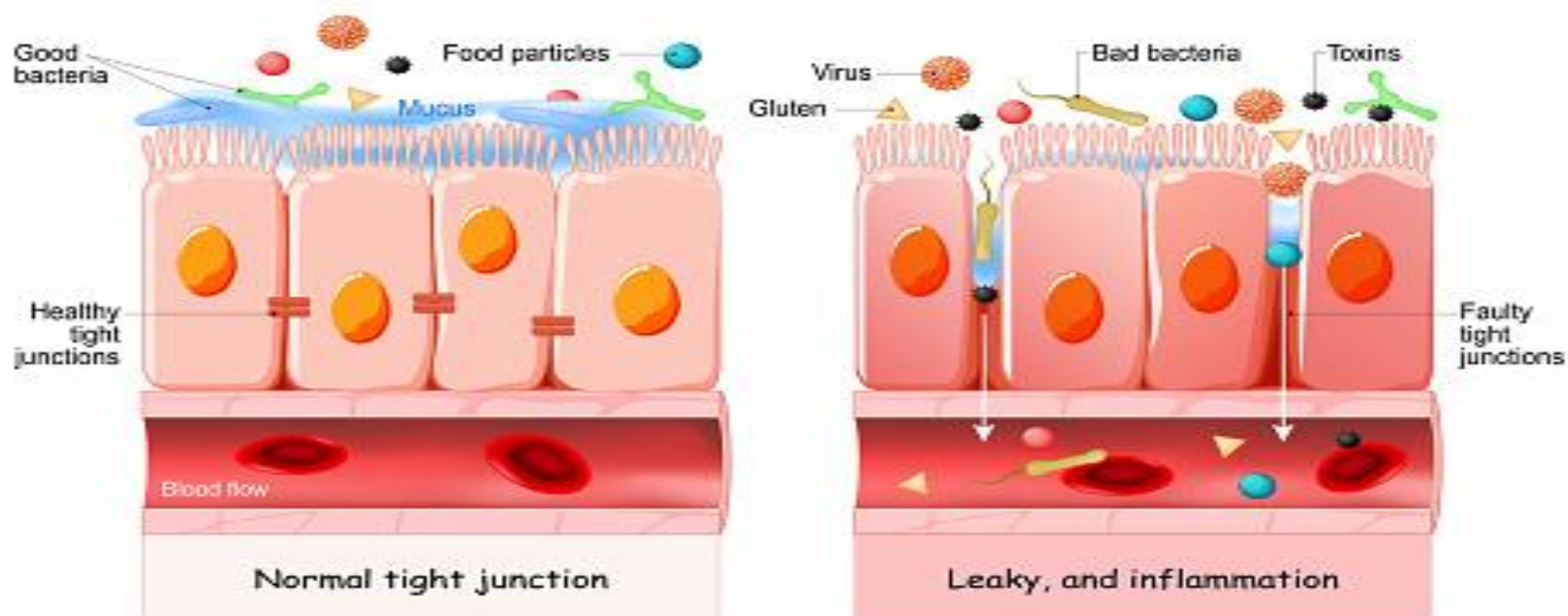


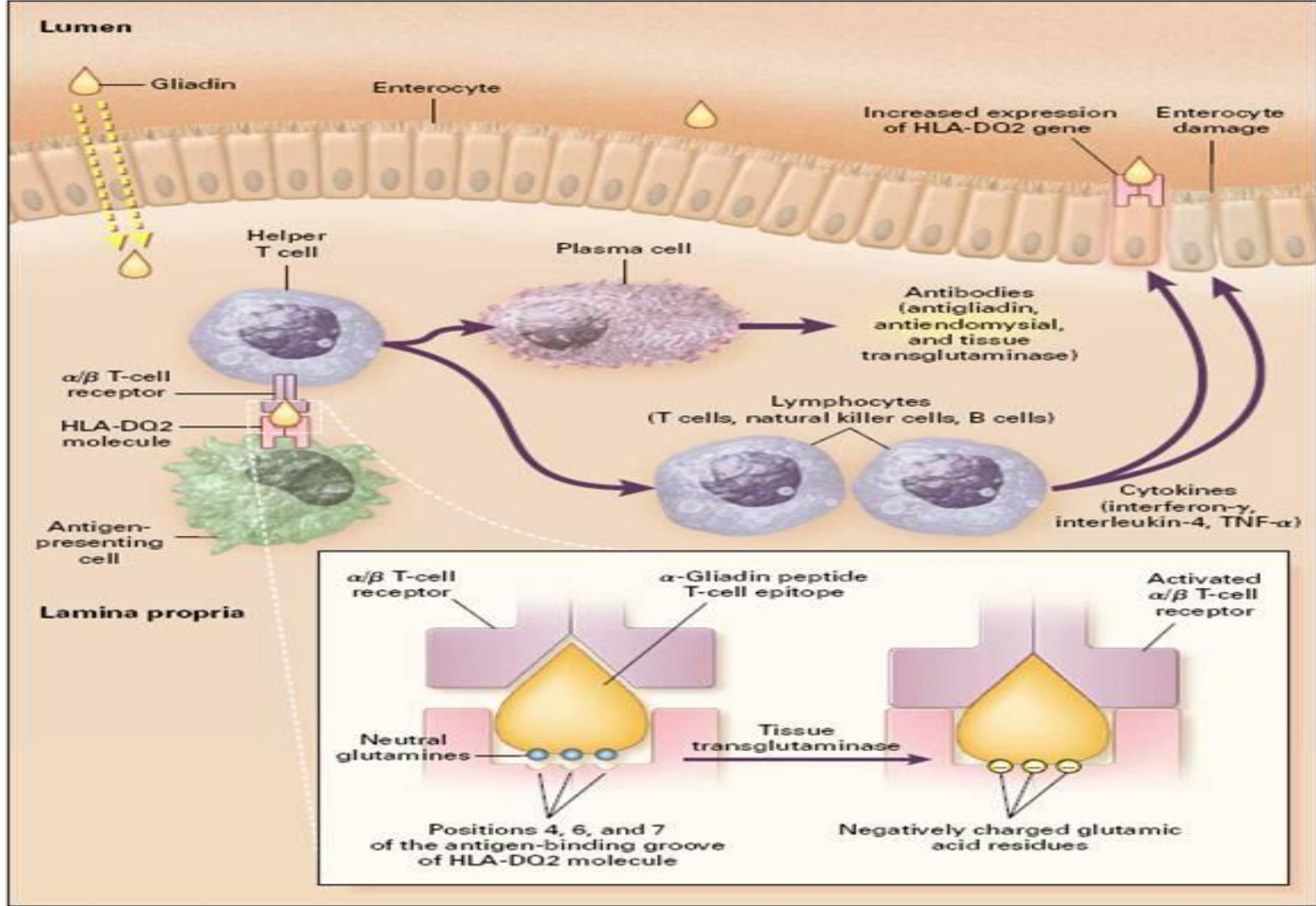
Leaky gut And Celiac Disease



By Oswald Lozano

Leaky gut syndrome





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Introduction

* It's important to note that a leaky gut is not a recognized medical diagnosis, but it is a term used to describe a condition where the gut lining is damaged and the gut barrier function is compromised. Some of the conditions that can lead to a leaky gut include celiac disease, inflammatory bowel disease, and certain infections. *

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Leaky gut, also known as increased intestinal permeability, occurs when the lining of the gut becomes damaged, allowing undigested food particles, toxins, and bacteria to leak through the gut wall and into the bloodstream. This can lead to inflammation, autoimmune disorders, and other health problems.

Both celiac disease and leaky gut can cause damage to the gut and lead to nutrient deficiencies, however, celiac disease is specifically an autoimmune disorder that is triggered by the ingestion of gluten, while leaky gut can be caused by a variety of factors, including infections, toxins, and inflammatory conditions.

The damage caused by celiac disease and leaky gut can also affect other systems in the body, such as the immune system and the neurological system, leading to different symptoms and complications.

The genetical origin of Celiac disease can be confusing.

Everyone has HLA-DQ genes. In fact, everyone inherits two copies of HLA-DQ genes—one from their mother and one from their father. There are many different types of HLA-DQ genes, including HLA-DQ2, [HLA-DQ8](#), [HLA-DQ7](#), HLA-DQ9, and [HLA-DQ1](#). It's the HLA-DQ2 and HLA-DQ8 gene variants that raise your risk of having celiac disease.

