The Leaky Gut Diet Plan: What to Eat, What to Avoid

The term "leaky gut" has gained a lot of attention in recent years.

Also known as increased intestinal permeability, it's a condition in which gaps in your intestinal walls start to loosen. This allows larger substances, such as bacteria, toxins and undigested food particles, to pass across the intestinal walls into your bloodstream.

Studies have shown that increased intestinal permeability may be connected to several chronic and autoimmune diseases like type 1 diabetes and celiac disease.

This article takes a look at leaky gut syndrome and its causes. It also includes a list of foods that aid digestive health and a sample meal plan for one week.

What Is Leaky Gut Syndrome?

Leaky gut syndrome is a condition that affects your digestive system.

The digestive system consists of many organs that collectively break down food, absorb nutrients and water and remove waste products. It also acts as a barrier between your gut and bloodstream to prevent harmful substances from entering your body $(\underline{1}, \underline{2})$.

Most nutrient and water absorption occurs in your intestines. Your intestines have tight junctions, or small gaps, that allow nutrients and water to pass into your bloodstream.

How easily substances pass across the intestinal walls is known as intestinal permeability. In leaky gut syndrome, these tight junctions loosen, potentially allowing harmful substances like bacteria, toxins and undigested food particles to enter your bloodstream.

This is thought to trigger widespread inflammation and stimulate an immune reaction (3).

Yet, there is little evidence to prove that <u>leaky gut syndrome</u> is a serious problem. As a result, it's not recognized as a medical diagnosis by mainstream physicians.

On the other hand, many alternative practitioners believe leaky gut syndrome is linked to various conditions, including autoimmune diseases, migraines, autism, food sensitivities, skin conditions, brain fog and chronic fatigue.

Increased intestinal permeability exists and occurs alongside many diseases. However, it's not clear if it's a symptom or underlying cause of chronic disease ($\underline{4}$).

SUMMARYLeaky gut syndrome, or increased intestinal permeability, occurs when the tight junctions of your intestinal walls loosen. This may allow harmful substances, such as bacteria, toxins and undigested food particles, to pass into your bloodstream.

What Causes Leaky Gut Syndrome?

The exact cause of leaky gut syndrome is a mystery.

However, increased intestinal permeability is well known and occurs alongside several chronic diseases, including celiac disease and type 1 diabetes ($\underline{5}$).

Zonulin is a protein that regulates tight junctions. Research has shown that higher levels of this protein may loosen tight junctions and increase intestinal permeability ($\underline{6}, \underline{7}$).

Two factors may stimulate higher zonulin levels — bacteria and gluten $(\underline{8})$.

There is consistent evidence that <u>gluten increases intestinal permeability</u> in people with celiac disease (9, 10).

However, research in healthy adults and those with non-celiac gluten sensitivity shows mixed results. While test-tube studies have found that gluten can increase intestinal permeability, human-based studies have not had the same effect (10, 11, 12).

Aside from zonulin, other factors can also increase intestinal permeability.

Research shows that higher levels of inflammatory mediators, such as tumor necrosis factor (TNF) and interleukin 13 (IL-13), or the long-term use of non-steroidal anti-inflammatory drugs (NSAIDS), such as aspirin and ibuprofen, may increase intestinal permeability (<u>13</u>, <u>14</u>, <u>15</u>, <u>16</u>). Furthermore, low levels of healthy gut bacteria may have the same effect. This is called gut dysbiosis (<u>17</u>).

SUMMARYThe exact cause of leaky gut syndrome remains a mystery, but certain proteins like zonulin and markers of inflammation provide some clues. Other potential causes include long-term NSAID use and an imbalance of gut bacteria known as gut dysbiosis.

Foods to Eat

As leaky gut syndrome isn't an official medical diagnosis, there is no recommended treatment. Yet, you can do plenty of things to improve your digestive health.

One is to eat a diet rich in foods that aid the growth of <u>beneficial gut bacteria</u>. An unhealthy collection of gut bacteria has been linked to poor health outcomes, including chronic inflammation, cancers, heart disease and type 2 diabetes (<u>18</u>).

The following foods are great options for improving your digestive health:

• **Vegetables:** Broccoli, <u>Brussels sprouts</u>, cabbage, arugula, carrots, kale, eggplant, beetroot, Swiss chard, spinach, ginger, mushrooms and zucchini.

Roots and tubers: Potatoes, sweet potatoes, yams, carrots, squash and turnips.

- Fermented vegetables: Kimchi, sauerkraut, tempeh and miso.
- **Fruit:** Coconut, grapes, bananas, <u>blueberries</u>, raspberries, strawberries, kiwi, pineapple, oranges, mandarin, lemon, limes, passionfruit and papaya.
- **Sprouted seeds:** Chia seeds, flax seeds, sunflower seeds and more.

 \cdot Gluten-free grains: Buckwheat, amaranth, rice (brown and white), sorghum, teff and gluten-free oats.

