IBS Test

🔬 Lab test   🌀 Stool

Name: **Sample Report**   Date of test: **09/28/2023**   Analysis-ID: **DUMMY-41**
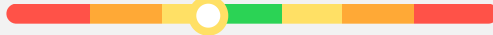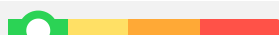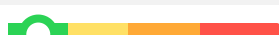
getTested

Table of contents

Your test results
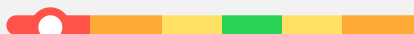
How to interpret your results

If the arrow on the scale is within the green area, your value is good. If the arrow is within the yellow, orange or red area, it indicates a deviation. Some parameters can not be either too high or too low, in which case the endpoint is at ende on the green area, this is completely correct. For an explanation of the various parameters, please see Part 2 entitled Extended information.

Determination of aerobic bacteria

Name	Your value	Unit	Reference value	Scale
Escherichia coli	8,0 x 10^5	CFU/g faeces	10^6 - 10^7	
Escherichia coli Biovare	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Proteus spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Klebsiella spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Pseudomonas spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Enterobacter spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Serratia spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Hafnia spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
Enterococcus spp	< 1,0 x 10^4	CFU/g faeces	10^6 - 10^7	
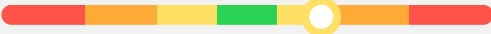
Determination of anaerobic bacteria

Name	Your value	Unit	Reference value	Scale
Bifidobacterium spp	3,0 x 10^9	CFU/g faeces	10^9 - 10^11	
Bacteroides spp	1,0 x 10^9	CFU/g faeces	10^9 - 10^11	
Lactobacillus spp	< 1,0 x 10^4	CFU/g faeces	10^5 - 10^7	
Clostridium spp	< 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^5	

Mycological stool examination

Name	Your value	Unit	Reference value	Scale
Candida spp	< 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	
Candida albicans	< 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	
Yeast	Negative		Negative	
Geotrichum candidum	< 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	
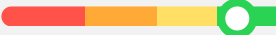
pH value

Name	Your value	Unit	Reference value	Scale
pH	6.87		5,8 - 6,5	
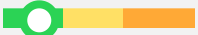
Digestive residues

Name	Your value	Unit	Reference value	Scale
Quantitative determination of fat	5.41	g/100g	< 3,5	
Quantitative determination of nitrogen	0.80	g/100g	< 1,0	
Quantitative determination of sugar	3.02	g/100g	< 2,5	
Quantitative determination of water	74.36	g/100g	75 - 85	
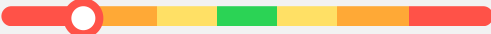
Detection of indigestion

Name	Your value	Unit	Reference value	Scale
Pancreatic elastase	396.71	µg/g	> 200	
Bile acids in stool	79.54	µmol/l	< 70	

Detection of malabsorption

Name	Your value	Unit	Reference value	Scale
Calprotectin	30.74	mg/l	< 50	
Alfa-1 antitrypsin	31.54	mg/dl	< 27,5	

