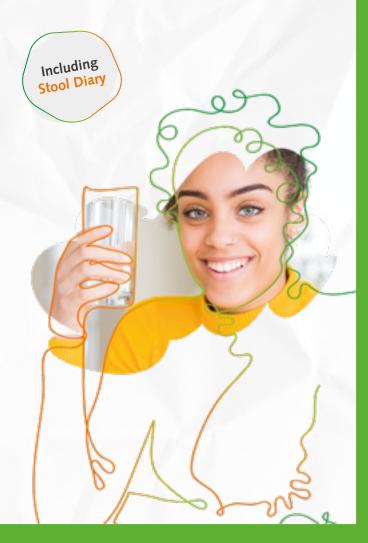
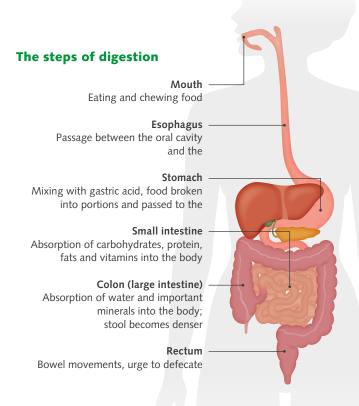


Chronic Constipation



Health and well-being start with good digestion

A healthy digestive tract and good digestion begin with a high-fiber diet that includes fruits, vegetables, and wholegrain foods, drinking enough liquids (at least 2 liters per day with high mineral content), regular physical activity, and relaxing.



How does constipation occur?

If stool takes too long to pass through the colon, too much water gets removed from the stool and it becomes hard. This makes it more difficult for the stool to pass into the rectum, and constipation becomes more likely.

What is the precise definition of constipation?

Although many people think they need to have at least one bowel movement per day, experts disagree. One bowel movement every other day can also be normal. There is no need to worry about toxicity or becoming "poisoned" if you don't have a bowel movement for a day or two. One key criteria for constipation is having less than three bowel movements per week.

If you frequently have difficulty finding time to go to the bathroom and instead push back the urge to have a bowel movement, at some point you will no longer feel the need to defecate. Both you and your digestive system will lose the habit of regular bowel movements. Stool will remain in the colon longer and become even denser, bowel movements will become more difficult, and your risk of chronic constipation will increase.

Common causes of constipation

- Low-fiber diet
- · Sitting or lying down too much
- Drinking too little water or liquids
- Stress
- · Rapid lifestyle changes, like travel or hospitalization
- · Certain medications
- Certain diseases

One common source of constipation is irritable bowel syndrome (IBS),

which causes abdominal pain, abdominal cramps, constipation, bloating, and diarrhea. IBS is classified into "constipation-predominant" and "diarrhea-predominant" types depending on the symptoms. There is also a mixed form with alternating diarrhea and constipation. The precise causes of IBS remain unknown.

Your daily lifestyle is key

Often, small changes in daily life can lead to major improvement in your symptoms. For example, drinking a glass of water after waking up in the morning can do wonders.

On the other hand, just waking up a little earlier to give you more time for your morning bowel movement might be enough. Schedule a set time for your digestive system that it can get used to.



The right diet to prevent constipation

A high-fiber diet is the best way to promote healthy digestion. Fruits and vegetables not only provide important vitamins and minerals, they also increase motility in your digestive tract. Berries and whole-grain foods are especially recommended and are nowadays available in many different versions.

Staying hydrated keeps stool soft

Drinking enough liquids is crucial for healthy bowel movements. Normal stool consists of 70% to 80% water, while constipation occurs when stool contains less than about 60% water.

So how much do you need to drink to prevent constipation? Drinking 1.5 to 2 liters of liquids (which produces 1.5 liters of urine over 24 hours) is enough for most situations.

People on a high-fiber diet should drink 250 to 500 ml per day more, since fiber absorbs water in the digestive tract, keeping stool soft and easy to pass.

Recommended foods and beverages include mineral water, buttermilk, yogurt, herbal tea, fruit tea, as well as fruit and vegetable juices. You can drink coffee, if you tolerate it. Black tea can promote constipation.

Staying active keeps digestion active

Spending lots of time sitting with little physical activity not only results in less energy, muscle and bone mass, but also less movement in the digestive tract. Your digestive system needs the mechanical stimulation provided by movement and jostling, which happens during activities such as walking. It also needs to be "massaged" by the diaphragm, which occurs when you breathe deeply, for example when walking up stairs.

Exercises for constipation

The following exercises are recommended to strengthen the muscles and increase motility in your large intestine:

Exercise 1: Just before you want to go to the bathroom, breathe in deeply while pulling your stomach in. Then quickly push your stomach back out while exhaling. Repeat this exercise 5 to 10 times. This exercise lets your diaphragm "massage" your large intestine, stimulating movement in your colon.

Exercise 2: Pull in your stomach, count to 10, and then slowly relax. Repeat this exercise throughout the day: 5 times each in the morning, noon, and evening.

Exercise 3 (see image): While sitting or lying down, pull your knees as closely as possible to your chest, while keeping your calves at a comfortable angle. Hold this position for a few seconds, then bring your legs back down. Repeat this exercise 5 to 10 times. Always start with the right leg, then the left.