- Healthy fats: <u>Avocado</u>, avocado oil, coconut oil and extra virgin olive oil.
- Fish: Salmon, tuna, herring and other omega-3-rich fish.
- Meats and eggs: Lean cuts of chicken, beef, lamb, turkey and eggs.
- Herbs and spices: All herbs and spices.
- **Cultured dairy products:** <u>Kefir</u>, yogurt, Greek yogurt and traditional buttermilk.
- Beverages: Bone broth, teas, coconut milk, nut milk, water and kombucha.
- Nuts: Raw nuts including peanuts, almonds and nut-based products, such as nut milks.

SUMMARYA diet that promotes digestive health should focus on fibrous vegetables, fruits, fermented vegetables, cultured dairy products, healthy fats and lean, unprocessed meats.

Foods to Avoid

Avoiding certain foods is equally important for improving your gut health.

Some foods have been shown to cause inflammation in your body, which may promote the growth of unhealthy gut bacteria linked to many chronic diseases (19).

The following list contains foods that may <u>harm healthy gut bacteria</u>, as well as some that are believed to trigger digestive symptoms, such as bloating, constipation and diarrhea:

- Wheat-based products: Bread, pasta, cereals, wheat flour, couscous, etc.
- **Gluten-containing grains:** Barley, rye, bulgur, seitan, triticale and oats.
- **Processed meats:** Cold cuts, deli meats, bacon, hot dogs, etc.
- **Baked goods:** Cakes, muffins, cookies, pies, pastries and pizza.

- Snack foods: Crackers, muesli bars, popcorn, pretzels, etc.
- Junk food: Fast foods, potato chips, sugary cereals, candy bars, etc.
- Dairy products: Milk, cheeses and ice cream.
- **Refined oils:** Canola, sunflower, soybean and safflower oils.
- Artificial sweeteners: Aspartame, sucralose and saccharin.
- **Sauces:** Salad dressings, as well as soy, teriyaki and hoisin sauce.
- **Beverages:** Alcohol, carbonated beverages and other sugary drinks.

SUMMARYAvoiding processed junk foods, alcohol, sugary beverages, refined oils and artificial sweeteners may aid the growth of healthy gut bacteria. Cutting out foods containing gluten or common stimulants of digestive symptoms may also help.

A Sample Menu for One Week

Below is a healthy one-week sample menu for improving your digestive health.

It focuses on incorporating foods that promote the growth of healthy gut bacteria while removing foods that are notorious for causing uncomfortable digestive symptoms.

Some menu items contain sauerkraut, which is a type of fermented cabbage that is easy, simple and inexpensive to prepare. You can learn how to make sauerkraut <u>here</u>.

Monday

- **Breakfast:** Blueberry, banana and Greek yogurt smoothie.
- Lunch: Mixed green salad with sliced hard-boiled eggs.
- **Dinner:** Beef and broccoli stir-fry with zucchini noodles and sauerkraut.

Tuesday

- **Breakfast:** Omelet with veggies of your choice.
- Lunch: Leftovers from Monday's dinner.
- **Dinner:** Seared salmon served with a fresh garden salad.

Wednesday

- Breakfast: Blueberry, Greek yogurt and unsweetened almond milk smoothie.
- Lunch: Homemade salmon, egg and veggie frittata.
- **Dinner:** Grilled lemon chicken salad with a side of sauerkraut.

Thursday

- **Breakfast:** Gluten-free oatmeal with one-fourth cup raspberries.
- **Lunch:** Leftovers from Wednesday's dinner.
- **Dinner:** Broiled steak with Brussels sprouts and sweet potatoes.

Friday

- **Breakfast:** Kale, pineapple and unsweetened almond milk smoothie.
- Lunch: Beet, carrot, kale, spinach and brown rice salad.
- **Dinner:** Baked chicken served with roasted carrots, beans and broccoli.

Saturday

- **Breakfast:** Coconut and papaya chia pudding one-fourth cup chia seeds, one cup unsweetened coconut milk and one-fourth cup diced papaya.
- Lunch: Chicken salad with olive oil.
- **Dinner:** Roasted tempeh with Brussels sprouts and brown rice.

Sunday

- **Breakfast:** Mushroom, spinach and zucchini frittata.
- Lunch: Sweet potato halves stuffed with spinach, turkey and fresh cranberries.
- **Dinner:** Grilled chicken wings with a side of fresh spinach and sauerkraut.

SUMMARYA healthy gut menu should be rich in fruits, vegetables and lean protein. Fermented vegetables like sauerkraut or cultured dairy products like Greek yogurt are also excellent additions, as they're a great source of healthy gut bacteria.

Other Ways to Improve Your Gut Health

Although diet is key to improving gut health, there are plenty of other steps you can take. Here are some more ways to improve your gut health:

• **Take a probiotic supplement:** <u>Probiotics</u> contain beneficial bacteria that are naturally present in fermented foods. Taking a probiotic supplement can improve gut health if you don't get enough probiotics through your diet (<u>20</u>).

• **Reduce stress:** Chronic stress has been shown to harm beneficial gut bacteria. Activities like meditation or yoga can help (21).