Mucosal immunity

Name	Your value	Unit	Reference value	Scale
Secretory IgA	167.00	CFU/g faeces	510 - 2040	
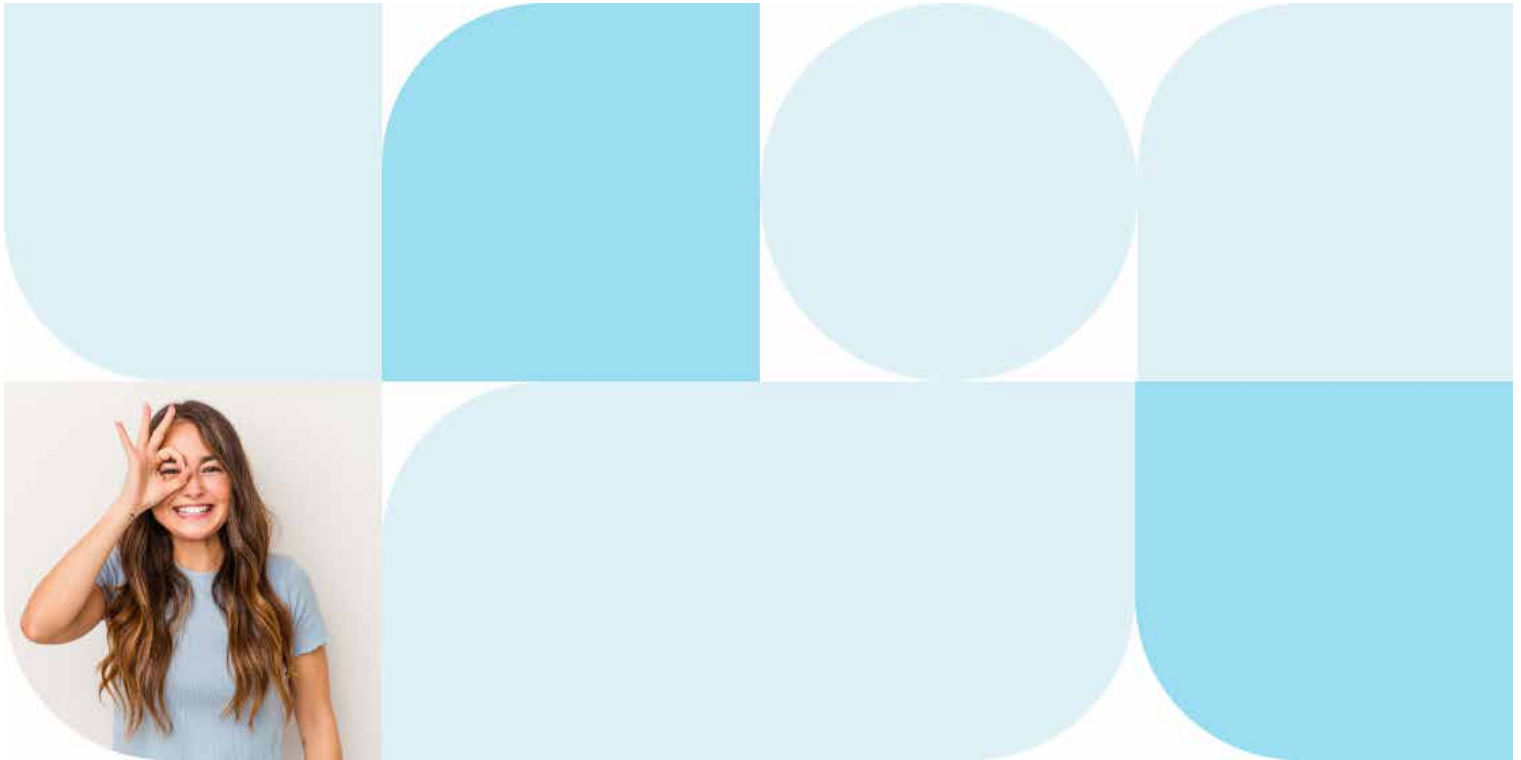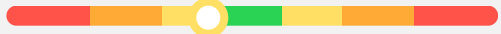
Extended Information

Explanation of your test results

The intestinal flora includes the bacteria and other microorganisms that are naturally present in the intestine. Our intestinal flora has a broad influence on human health and disease. It modulates the immune system, provides the organism with vitamins, participates in the digestion of food components, supplies intestinal epithelium with energy by producing short-chain fatty acids and stimulates intestinal peristalsis.

Determination of aerobic bacteria

Escherichia coli

Name	Your value	Unit	Reference value	Scale
Escherichia coli	8,0 x 10^5	CFU/g faeces	10^6 - 10^7	

Escherichia coli belongs to the putrefactive bacteria. Putrefactive bacteria are bacteria that thrive in an alkaline environment and produce ammonia. At high pH, they grow and can compete with other good bacteria.

Putrefactive bacteria primarily metabolise protein and fat, which produce toxic metabolites such as ammonia, indole, skatole and hydrogen sulfide. This can damage the intestinal mucosa and may lead to an increase in the pH of the colon (>6.5) in the long term.

Elevated levels are often caused by insufficient activity in the mucosal immune system. If the intestinal flora is characterised by an increased amount of putrefactive bacteria, one can try to reduce the pH value in the intestinal lumen by supplementing with pre- or probiotics. This promotes the reconstitution of the intestinal acidification flora and inhibits the growth of putrefactive bacteria. Less toxic metabolic byproducts are produced, which alleviates the damage on the intestine and other vital organs such as the liver and kidneys.