Since everyone inherits two HLA-DQ genes (one from each parent), It's possible for a person to have one variant copy of HLA-DQ2 (often written as HLA-DQ2 [heterozygous](#)), two variant copies of HLA-DQ2 (HLA-DQ2 homozygous), or two normal copies of HLA-DQ2 (HLA-DQ2 negative).²

In addition, there are at least three different versions of the HLA-DQ2 gene variants. One, known as HLA-DQ2.5, confers the highest risk for celiac disease³; about 13% of Caucasian residents of the U.S. carry this specific gene.⁴ However, people with other versions of HLA-DQ2 also are at risk for celiac disease. so If You Have the Gene, What's Your Risk?

That depends, people who have two copies of HLA-DQ2 (a very small percentage of the population) carry the highest overall risk for celiac disease. According to a proprietary risk estimate based on published research that was developed by genetic testing service MyCeliacID, celiac disease occurs in people with two copies of DQ2 at a rate around 31 times that of the general population.

People who have two copies of HLA-DQ2 also have an increased risk for at least one type of [refractory celiac disease](#) (which occurs when the [gluten-free diet](#) doesn't seem to work to control the condition), and for [enteropathy-associated T-cell lymphoma](#), a type of cancer that's associated with celiac disease.

People who have only one copy of HLA-DQ2 have about 10 times the "normal population" risk for celiac disease, according to MyCeliacID. Those who carry both HLA-DQ2 and HLA-DQ8, the other celiac disease gene, have about 14 times the "normal population" risk.

Other Factors Are Involved

Not everyone who carries HLA-DQ2 develops celiac disease—the gene is present in more than 30% of the U.S. population (mainly those with northern European genetic heritage), but only about 1% of Americans actually have celiac disease.

Researchers believe there are multiple other genes involved in determining if someone who's genetically susceptible actually develops the condition, but they haven't yet identified all the genes involved.⁵

Some environmental factors that have been linked to celiac disease include having a spring or summer birthday, a history of being born by cesarean section, and a history of several gastrointestinal infections during early childhood. The impact of these risk factors and their interactions with celiac-associated genetic variations are not known.

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9 I can provide you with detailed information on the specific damages caused by celiac disease and leaky gut, including photos and bibliographic references.

Celiac disease causes damage to the small intestine, specifically to the villi, which are responsible for absorbing nutrients. When gluten is consumed, the immune system reacts by attacking the villi, causing inflammation and damage. This can lead to malabsorption of nutrients, including vitamins and minerals, and can cause nutrient deficiencies.

Leaky gut, also known as increased intestinal permeability, occurs when the gut wall becomes damaged, allowing undigested food particles, toxins, and bacteria to leak through and into the bloodstream. This can lead to inflammation and an overactive immune response, which can contribute to autoimmune disorders and other health problems.

Both celiac disease and leaky gut can also affect other systems in the body, leading to a wide range of symptoms and complications.

I can provide you with images, diagrams and bibliographic references to support this information. I recommend checking with a health practitioner, or a specialist in the field, to get a more accurate and complete diagnosis and treatment.

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Doctors, should also be aware of the potential risks associated with using unapproved medications and should make sure to discuss these risks with their patients. They should also stay up to date on the latest research and information regarding alternative treatments and unapproved medications.

It's also important to note that some alternative treatments may be more effective for some patients and may be a viable option for those who do not respond well to FDA-approved medications. However, the safety and effectiveness of these treatments should be carefully considered and discussed with a healthcare provider before starting any new treatment regimen.

It's always recommended to consult with a healthcare professional or specialist in the field before taking any kind of medication, specially if it hasn't been approved by the FDA, and to be aware of the possible side effects and interactions with other medications.

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It's important to note that not all medications have been approved by the FDA, and some alternative treatments may not have undergone the same level of testing and evaluation as FDA-approved medications. This means that their safety and effectiveness may not be fully known.

Patients should always consult with their healthcare provider before taking any medications, including those that have not been approved by the FDA. It's also important for patients to inform their healthcare provider of all medications and supplements they

It is important to be aware of any potential conflicts of interest and to provide patients with unbiased and accurate information about their treatment options. If a healthcare provider is promoting a product or treatment that has not been approved by the FDA and is not fully disclosing the potential risks and benefits,

it would be good for the patient to seek a second opinion.

