

# LEAKY GUT WORKBOOK



THE GUIDE TO TREATING THE SOURCE OF ALLERGIES, JOINT PAIN, DIGESTIVE DISEASES AND MORE.

dogsnaturally

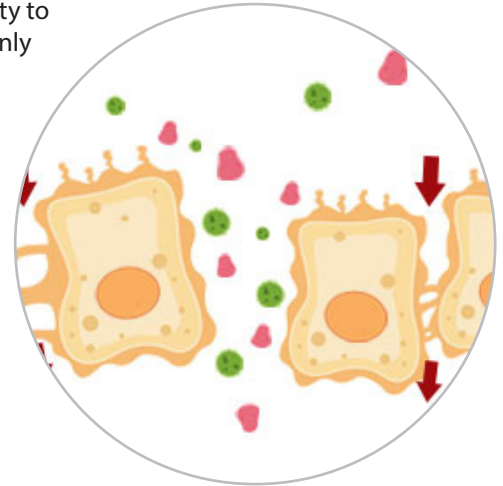
# WHAT IS LEAKY GUT?

Leaky Gut Syndrome is an increasingly widespread condition in both cats and dogs.

Even though the issue is in the gut, this little known syndrome can lead to skin issues and many other common inflammatory diseases.

The lining of the gut, called the mucosal lining, becomes inflamed and its ability to absorb nutrients is impaired. The mucosa contains small holes that normally only allow small, digested food particles to pass. The cells lining the intestinal wall are connected tightly and the tiny microvilli at the tips of the cells absorb and transport properly digested nutrients through the junctions and into the bloodstream.

Leaky Gut occurs when these junctions open, allowing unwanted molecules (such as undigested food, bacteria and toxins) to flow directly into the bloodstream.



# WHY LEAKY GUT MIMICS OTHER DISEASES

When undigested food and toxins enter the bloodstream, the immune system spots the foreign protein matter and goes into battle mode to fight the invaders. The liver tries to remove the toxins from the body but because the attack is constant, it can't keep up and the undigested protein and toxins are soon absorbed into the body's tissues - causing inflammation throughout the body.

This inflammation is increased every time your dog eats and, over time, the inflammation causes the intestinal holes to become bigger, allowing even more undigested food to enter the body.

In time, the foreign proteins can start to look like the body's own tissue proteins. This is called molecular mimicry and can lead to the body creating antibodies against itself, which is the cause of autoimmunity.

In dogs, the most commonly found autoimmune diseases include diseases of the skin, thyroid, joints, heart, spinal cord, eyes or brain, inflammatory bowel disease, collapsing trachea, laryngeal paralysis, liver, gallbladder and pancreatic disorders. Behavior problems can also result and, if the autoimmune disease is left unchecked, the chronic inflammation could lead to some forms of cancer.

# HOW DIET CAUSES LEAKY GUT

The main dietary contributors to Leaky Gut are highly processed, grain-based foods and food additives (such as preservatives and coloring).

The ingredients that can most often damage your dog's intestinal lining are the proteins found in non-sprouted grains, sugar, genetically modified organisms (GMOs) and conventional dairy products. Even if you don't see them listed on the packaging as ingredients, most food animals are fed these foods so they will be in your dog's food too.

Unsprouted grains in dog foods contain large amounts of lectins. Lectins are sugar-binding proteins that attach to the intestinal lining and damage the gut, causing inflammation. Wheat, rice, spelt and soy commonly contain lectins, although they can be found in many grains and plants.

Carbohydrates with a higher glycemic load can also cause Leaky Gut. They are the preferred food source of many pathogenic bacteria. Over time, dogs eating a diet high in soluble carbohydrate will suffer from unbalanced bacteria in the gut (dysbiosis). Dysbiosis is one of the leading causes of Leaky Gut.

# OTHER CAUSES OF LEAKY GUT

## 1. VACCINATION

When a body is forced to respond to a vaccine that it has already established antibodies to, it creates absolute turmoil in the immune system and causes associated diseases including but not limited to Leaky Gut.

## 2. STEROIDS

Steroids inhibit several important GI processes and also suppress the immune system. This can lead to the overgrowth of pathogens causing more life threatening disease to occur. Steroids can be called “anti-inflammatory” or “allergy” injections or medication, so be sure to ask your veterinarian exactly what he or she is giving your animal. NSAIDS (non-steroidal anti-inflammatories) can also cause dysbiosis.

## 3. CHLORINATED WATER

## 4. DEWORMERS, FLEA AND TICK TREATMENTS

Dewormers also causes dysbiosis - flea and tick treatments are in fact pesticides and are extremely toxic with many severe side effects

## 5. ANTIBIOTICS

Antibiotics are the most common cause of dysbiosis.