Escherichia coli Biovare

Name	Your value	Unit	Reference value	Scale
Escherichia coli Biovare	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	

Escherichia coli Biovare is a subspecies of Escherichia coli that does not normally occur in the intestine. There are several types such as haemolytic, mucoid and lactose negative E. coli. It is not uncommon to find haemolytic or mucoid E. coli while lacking a favorable E. coli and alkaline pH.

Elevated levels can also be caused by insufficient mucosal immunity. This is mainly due to too low production of secretory IgA.

Proteus spp

Name	Your value	Unit	Reference value	Scale
Proteus spp	< 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
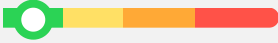
Elevated levels of Proteus species often occur in Crohn's disease and urinary tract infections.

Klebsiella spp

Name	Your value	Unit	Reference value	Scale
Klebsiella spp	🟢 < 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	
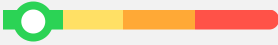
High levels indicate an increased inflammatory activity in the intestine. Klebsiella can release histamine and may cause abdominal pain, bloating, gas and diarrhea. Elevated levels of Klebsiella is common after prolonged use of antibiotics.

Pseudomonas spp

Name	Your value	Unit	Reference value	Scale
Pseudomonas spp	🟢 < 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	

Elevated levels of Pseudomonas species may occur in inflammation of the intestine. Elevated levels can lead to diarrhea and loose stool.

Enterobacter spp

Name	Your value	Unit	Reference value	Scale
Enterobacter spp	🟢 < 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	

Enterobacter species belong to the putrefactive bacteria. Putrefactive bacteria are bacteria that thrive in an alkaline environment and produce ammonia. At high pH, they grow and can compete with other good bacteria. Putrefactive bacteria primarily metabolize protein and fat, which produce toxic metabolites such as ammonia, indole, skatole and hydrogen sulfide. This can damage the intestinal mucosa and may lead to an increase in the pH of the colon [>6.5] in the long term.

Enterobacter species are common bacteria in soil and water and are often found in the intestinal tract of humans and animals. High levels are often associated with an inflammatory process in the intestinal mucosa. Enterobacter are opportunists that can occur as pathogens in hospitals where they cause infections in people with weakened immune systems.

If the intestinal flora is characterized by an increased amount of putrefactive bacteria, one can try to reduce the pH value in the intestinal lumen by supplementing with pre- or probiotics. This promotes the reconstitution of the intestinal acidification flora and inhibits the growth of putrefactive bacteria. Lowering toxic metabolite byproducts are produced, which alleviates the damage on the intestine and other vital organs such as the liver and kidneys.

Serratia spp

Name	Your value	Unit	Reference value	Scale
Serratia spp	🟢 < 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	

Serratia species occur in a variety of infections. Elevated levels also often occur in people with diarrhea.

Hafnia spp

Name	Your value	Unit	Reference value	Scale
Hafnia spp	🟢 < 1,0 x 10^4	CFU/g faeces	< 1,0 x 10^4	

Elevated levels of Hafnia species can occur in people with diarrhea and can cause illness in people with weakened immune systems.

Enterococcus spp
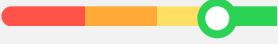
Name	Your value	Unit	Reference value	Scale
Enterococcus spp	🔴 < 1,0 x 10^4	CFU/g faeces	10^6 - 10^7	

Enterococcus produce acidic metabolic products and antibacterial substances that prevent foreign bacterial colonization in the small intestine (resistance to small intestine colonization).

Low levels promote the occurrence of endogenous infections by disrupting microbial barrier function.

Determination of anaerobic bacteria

Bifidobacterium spp

Name	Your value	Unit	Reference value	Scale
Bifidobacterium spp	🟢 3,0 x 10^9	CFU/g faeces	10^9 - 10^11	

Bifidobacteria are needed, among other things, to protect against potentially pathogenic microbes, for the synthesis of short-chain fatty acids and to stimulate GALT (gut-associated lymphoid tissue), as well as to break down complex carbohydrates and indigestible fiber. They are part of the acidifying flora, and mainly use carbohydrates as their fuel substrate. They produce short-chain fatty acids (acetate and butyrate), which lower the pH value in the intestinal lumen and therefore inhibit the growth and spread of putrefactive bacteria.

Weak bifidobacteria flora leads to deterioration of colonization resistance in the colon. Bifidobacteria develop a microbial barrier against infection by occupying mucosal receptors. These counteract the colonization and spread of pathogenic bacteria, yeast or parasites.
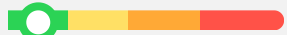
Low levels can be due to a weakened intestinal mucosa or too low fiber intake. Excessive levels are rare. Bifidobacteria is a very common bacterial strain used in probiotics. Bifidobacteria is also well supported by prebiotics.

