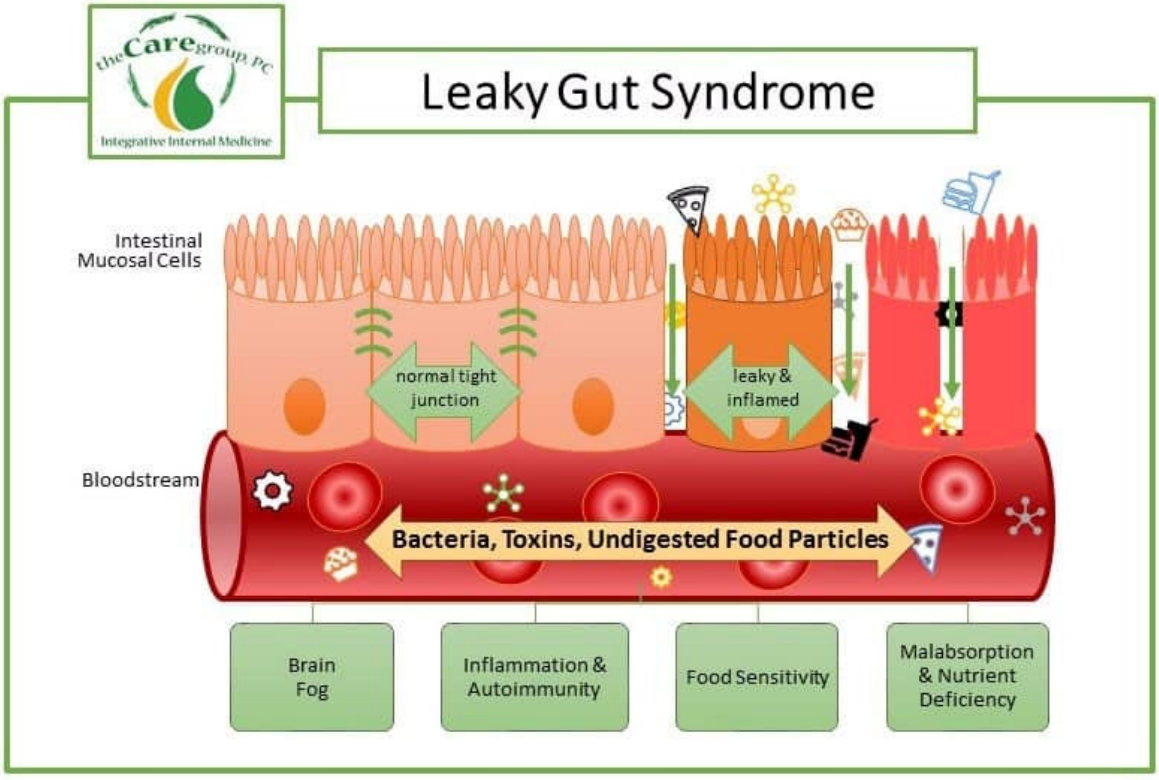
WHAT IS LEAKY GUT?

It is estimated that **about 80% of all of the body's immune defenses—the white blood cells—are located in the intestinal tract.** These white blood cells are like the bouncers at a club. Their job is to allow all of the good guys into the body—the vitamins, minerals, amino acids, and fatty acids, for example—and to block all the bad guys at the door—the bacteria, toxins, and yeast, for example. The job of these white blood cell bouncers is made easier by the barrier set up by the cells of the intestinal lining itself.

The cells of the intestinal lining are connected to each other via tight junctions, creating what can be likened to a gated parking lot. Most of the bacteria, toxins, yeast, and other bad guys are blocked by the intestinal cells and their tight junctions before the white blood cell bouncers ever have a chance to see them. In a healthy digestive tract, **this system works well to carefully manage what can or cannot pass from the intestinal tract into the body's systemic circulation.**



The tight junctions of the intestinal lining, however, are susceptible to damage. When digestive health is compromised, gaps can occur where tight junctions once were. Holes appear in the wall of that gated parking lot, and control over what passes through is lost. This situation is commonly referred to as a **"leaky gut"** and more technically called **"increased intestinal permeability."** Undigested food particles, bacteria, and toxins can now encounter those white blood cell bouncers at the door of the club—or of the body.

When white blood cells encounter particles that they do not recognize, such as undigested food or bacteria, they mount an immune response to eliminate the bad guy. They call on the other bouncers, security guards, and even call in the police. **This activated immune response can produce allergic symptoms, digestive symptoms, or generalized inflammation**. In some cases, the immune response becomes so overly active that it begins to attack healthy cells of the body itself. This is called an autoimmune reaction, and it contributes to conditions such as rheumatoid arthritis, systemic lupus, and multiple sclerosis. **When there is an autoimmune reaction, the immune system begins to produce inflammation throughout the entire body—systemic inflammation.**

There are lengthy discussions in medical journals about the interaction between a leaky gut and systemic inflammation. It has even been suggested that **processed foods may produce a leaky gut and subsequent inflammation and autoimmune disease.** There is even evidence to suggest that a leaky gut may contribute to the autoimmune form of diabetes, or type I diabetes. As the immune cells wage war on the foreign invaders, collateral damage occurs, perpetuating the cycle of inflammation.

Many patients who have digestive problems will notice other symptoms throughout their body. They might notice **stiff joints, achy muscles, headaches, or brain fog. I have found that when we treat the health of the gut, seal up those tight junctions, and calm down the immune response, the non-digestive symptoms also melt away.** The gated parking lot gets locked again, the white blood cell bouncers go back to their places, and order is restored in the club.

References

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