## 6. STRESS

Stress weakens the immune system and its ability to fight off foreign invaders like bad bacteria and viruses, leading to inflammation and leaky gut.

# DOES YOUR DOG HAVE LEAKY GUT?



## DIGESTIVE DISEASE

Inflammatory bowel disease  
Bladder disease  
Liver, gallbladder and pancreas  
Nutritional deficiencies



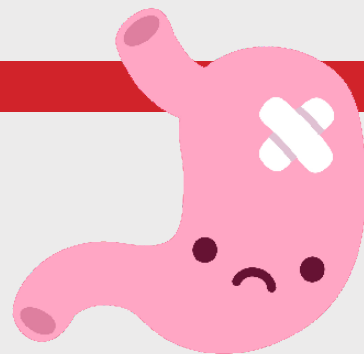
## BEHAVIOR ISSUES

Thyroid disease  
Separation anxiety  
Sudden rage  
Self mutilation



## OTHER

Heart disease  
Collapsing trachea  
Laryngeal paralysis  
Some cancers



## JOINT DISEASE

Arthritis  
Strains and sprains  
Lameness



## ALLERGY SYMPTOMS

Skin disease  
Yeast  
Itching



## CHRONIC STRESS

Weakens the immune system  
Stresses the digestive tract



## ANTIBIOTICS

The most common cause  
of leaky gut  
Destroy good bacteria



## VACCINATION

Creates chronic inflammation



## DIET

Grains, sugar and dairy  
Processed and GMO foods  
Preservatives and coloring



## TOXINS AND DRUGS

Steroids  
NSAIDs  
Dewormers, flea and tick meds

# REPAIRING LEAKY GUT

The good news is that Leaky Gut can be repaired. This takes a three-step approach that includes:



REMOVING THE CAUSE



REBALANCING THE BODY



REPLENISHING THE GUT LINING

Let's take a look at these three steps in more detail.



# REMOVE

This first step is critical to prevent further damage to the gut.

1. Stop feeding processed foods. Feed fresh, preferably raw foods instead.
2. Remove all grains, carbohydrates, sugars and dairy from the diet.
3. Stop routinely vaccinating and replace it with titer testing.
4. Stop all flea and parasite products. These are pesticides and will further damage your dog's immune system. Use natural alternatives instead.
5. Stop all drugs when you can. A good holistic or homeopathic veterinarian can help you with this.
6. Stop your dog's source of stress where you can. Take him to day care if he's home alone or get him a companion.





# REPLENISH WITH FOODS

Once you've removed the cause of Leaky Gut, it's time to start repairing the damage. Here are the foods your dog will need to heal:

## 1. KEFIR

Make sure the kefir is from goat milk or coconut water, not cow milk. This is a source of probiotics.  
Give 2 Tbsp per meal for the average sized dog

## 2. FERMENTED FOODS

These can deliver a huge amount of probiotics and mimic the type of vegetation a wild dog would eat.  
Start with just a pinch and work up slowly to one to three tsp a day for every 20 lbs of body weight.

## 3. BONE BROTH

Bone broth contains two important amino acids. Proline tightens and restores cell structure and Glycine supports the production of collagen, which will hold the gut lining together. Bone broth also contains its own collagen to help repair the gut lining. (To learn how to make your own bone broth:  
<http://dogsnaturallymagazine.com/how-to-make-bone-broth-for-your-dog>)

## 4. COCONUT OIL

Give your dog 1 tsp per 10 lbs body weight but start with a quarter of the recommended amount and increase gradually over a two to three week period.



# REPLENISH WITH SUPPLEMENTS

These supplements will add to the healing power of the foods:

## 1. NAG (N-ACETYL GLOCOSAMINE)

NAG is a component of healthy connective tissue and mucous membranes. It also supports healthy digestion and is indicated for Leaky Gut management.

Dose: 250 to 1,500 mg per day

## 2. L-GLUTAMINE

L-Glutamine is an amino acid that is essential to the healing of Leaky Gut. It supports the strength of the mucosal lining and the proper functioning of the gastrointestinal tract. It also protects against irritants that can cause inflammation of the cells.

Dose: 1 mg per lb daily

## 3. DIGESTIVE ENZYMES

Digestive enzymes will ensure food is digested before it slips through the damaged cells walls, limiting the immune reaction. Buy a product manufactured for animals and follow the label instructions.

## 4. ALOE VERA

Aloe will soothe and heal the irritated gastrointestinal lining.

Dose: 0.5 to 1.5 ml per kg daily



# REPLENISH WITH SUPPLEMENTS

## 5. QUERCETIN

This will seal the gut and support the creation of tight junction proteins. It will also inhibit the release of histamine.