Bacteroides spp

Name	Your value	Unit	Reference value	Scale
Bacteroides spp	🟡 1,0 x 10^9	CFU/g faeces	10^9 - 10^11	🟥🟧🟨○🟩

[illegible]

Lactobacillus spp

Name	Your value	Unit	Reference value	Scale
Lactobacillus spp	🔴 < 1,0 x 10^4	CFU/g faeces	10^5 - 10^7	🟥○🟧🟨🟩🟨🟧

[illegible]

Clostridium spp

Name	Your value	Unit	Reference value	Scale
Clostridium spp	🟢 < 1,0 x 10^5	CFU/g faeces	< 1,0 x 10^5	🟩○🟨🟧🟥

[illegible]

Mycological stool examination

The mycological stool examination is used to detect any overgrowth of yeast and fungi. A possible fungal overgrowth is a result of unfavorable conditions in the intestine, which in turn is often due to a weakening of the bacterial flora.

Candida spp

Name	Your value	Unit	Reference value	Scale
Candida spp	🟢 < 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	

Candida species are typically part of the commensal fungal flora, but can become pathogenic in people with weakened immune systems and may cause vaginal fungal infections.

Candida albicans

Name	Your value	Unit	Reference value	Scale
Candida albicans	🟢 < 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	

Candida albicans belong to the group of facultative pathogenic yeast which - under certain circumstances - intensively multiply and can cause mycoses/mycosis. Candida albicans accounts for 80-90% of all Candida mycoses.

Objects that come in contact with human mucous membranes are often contaminated with yeast. To prevent recurrence of infections, reusable salves, artificial dentures or braces should be disinfected regularly.

If the intestinal flora is characterized by an increased amount of putrefactive bacteria, one can try to reduce the pH value in the intestinal lumen by supplementing with pre- or probiotics. This promotes the reconstitution of the intestinal acidification flora and inhibits the growth of putrefactive bacteria. Lactic acid metabolic byproducts are produced which alleviates the damage on the intestine and other vital organs such as the liver and kidneys.

Yeast

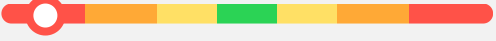| Name	Your value	Reference value
Yeast	Negative	Negative

Yeast is a type of fungus that naturally occurs in the digestive system, but can cause disease if they overgrow. Negative = no overgrowth. Positive = overgrowth. Your result should be negative.
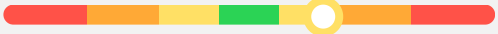
Geotrichum candidum

Name	Your value	Unit	Reference value	Scale
Geotrichum candidum	⬤ < 1,0 x 10^3	CFU/g faeces	< 1,0 x 10^3	

Geotrichum candidum is a saprophyte that can be isolated from soil, waste, unwashed vegetables, fruits and dairy products. The fungus is also often detected in saliva and stool.

Geotrichum can cause disease in the case of a weakened immune system, long-term antibiotic treatment or immunosuppressive treatment. This affects the oral cavity, tonsils and bronchi in addition to the effect on the intestine.

The properties of the stool - pH-value

Name	Your value	Unit	Reference value	Scale
pH	⬤ 6.87		5,8 - 6,5	

The pH value of the stool can indicate if there are any conditions of excess decay or fermentation in the intestine. A too low pH value after excess in combination with a dysfunctional intestinal flora, as complex sugars are metabolised to fatty acids, which can contribute to an acidified stool. A too high pH value can be due to excessive impurity of protein, which can stimulate certain intestinal bacteria to produce ammonia and other metabolic products, thus raising the pH value of the stool.

An environment that is too alkaline (elevated pH) can be inhibited by the addition of pre- and probiotics, in combination with a diet rich in fibre and low/moderate in fat and protein.

Digestive residues

Quantitative determination of fat

Name	Your value	Unit	Reference value	Scale
Quantitative determination of fat	⬤ 5.41	g/100g	< 3,5	

Elevated levels of fat in the stool may be due to diet (high-fat diet) or indicate disorders of fat breakdown or absorption. It may be due to a disturbance in bile secretion, bile acid absorption or incomplete secretion of lipolytic enzymes from the pancreas.