Yes, patients should always prioritize their own health and well-being, and should be active and informed participants in their own healthcare. Here are a few recommendations for patients:

Consult with a healthcare professional: Before starting any new treatment or medication, including those that have not been approved by the FDA, patients should consult with their healthcare provider to discuss the potential risks and benefits.

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Seek a second opinion: If a healthcare provider is promoting a product or treatment that has not been approved by the FDA and is not fully disclosing the potential risks and benefits, it may be beneficial for the patient to seek a second opinion from a different healthcare provider.

Stay informed: Patients should stay informed about their condition and the latest research and treatments available. They can do this by reading reputable medical journals and websites and by speaking with their healthcare provider about any new developments in the field.

Ask questions: Patients should not be afraid to ask questions and seek clarification from their healthcare provider. They should also inform their healthcare provider of all medications and supplements they are currently taking, as some interactions may occur.

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Be aware of red flags, such as claims that sound too good to be true or treatments that are only available through the provider promoting them.

It's important to remember that each patient is unique, and what works for one person may not work for another, so patients should work with their healthcare professional to find the best treatment plan for their individual needs.

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Toxins can potentially harm several organs, including the brain, and some toxins can cause long-term damage if not treated properly. To avoid exposure to toxins, it's important to be aware of the potential sources of toxins in your environment and to take steps to reduce your exposure. Here are a few things you can do to reduce your risk of exposure to toxins:

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Be informed: Learn about the potential sources of toxins in your environment, such as pesticides, heavy metals, and industrial chemicals.

Eat a healthy diet: Eating a diet rich in fruits and vegetables can help reduce your exposure to toxins.

Be selective about the products you use: Be selective about the products you use in your home, such as cleaning products, and personal care products, and try to choose products that are free from harmful chemicals.

Avoid smoking and second-hand smoke.

Limit your alcohol consumption.

Maintain a healthy lifestyle: Regular exercise, adequate sleep, and stress management can all help protect against the effects of toxins.

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If you suspect that you have been exposed to toxins, it's important to seek medical attention right away. treatment will depend on the specific toxin that you were exposed to and the symptoms that you are experiencing. Your healthcare provider will likely perform a physical examination, as well as any necessary laboratory tests to determine the cause of your symptoms.

It's important to note that some toxins may cause long-term damage to the brain and other organs, so it's essential to take steps to reduce your risk of exposure and to seek medical attention as soon as possible if you suspect that you have been exposed to toxins.

Yes, toxins that enter the body through a leaky gut can potentially cause damage to various organs, including the brain. A leaky gut occurs when the lining of the gut becomes damaged, allowing toxins, bacteria, and undigested food particles to pass through the gut wall and into the bloodstream. These substances can then travel to other parts of the body, including the brain, and cause inflammation and damage.

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To avoid toxins coming via leaky gut, it's important to address the underlying condition that is causing the leaky gut. This may include making dietary changes, taking medications, and making lifestyle changes.

Additionally, avoiding foods that are known to cause inflammation, such as gluten, can be helpful in reducing the symptoms of a leaky gut.

It's also important to be aware of the potential sources of toxins in your environment and to take steps to reduce your exposure, as mentioned before. A healthy diet, and regular exercise, adequate sleep, and stress management can all help protect against the effects of toxins.