• Avoid smoking: Cigarette smoke is a risk factor for several bowel conditions and may increase inflammation in the digestive tract. Quitting smoking can raise healthy bacteria numbers and reduce harmful gut bacteria (22).

Sleep more: Lack of sleep can cause poor distribution of healthy gut bacteria, possibly resulting in increased intestinal permeability (23).

• **Limit alcohol intake:** Research has shown that <u>excessive alcohol intake</u> may increase intestinal permeability by interacting with certain proteins (<u>24</u>, <u>25</u>, <u>26</u>).

If you think you have leaky gut syndrome, consider getting tested for celiac disease. The two disorders can have overlapping symptoms.

Some people also find that diets like the <u>Gut and Psychology Syndrome (GAPS) diet</u> may ease leaky gut symptoms. However, this particular diet is incredibly restrictive and has no scientific studies to support its health claims.

SUMMARYAside from diet, try taking a probiotic supplement, reducing your stress levels, sleeping more, avoiding smoking and limiting alcohol intake to improve your gut health.

The Bottom Line

Leaky gut syndrome is also known as increased intestinal permeability.

It's a condition in which gaps in the intestinal walls may widen, allowing bacteria, toxins and undigested food particles to pass through the intestinal walls into your bloodstream.

However, leaky gut syndrome is not a diagnosis recognized by mainstream physicians, as there is little evidence to prove that it's a serious health problem.

Increased intestinal permeability occurs alongside chronic diseases like <u>celiac disease</u> and type 1 diabetes. However, it may be a symptom of these diseases, rather than a cause.

That said, there are plenty of steps you can take to improve your digestive health.

To combat leaky gut syndrome, eat foods that promote the growth of healthy gut bacteria, including fruits, cultured dairy products, healthy fats, lean meats and fibrous and fermented vegetables.

Avoid processed and refined junk foods.

You can also take probiotic supplements, reduce stress, limit NSAID use, avoid alcohol and get more sleep.

Supplements can also be very helpful in restoring gut health

Total Gut Restoration Supplements

www.microbiomelabs.com

https://microbiomelabs.com/register/?ref=Appwell

Mega IgG2000TM is a dairy-free, high concentration immunoglobulin (IgG) that supports mucosal immunity, maintains microbial balance, supports a healthy response to environmental toxins, and helps repair leaky gut.

MegaMucosa[™] is the first complete mucosal support supplement of its kind, formulated with key amino acids to REBUILD a healthy mucosal barrier. MegaMucosa also contains dairy-free immunoglobulins clinically shown to support a healthy immune response in the mucosa and a state-of-the-art flavobiotic clinically shown to support microbial diversity and alleviate barrier dysfunction, otherwise known as leaky gut.

MegaSporeBiotic[™] is the first 100% spore-based, broad-spectrum probiotic clinically shown to improve leaky gut by 60% in just 30 days. This unique all-spore formula effectively

<u>RECONDITIONS</u> the gut by increasing microbial diversity and encouraging the growth of key health-promoting, commensal gut bacteria. MegaSporeBioticTM boasts a 5-year shelf-life, does not require refrigeration, and maintains efficacy during antibiotic therapy.

Starting Dose

1 capsule every other day X 1 week, then

1 capsule daily X 1 week, then

2 capsules once/d

MegaPreBiotic[™] is the first Precision Prebiotic[™] supplement made up of clinically-tested, nondigestible oligosaccharides that can increase microbial diversity and selectively feed beneficial bacteria like Akkermansia muciniphila, Faecalibacterium prausnitzii, and Bifidobacteria. MegaPreBiotic[™] REINFORCES the beneficial microbial changes created by

MegaSporeBioticTM to promote a strong and diverse microbiome.

HU58TM is a high potency dose of Bacillus subtilis HU58 formulated to enhance the efficacy of MegaSporeBioticTM. HU58TM can produce over 12 targeted antibiotics in the intestines, which makes it particularly effective in balancing intestinal microflora.

RestorFloraTM is another adjunct probiotic containing Saccharomyces boulardii, Bacillus clausii, and Bacillus subtilis HU58, formulated to enhance MegaSporeBioticTM and reduce digestive symptoms associated with antibiotic therapy.

MegaMycoBalanceTM is formulated with undecylenic acid and bee propolis to support healthy yeast and fungal balance in the body.

MegaSpore for Kids[™] is a probiotic syrup designed specifically for children that supports healthy immunity and digestion.

MegaQuinone[™] is a high-dose, 100% soy-free formulation of natural vitamin K2 (MK-7) formulated for optimal bone, nerve, and heart health. This formula includes 320 mcg of vitamin K2 with vitamin K1 and chelated minerals for absorption

MyoMax[™] is a high-dose, 100% soy-free vitamin K2 (MK-7) supplement formulated for improved mitochondrial function. This formula includes 300 mcg of vitamin K2 with calcium pyruvate for enhanced ATP production

*Safe for patients taking anticoagulants like warfarin.