Quantitative determination of nitrogen

Name	Your value	Unit	Reference value	Scale
Quantitative determination of nitrogen	⬤ 0.80	g/100g	< 1,0	

Elevated levels may indicate a disturbance in the breakdown or absorption of protein in the small intestine.

Quantitative determination of sugar

Name	Your value	Unit	Reference value	Scale
Quantitative determination of sugar	3.02	g/100g	< 2,5	
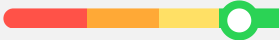
Quantitative determination of water

Name	Your value	Unit	Reference value	Scale
Quantitative determination of water	74.36	g/100g	75 - 85	

Detection of indigestion

Pancreatic elastase

Name	Your value	Unit	Reference value	Scale
Pancreatic elastase	396.71	µg/g	> 200	
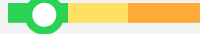
Bile acids in stool

Name	Your value	Unit	Reference value	Scale
Bile acids in stool	79.54	µmol/l	< 70	

Detection of malabsorption

Calprotectin
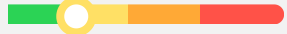
Name	Your value	Unit	Reference value	Scale
Calprotectin	⭕ 30.74	mg/l	< 50	

Calprotectin as a marker for inflammation in the gastrointestinal tract. Elevated levels may be due to certain drugs, dysbiosis, food allergens, intestinal infections, toxins, inflammatory bowel disease, polyps, diverticulitis or colorectal cancer. In case of prolonged elevated levels, you should consult a doctor for a proper evaluation.

The calprotectin levels in the stool closely correlate with the activity and extent of inflammatory mucosal changes. Very high calprotectin levels are found, for example, in active chronic inflammatory gastrointestinal diseases, invasive bacteria or extensive ulcerative colorectal carcinoma. People with chronic diffuse gastrointestinal disease, food allergies or malabsorption instead show lower to moderately elevated levels (50-150 mg/l).

Regardless of the issue of the elevated levels, one should at any rate achieve healing of the intestinal mucosa. According to studies, this is achieved particularly well by the addition of phosphatidylcholine (lecithin), which also supports the formation of an effective mucosal barrier by stabilizing and strengthening the mucous. Because intestinal microbiota can partially convert phosphatidylcholine to TMA (trimethylamine), which is further metabolized in the liver to TMAO (trimethylamine-N-oxide) and can promote vascular inflammation and atherosclerosis, it is advisable to reduce the dose of lecithin and increase the desired effect by adding Allicin, berberine, butyric acid, L-glutamine and/or resveratrol.

Alfa-1 antitrypsin

Name	Your value	Unit	Reference value	Scale
Alfa-1 antitrypsin	⭕ 31.54	mg/dl	< 27,5	

Alpha-1 antitrypsin regulates inflammatory responses by blocking enzymes released by leukocytes and macrophages.

Elevated levels of alpha-1 antitrypsin indicate an inflammatory reaction of the intestinal mucosa. This can lead to a decrease in the absorption of nutrients from food. There is often a link between elevated alpha-1 antitrypsin levels and an increased permeability of the intestinal mucosa, which in turn can lead to an increased load on the body's systemic defense system.

Regardless of the issue of the elevated levels, one should at any rate achieve healing of the intestinal mucosa. According to studies, this is achieved particularly well by the addition of phosphatidylcholine (lecithin), which also supports the formation of an effective mucosal barrier by stabilizing and strengthening the mucous. Because intestinal microbiota can partially convert phosphatidylcholine to TMA (trimethylamine), which is further metabolized in the liver to TMAO (trimethylamine-N-oxide) and can promote vascular inflammation and atherosclerosis, it is advisable to reduce the dose of lecithin and increase the desired effect by adding Allicin, berberine, butyric acid, L-glutamine and/or resveratrol.

Mucosal immunity

Name	Your value	Unit	Reference value	Scale
Secretory IgA	🔴 167.00	CFU/g faeces	510 - 2040	

How can you use the results

5R 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 imbalances, we recommend that you follow the program as described below. The program usually takes between 3-6 months to complete.

1. Remove

Find and exclude any microbes, foods or toxins that may interfere with normal intestinal function and exclude them. Examples of antimicrobial herbs are Allicin/garlic extract, berberine, caprylic acid, grape seed extract, olive leaf extract and oil of oregano. If you suspect food intolerances or a toxic load, we offer food intolerance tests and heavy metals tests.

