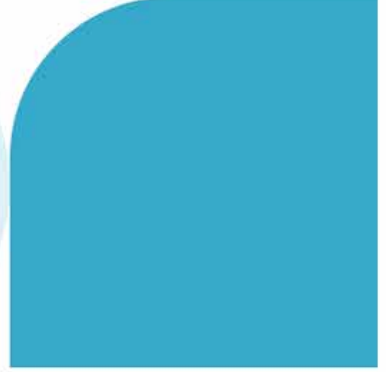
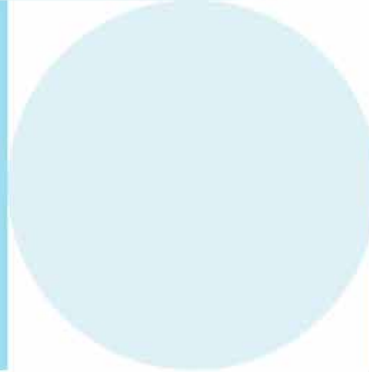
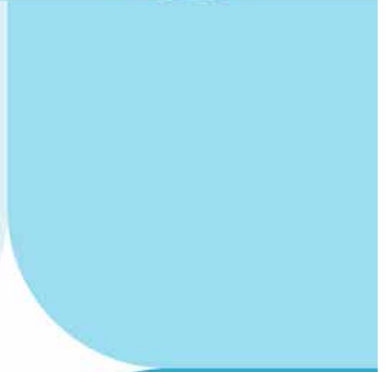
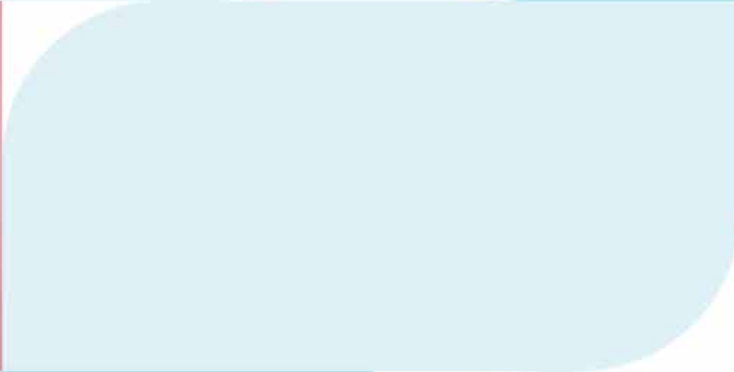




Test report



At-home test



Leaky Gut Test


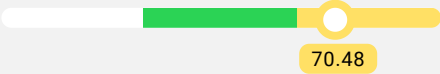
Lab test

Stool

Name: **Sample Report** Date of test: **02/21/2024** Analysis-ID: **DUMMY-58**

Your test results

Leaky gut

Name	Your value	Reference value	Scale
Zonulin	 70.48 ng/ml	<55 ng/ml	 70.48

Zonulin is a protein that regulates the permeability of the tight junctions in the intestinal mucosa. This is so that nutrients and other molecules can pass. In the case of increased intestinal permeability (so-called "leaky gut"), these tight junctions are more open than usual and larger protein molecules that are not normally allowed to pass through can pass.

Elevated levels are associated with increased intestinal permeability and low levels indicate a tight and stable intestinal mucosa. Increased intestinal permeability may cause inflammatory bowel disease and celiac disease. Increased zonulin is often measured in patients with celiac disease, type 1 diabetes and many other autoimmune diseases.

In case of elevated zonulin values the following is recommended:

- A) Supplementing with broad spectrum probiotics that support the intestinal flora and directly affect the stabilization of tight junctions.
- B) Supplementing with lectinolytic spherulicidalins that support the intestinal mucosa.
- C) Supplementing with fucose acids that cover the mucosa as a film that generally reduces the permeability of the intestinal mucosa. In addition, fucose acids promote mucus production and neutralize toxins.

Leaky gut and its significance

A well-functioning digestive system is crucial for providing the body with nutrition. On the other hand, the intestinal mucosa protects the body from pathogens, bacteria, and toxins in the air. Therefore, a controlled permeability in the intestine is of great importance for our health.

If the intestinal permeability increases, larger amounts of substances pass into the circulatory system. The increased amount of substances can have a negative effect on the body in the long run. The consequences of this is a reaction of the immune system against these substances. At the same time, the intestinal mucosa is affected, which in the long run leads to damage to the intestinal mucosa, which further increases the intestinal permeability and a vicious cycle is started.

In addition, there are other immunological reactions of the immune system against harmful food components, which pass into the body due to the "leaky gut". This can lead to food allergies or food intolerances and more problems will occur over time. People with a "leaky gut" can, in the long run, produce antibodies, which act on the body's own organ surfaces and suddenly the body begins to fight against itself. Simply explained, this means that a permeable intestine can cause autoimmune diseases and this has been proven in studies for, among other things, type 1 diabetes, multiple sclerosis and rheumatoid arthritis. One can only assume that a permeable intestine can be a (part) during cause of many more diseases.

Underlying causes of increased intestinal permeability

First of all, various intestinal diseases affect the permeability of the intestine. Diseases such as Crohn's and ulcerative colitis lead to increased intestinal permeability. Colon diseases and various types of intolerances such as lactose, fructose etc. also affect intestinal permeability. Enzyme deficiencies (lack of enzymes to break down food) also damage the intestinal mucosa and increase its permeability. Furthermore, infections, imbalances in the intestinal flora, toxins as well as acute and chronic physical and mental stress can affect the permeability of the intestinal mucosa due to the increase in stress hormones.

Causes of increased intestinal permeability can be:

- Inflammatory bowel diseases
- Colon diseases
- Food intolerances
- Impaired permeability function
- Low secretory IgA
- Mental and physical stress
- Infections and improper intestinal colonization (bacteria, parasites, viruses and fungi)
- Alcohol
- Drugs
- Heavy metals
- Systemic stress

How can you use the results

DR is a treatment protocol developed by the Institute for Functional Medicine in the United States to restore gastrointestinal health and other problems that originate therefrom. If you have any underlying issues, we recommend that you follow the program as described below. The program usually takes between 2-3 months to complete.

1. Remove

Find and exclude any molecules, foods or toxins that may interfere with optimal intestinal function and exclude them. Examples of common allergenic foods are: Allergenic: wheat, lactogenic: cow milk and grape seed extract, olive leaf extract and all of eggs. If you suspect food intolerance at a root level, we offer food intolerance testing and heavy metal testing.

2. Replace

Support the digestive system with suitable digestive support. For example, lactase (Lactaid) with people, digestive enzymes or herbs such as cardamom, cinnamon, fennel, garron, ginger and turmeric.

3. Reinoculate

Balance the intestinal flora with dietary fiber, probiotic foods and probiotic supplements. Choose probiotics according to the intestinal bacteria you are low on according to the test results.

4. Repair

Support the intestinal mucosa. Examples of substances to support the intestinal mucosa are: zinc, B-vitamins, essential fatty acids, L-glutamine, mucilage (licorice root and slippery elm).

5. Rebalance

Balance your lifestyle that includes sleep and stress.

This test does not replace a medical consultation. Always seek medical attention if you experience severe symptoms.

