composition.

According to Cox, several researchers have proved that altered microbiota (AKA the microbiome — the collection of microorganisms that live in and on the body), which can result from antibiotic use, can cause obesity through processes that create inflammation or change metabolic activity in the gut. These processes can result not only in obesity, but also diabetes and fatty liver disease.[1]

According to Cox, research suggests that antibiotics disrupt early development of microbiota. Studies involving production animals that received subtherapeutic (low-dose) levels of antibiotics to promote growth show that the earlier in life the antibiotics are given, the more profound the effect.

Similar studies conducted with mice have produced an increase in fat mass. Cox's studies have shown that exposure to antibiotics in early infancy changes the composition of the microbiota, leaving it more vulnerable to disruption. In the mice studies, the animals not only gained weight, they also accumulated more visceral and liver fat.

These results show a clear link between antibiotics and changes in metabolic pathways, and further research shows that a calorically unrestricted high-fat diet exacerbates the problem, and also that changes in the metabolic pathways remain throughout life.

In addition to demonstrating that antibiotics early in life cause alterations in microbiota that result in changes in body composition, Cox has also proven that the microbes alone can trigger fat accumulation. In fact, germ-free mice that were administered microbiota from antibiotic-treated mice gained more weight and fat than mice that received microbiota from control mice.[2]

In my experience, many veterinarians are entirely too quick to prescribe antibiotics for health issues that can (and should) be treated more successfully by other means.

Unless your dog or cat has a confirmed bacterial infection (not a "probable" bacterial infection) and if necessary, your vet has performed culture and sensitivity testing to determine which drug will be most effective, it's bad medicine to put your pet on antibiotic therapy unless there is no other means of resolving the infection.

Selecting a High-Quality Pet Probiotic

When researching supplements for your pet, avoid human probiotics, and probiotics added to commercial pet food. Probiotic formulas used by humans were developed specifically to fortify the bacterial species found in the human GI tract. Pets have specific strains of bacteria unique to them, so they do best with a customized probiotic.

A few strains have been shown to benefit both people and pets, and emerging research suggests sporebiotics may also be beneficial for animals, but one thing that's important to evaluate for all species taking probiotics is viability.

The bacteria in a probiotic must be live and able to reproduce in order for it to be beneficial. That's why commercial pet foods containing probiotics aren't worth the money. Tests on dog foods claiming to contain probiotic microorganisms showed the manufacturing process kills too many of the live bacteria, rendering the probiotic effect useless by the time the food is packaged and shipped. When selecting a **high-quality pet probiotic**, look for the following five important characteristics:

1. The correct strains of bacteria beneficial for pets, not people
2. Easy to give to your dog or cat
3. The ability to survive the acidic environment of your pet's stomach
4. Enough live organisms to colonize the intestines
5. Product stability under normal storage conditions

And remember that your dog or cat should receive the majority of his nutrients from a fresh, whole-food diet that is nutritionally balanced and species-appropriate. Also consider adding some fermented veggies to your pet's diet, since they not only provide a wider variety of beneficial bacteria than probiotic supplements, but also far more of them.

Another very beneficial supplement to promote healthy digestion in your dog or cat are digestive enzymes. High-quality digestive enzymes for pets should be sourced from animals (not plants or fungi), and should ideally contain some or all of these ingredients: betaine HCl, ox bile extract, bromelain, papain, pancreatin, protease, amylase and lipase.

Sources and References

[1] dvm360 October 1, 2014

[2] Cell, Vol 158, Iss 4, p705-721, August 14, 2014