2. Replace

Support the digestive system with suitable digestive support. For example, betaine HCl with pepsin, digestive enzymes or herbs such as cardamom, cinnamon, fennel, gentian, ginger and turmeric.

3. Reintroduce

Balance the intestinal flora with dietary fiber, prebiotic 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 aloe vera, B-vitamins, essential fatty acids, L-glutamine, Marshmallow root and vitamin A.

5. Rebalance - Remedy the lifestyle

Balance your lifestyle; diet, exercise, sleep and stress.
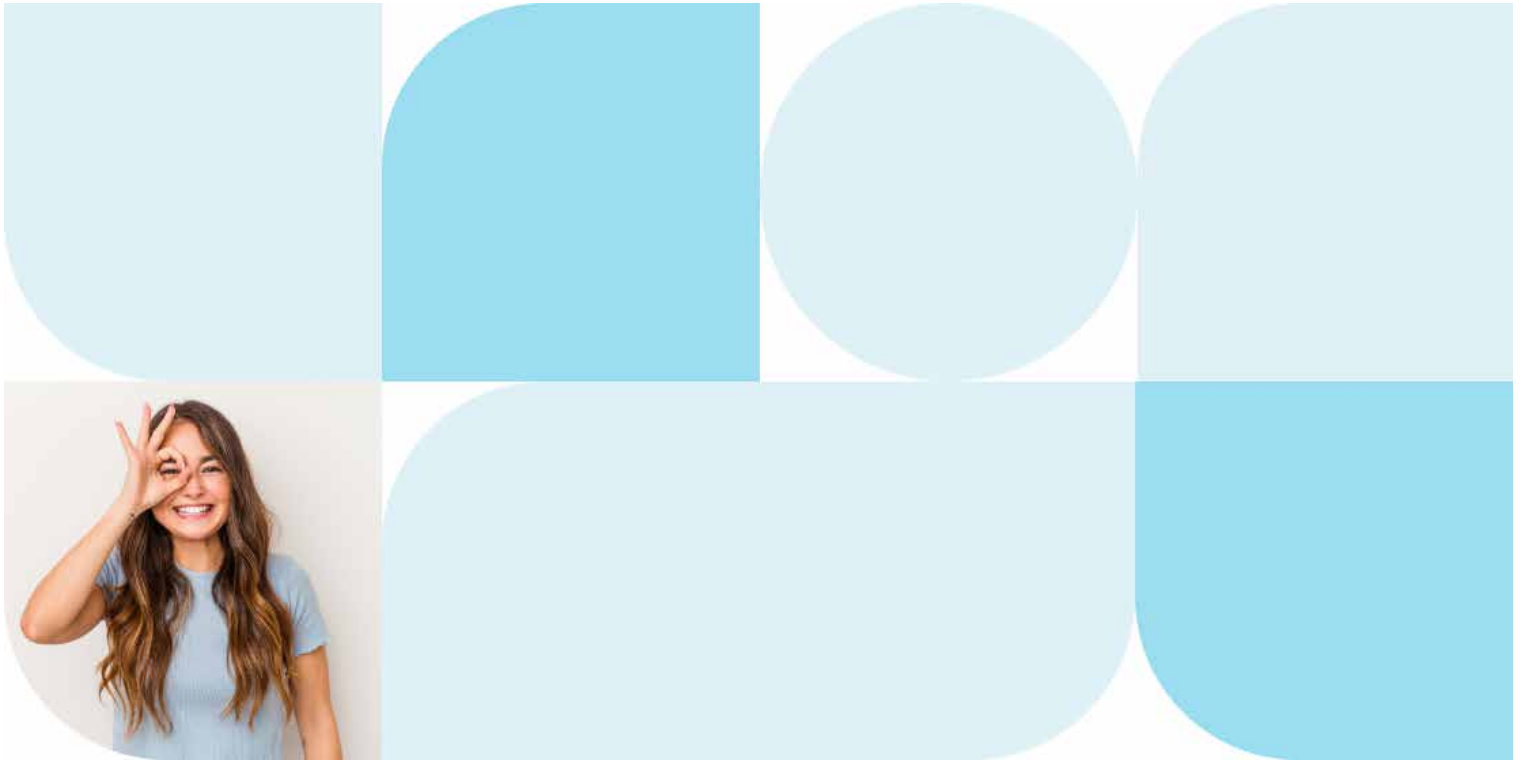
Other information

Leaky gut

The intestine is of great importance for the health of the body. In addition to absorbing nutrients, it has a very important function for our immune system - the intestinal mucosa acts as a protective barrier between the body and our environment.