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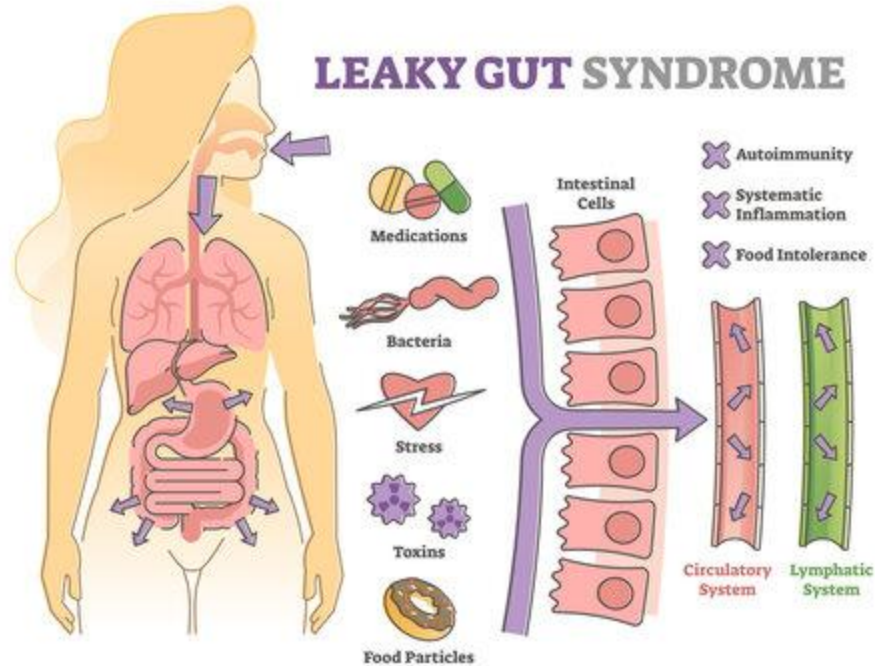
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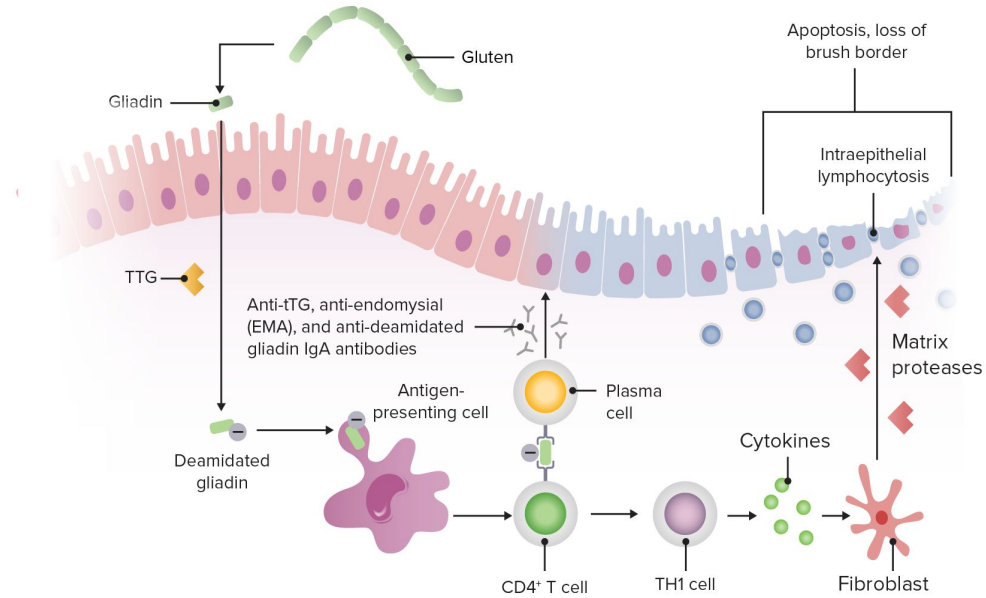
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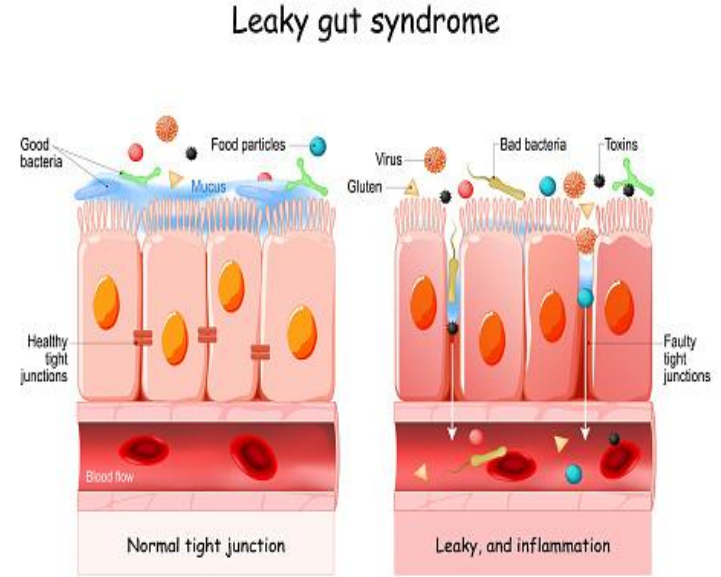