Dose: 5 to 10mg per lb daily.

## 6. SLIPPERY ELM

Slippery elm soothes the mucous membranes of the digestive tract and reduces inflammation.

Dose: 50 to 400 mg per kg daily

## 7. MARSHMALLOW ROOT

Marshmallow root has a similar effect to slippery elm but can also induce phagocytosis, which is the process where immune cells envelop and destroy bacteria, dead cell tissue and food particles.

Dose: 25 to 300 mg per kg daily

## 8. MSM (METHYLSULFONYLMETHANE)

This is a natural form of sulfur, which is important to the production and maintenance of connective tissue.

Dose:

Up to 30 lbs : up to 500 mg daily

31 to 59 lbs : up to 700 mg daily

60 lbs and over: up to 1000 mg daily



# REPLENISH WITH SUPPLEMENTS

## 9. TURMERIC

Turmeric (with its constituent curcumin) is a potent anti-inflammatory, liver protector, antibacterial and anti-fungal agent that's also important for wound healing. It can even induce apoptosis in cancer cells and inhibit their growth.

Dose: 50 to 600 mg per kg daily

## 10. GINGER ROOT

Ginger stimulates digestive enzyme activity and increases the production and secretion of bile.

Dose: 15 to 200 mg per kg daily

## 11. LICORICE ROOT

Use the form of licorice root called DGL - it's a safer form with the glycyrrhizin removed. Licorice root improves circulation in the gastric mucosa, helps with the secretion of a protective layer and supports the growth of new mucosal cells.

Dose: 25 to 300 mg per kg daily. Do not exceed 4 gm daily



# RESTORE

This final step is necessary to re-establish the balance between the healthy and pathogenic bacteria in the gut. This can be started with kefir and fermented foods, but you'll also want to add:

## 1. PROBIOTICS

Probiotics are the healthy bacteria that help your dog to digest nutrients and support his immune system. It's important to buy a probiotic with as many strains as possible. You'll also want to find one with at least 10 billion CFU (colony forming units). You'll also want to be sure the probiotic isn't derived from a dairy or other allergen based source.

Dose: Follow the label instructions but break the dose into two and give at mealtimes

## 2. PREBIOTICS

If you give your dog probiotics without prebiotics, the probiotics will just go right through his system. Prebiotics are the food the probiotics, or healthy bacteria, need to replicate and thrive. The best source of prebiotic is Larch Arabino-galactan. This is a larch tree extract and it supports colon health. It's also often used as an effective adjunct to cancer treatments due to its ability to stimulate the immune system and block metastasis of tumor cells.

Dose:

Under 25 lbs: up to 1000 mg daily

25 to 50 lbs: up to 2000 mg daily

51 to 100 lbs: up to 3000 mg daily

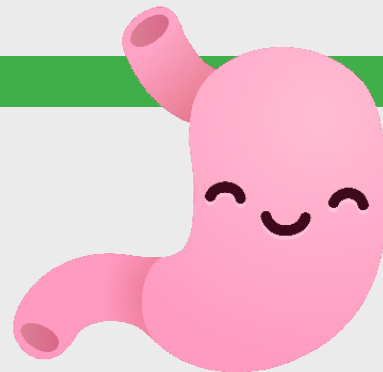
101 lbs and over: up to 4000 mg daily

# REPAIRING LEAKY GUT



## RESTORE

Make sure your dog's gut bacteria are back in balance.  
Add probiotics and prebiotics.



## REPLENISH

Add the following foods to your dog's daily diet:  
Kefir, Fermented Foods, Bone Broth and Coconut Oil.

Add the following foods to your dog's daily diet:

NAG, L-Glutamine, Aloe Vera, Licorice Root, Slippery Elm, Marshmallow Root, MSM, Turmeric, Ginger Root, Quercetin



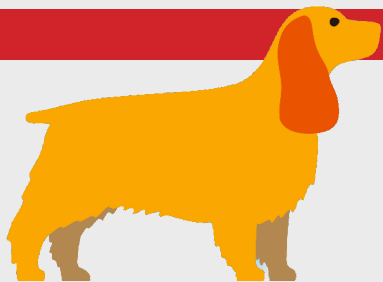
## REMOVE

Start feeding a fresh, whole food diet. Stop feeding processed foods, grains and sugars.

Discontinue routine vaccinations and start using titer testing.

Discontinue drugs and parasite control. Seek out holistic options.

Find and remove stress in your dog's daily life.





# THANK YOU

With thanks To Julie Anne Lee DCH, RCSHom  
<http://juliannelee.com>

## PLEASE NOTE:

The content in this guide is not meant to  
replace veterinary advice.