In order to perform its tasks correctly, the intestines need:

- A balanced bacterial population (our intestinal flora/microbiome)
- Adequate production of substances that support the intestinal mucosa
- Adequate levels of secretory IgA (sIgA)
- An undamaged intestinal epithelial cell layer

The intestinal flora is important in fighting endogenous infections. The commensal intestinal flora is a barrier that makes it difficult for unwanted bacteria from outside of the body to settle in the intestine. This is called colonization resistance.

The mucus produced by the intestinal mucosa is important for the transport of food in the intestines. It protects the mucosa, is important for its integrity and is therefore the basis for maintaining normal permeability.

In addition, sIgA is transferred to and distributed in the intestines with the mucus. sIgA has the important job of binding antigens of all types in the intestinal lumen, for example bacteria, viruses, large macromolecules, etc. In this way it reduces the stress on the mucous membrane while keeping the antigen inside the intestines, prevents it from coming into contact with the mucous membrane and leads it out of the body.

sIgA thus controls the antigens in the body and the frequency of infection. It is therefore very important for the immune system.

The controlled (nutrient) substance passage from the intestinal lumen into the circulatory system takes place at the intestinal epithelial layer. First, this is done by the cells themselves (transcellular) and secondly between the cells (paracellular). The transcellular transport takes place without further disturbance of the cells via simple diffusion, via specialized receptors or by enclosing the substances by invaginating the cell membrane (endocytosis). The paracellular passage through the single ephitelial layer, on the other hand, takes place at so-called ″tight junctions″. These are parts of a protein network, which encloses the cells and seals its gaps more or less. In some places, at these ″tight junctions″, the network allows a controlled passage of liquid and dissolved or colloidal substances.

If one or even several of the above conditions for a healthy gastrointestinal system are missing, various health problems will soon arise. If the intestinal flora is not in good condition, for example, pathogens can spread more easily and cause infections. If sIgA is not available in sufficient amounts, the antigenic load on the immune system increases. If the epithelial layer and its tight junctions do not hold tight, large amounts of unwanted substances can pass into the body. These issues can spread over time and cause problems in different parts of the body – especially autoimmune diseases.

Leaky gut and its significance

A well-functioning absorption capacity in the intestine is crucial for providing the body with nutrition. On the other hand, the intestinal mucosa protects the body from pathogenic bacteria, contaminants, etc. Therefore, a controlled permeability in the intestines 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-term. The consequence of this is a reaction of the immune system against these substances: first, the intestinal mucosa is infected, which in the long run leads to damage to the intestinal mucosa, which further increases the intestinal permeability and a vicious cycle is initiated.

In addition, there are other immunological reactions: if the immune system fights against harmless 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 link to 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 (contributing) 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 always lead to increased intestinal permeability. Celiac disease and various types of intolerances such as lactose, fructose, etc. also affect intestinal permeability. Exocrine pancreatic insufficiency (lack of enzymes to break down food) also damages the intestinal mucosa and increases 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 disease
- Celiac disease
- Food intolerances
- Impaired pancreatic function
- Low secretory IgA
- Mental and physical stress
- Infections and incorrect intestinal colonization (bacteria, parasites, viruses and yeast)
- Alcohol
- Drugs
- Heavy metals
- Oxidative stress

Milder intestinal inflammation

Mild intestinal inflammation can be a consequence of different disease states and can occur in different parts of the intestine. Most often, the lower part of the small intestine or the upper part of the large intestine is affected, which limits nutrient uptake. Undigested food has a tendency to remain in the intestine, which can cause irritation.

In case of irritation in the stomach/intestine, it is good to take into account and exclude foods that you are intolerant to. A well-balanced diet should be developed to reduce the strain on the gut. This can be accomplished by eating several smaller meals a day instead of large, heavy meals, as well as avoiding certain foods that can sometimes interfere with proper gastrointestinal function:

- Gas-producing vegetables: Cabbage, leeks, onions, peppers, mushrooms, legumes
- Hot spices: Chili, pepper, paprika powder
- Foods high in fat: Fried food, fatty fish, lard, cheese, mayonnaise
- Foods high in sugar: Sweets, products containing natural and artificial sweeteners
- Beverage: Alcohol, coffee, carbonated beverages, and drinks that are too hot or cold

It can be beneficial to test for food intolerances and exclude foods that may further irritate. Different cooking methods can also facilitate or make the load on the intestine more difficult.