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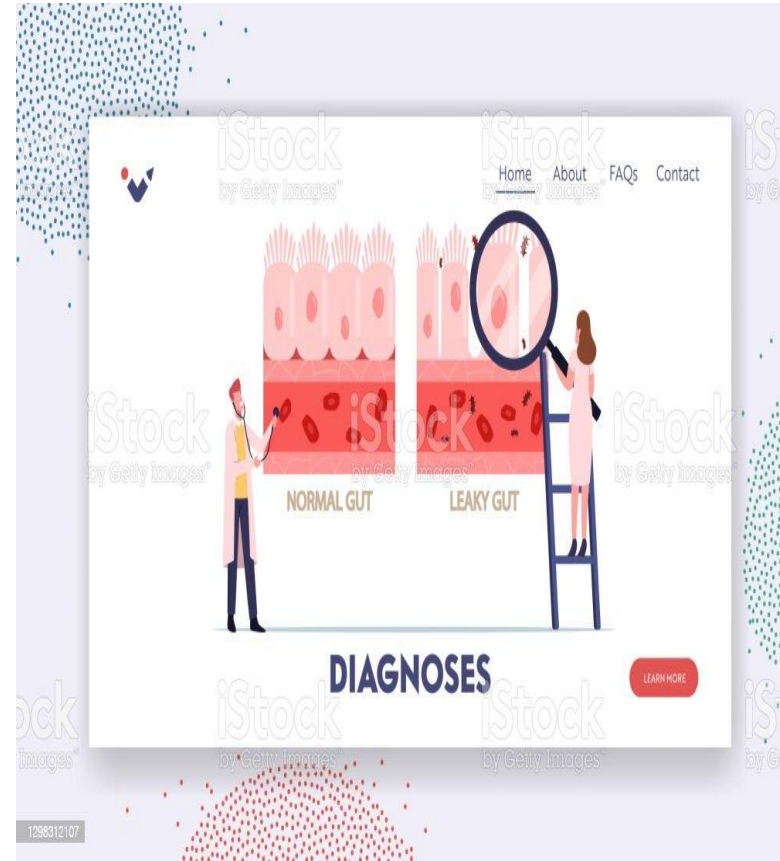
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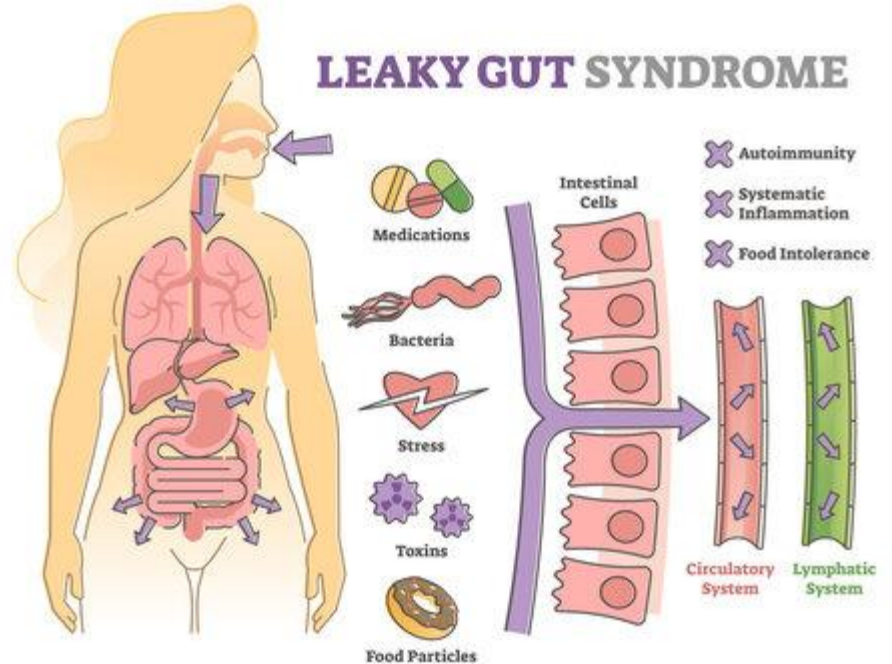
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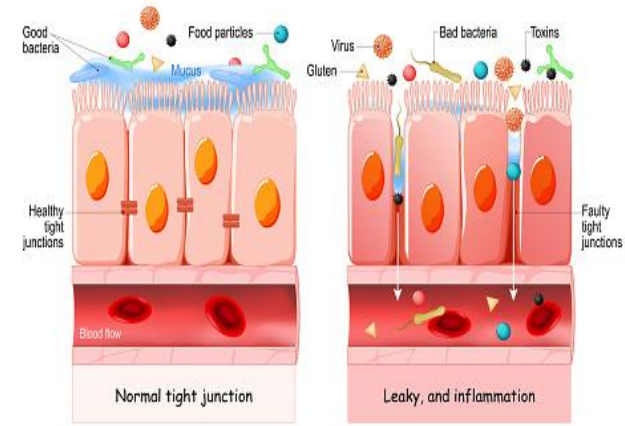