During asymptomatic periods, a diet rich in fiber is recommended to reduce inflammation. If you change your diet, remember to do it gradually.

Foods that are usually well tolerated:

- Amaranth, buckwheat, brown rice, millet and quinoa
- Eggs, fish, lean meat and poultry
- Cooked vegetables
- Potatoes and other tubers
- Porridge
- Ripe fruits

Nutritional deficiencies

Imbalance in the intestine can lead to impaired nutrient uptake. If you have any digestive issues, it can be a good idea to test yourself for any deficiency of vitamin B12, iron, magnesium and zinc.

MCT oil

MCT oil is composed of medium chain triglycerides, which are used in disorders of fat absorption and can be used as a readily available energy source. They can be more easily absorbed and digested independently of bile acids and digestive enzymes. Adding these fats should be done gradually to allow the intestines to adapt.

Fiber-rich food

Dietary fiber is a substance that the body can only use to a certain extent. Normally, fibers are excreted undigested, but can also be processed by the intestinal flora and provide beneficial metabolic products such as butyrate that are very valuable for the body.

- Fibers have a structure that requires them to be chewed more and longer. Chewing leads to the release of saliva, which in turn counteracts caries and tooth decay. Chewing a lot also leads to a faster feeling of satiety.
- Dietary fiber swells and binds water. This prolongs the feeling of satiety. It also increases the weight of the stool and stretches the intestinal walls, which triggers the muscles in the intestine to work and stimulates intestinal emptying. Improved bowel movements make it easier for toxic substances to be excreted from the body and reduce the risk of diseases linked to excessive toxic exposure.
- Fibers do not just bind water in the intestine. Bile acids produced from cholesterol are also bound up and excreted in the stool. The body is thus forced to form new bile acids from cholesterol and the cholesterol level is lowered.
- Dietary fiber is important for people with diabetes, as it has a positive effect on blood sugar.
- Dietary fiber stimulates the growth of beneficial bacteria and strengthens our natural intestinal flora while reducing the growth of unfavorable bacteria and harmful metabolic substances.

The general dietary recommendation for fiber intake is 25-35 grams of fiber per day for adults. In the table below you can see how much fiber different foods contain.

Type of food	Food	Fibers in g/100 g
Legumes (uncooked)	Broad beans Brown beans Mung beans Soybeans White beans	16,4 16,4 16,0 15,3 15,8
Fruits	Pomegranate Passion fruit Raisins Dried apricots Dried figs	10,0 15,9 9,7 12,0 18,5
Vegetables	Avocado Brussels sprouts Artichoke Sun-dried tomatoes Wheat sprouts	4,8 4,5 5,0 12,7 14,0
Grains	Oatmeal Oat bran Hard bread (wholegrain) Wheat bran Wheat germ	15,0 18,0 24,0 37,5 30,5

Support your intestinal flora through the right diet and beverage

We have a large number of bacteria in our gut. They support our immune system and intestinal mucosa by producing important metabolic products and other nutrients. Which substances the bacteria produce depends a lot on the substrate in the intestine, i.e. food components that can not be broken down by the body. Based on their metabolic products, they support either the acidification or the putrification process in the intestinal flora. If the relationship between these two groups is in balance, the intestinal environment is slightly acidic. Lactic acid cultures thrive best in acidic environments while putrefactive bacteria prefer an alkaline environment.

Undigested food residues after consuming high protein and fatty foods, are used by the putrefactive bacteria in the intestinal flora. The metabolic products produced by a dominant putrefactive intestinal flora can stress the liver, cause bloating and gas and in part have carcinogenic effects in the long term. Fiber-rich diets, on the other hand, support an acidic intestinal flora, which supports peristalsis and protects against pathogens as well as carcinogenesis.

A well-balanced diet can largely balance the relationship between acidification and putrification The intake of fat and protein should therefore be kept at a balanced and moderate healthy level.

Some ways to reduce fat and protein intake

- Eat lots of fruit and vegetables
- Avoid excessive intake of high-fat foods
- Eat lean fish, red meat and poultry
- Replace white flour products with whole grains
- Prepare the food carefully by, for example, steaming or baking in the oven rather than broiling, grilling or frying
- Make sure the fats you eat are good fats

This test does not replace a medical consultation. Always search for healthcare if you experience severe symptoms.