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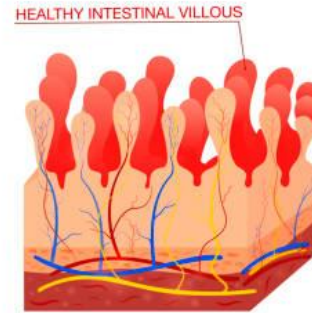
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Leaky gut syndrome

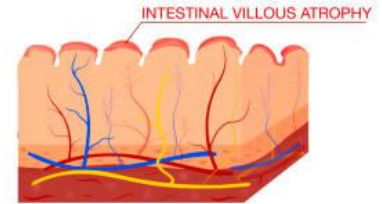


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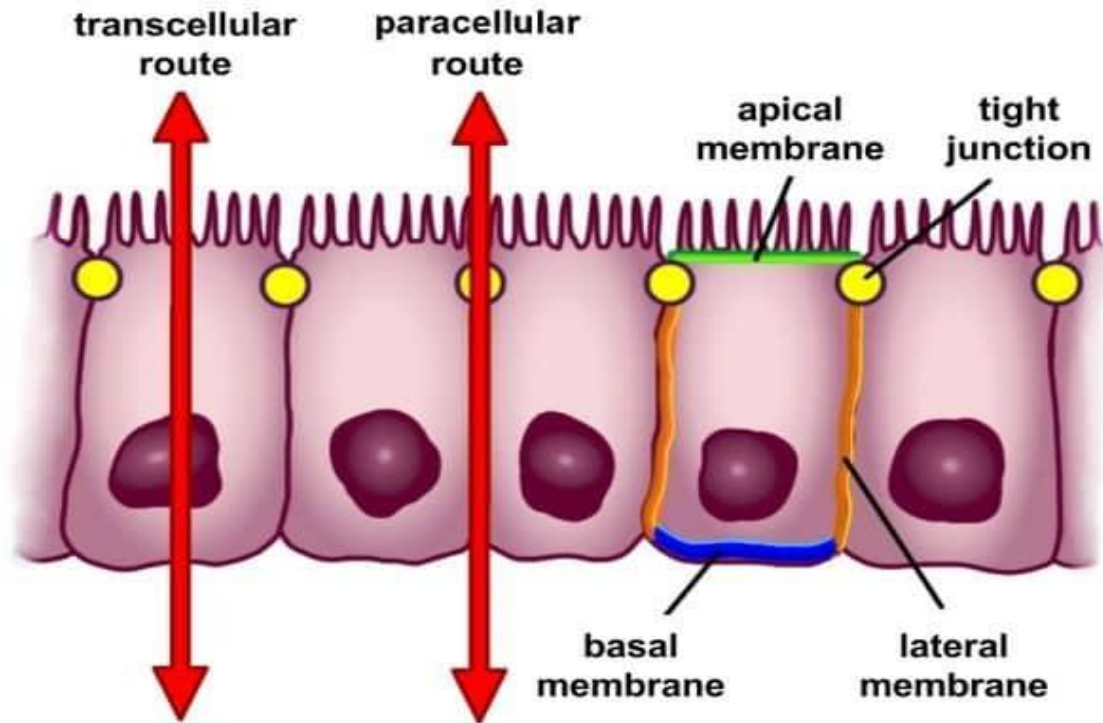
CELIAC DISEASE



NORMAL VILLI



CELIAC DISEASE



Gut Permeability