Healthy bowel habits

Only go to the bathroom when you need to, not when you want to or think you should. Even though many people notice that they have bowel movements more often after drinking a glass of water or eating breakfast, the common myth that the digestive tract can be intentionally "trained" to go to the bathroom is incorrect.

Although many people feel like they still need to go after having a first bowel movement, this is an illusion: the rectum is actually empty!

You shouldn't spend any longer than 3 minutes on the toilet!

Sitting on the toilet longer (especially while reading) is harmful, as it can cause your sphincter to stretch out and even lead to rectal prolapse (when part of the rectum sticks out).

To prevent this, you should perform the following sphincter exercise 3 to 4 times after passing a first stool and before cleaning your anus:

Sphincter exercise

- · Tighten your anus and pull up your sphincter muscle
- Hold this for 3 to 5 seconds
- Relax your anus (without pressing out!)

And if you have enough time: Repeat these exercises throughout the day – in the car, in the office, on the couch ...

How do dietary fiber and laxatives work?

Dietary fiber and laxatives use a similar mechanism: both increase the amount of water in stool, which makes stool bigger, stimulates the digestion process, and makes stool softer and easier to pass. This helps stool pass through the digestive tract more easily.

Dietary fiber

Dietary fiber is a natural regulator of stool that is primarily found in plant-based foods. Seed husks such as wheat bran or psyllium husks contain highly-concentrated dietary fiber. For example, 1 gram of bran can absorb 1.8 grams of water, while 1 gram of psyllium husks from the *Plantago ovata* plant can absorb 40 grams of water. Soluble fiber is a type of dietary fiber that absorbs very high amounts of water and incorporates it into stool.

This increases the volume of the stool, and also makes it softer and easier to pass. Larger stools naturally stimulate the digestive tract to pass the stool onward. Dietary fiber can keep gut bacteria healthy, as they can use some types of fiber as energy sources.

Plant-based dietary fiber is an essential element of a balanced, healthy diet. One very easy way to increase the amount of dietary fiber in your diet is by taking supplements containing soluble fiber, like Mucofalk®.



Other laxatives

Other laxatives are also available – both plant-based and synthetic. These products use some of the same basic mechanisms as natural dietary fiber, just in a more synthetic manner. For example, some laxative products raise the amount of water in stool by preventing water in the digestive system from being absorbed into the body, or by channeling more water from the body into the digestive tract. Other substances directly modify peristalsis, which is the process by which stool is propelled through the digestive tract. Yet other laxatives stimulate the movement and passing of stools by releasing CO_2 gas or acting as a lubricant. While some laxatives are not appropriate for long-term use, products based on soluble fiber – like Mucofalk® – can be taken daily, if recommended by your doctor.

Mucofalk®: the natural support for better digestion

Mucofalk® is plant-based and naturally promotes digestion. It is derived from a plant named *Plantago ovata*, often called psyllium, which is native to the Mediterranean region.

Mucofalk® is manufactured from the husks of *Plantago ovata* seeds to medicinal quality using a special method. Thanks to both their natural properties and the special manufacturing process, psyllium husks are able to absorb much more water than psyllium seeds themselves, making them more effective.



Mucofalk® regulates the digestive process

The natural, long-lasting effects of Mucofalk® are similar to the effects of a healthy, balanced, high-fiber diet. Psyllium husks contain high levels of soluble fiber, which promotes bowel movements by absorbing water into

partially-formed stools. This increases the size of stool while keeping it soft and easy to pass.

It also stimulates the rectum to empty and makes the defecation process easier. Dietary fiber serves as food source for the bacteria in the gut. This

promotes the growth of healthy bacteria in the digestive tract, which are an important part of our immune system and help to keep our bodies healthy.

The natural effects of psyllium are gentle and dependable

Mucofalk® reliably **relieves constipation** without needing to take higher doses, even with long-term use. It is not known to cause habituation.

For people with IBS whose major symptom is constipation,

dietary fiber and fiber products like psyllium are recommended to help regulate digestion.

How and how much Mucofalk® should you take, and how?

People with chronic constipation should take one sachet or one level measuring spoonful of Mucofalk® two to three times per day, while those with IBS with constipation (IBS-C) should take one sachet or one level measuring spoonful two to six times per day.* Take Mucofalk® by dissolving it in

water (at least 150 ml per sachet or measuring spoonful), stirring it, and drinking immediately. You should then drink another glass of liquid. Since some people experience bloating at the beginning of treatment, you can also start with a lower daily dose.

You can find more information and download patient guides at www.mucofalk.de
You can also ask your doctor or pharmacist for additional free print booklets.



Good to know: Keeping a stool diary for several days or weeks can give your doctor a good starting point for treating your constipation.

A 2-week stool diary is found on the following pages or at www.mucofalk.de.

^{*} Please consult the package insert for more details.

Stool diary Week 1	Monday	Tuesday	Wednesday
Date:			
Liquids consumed per day	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters
Physical activities (e.g. walking, hiking)	Yes No	Yes No	Yes No
Number of times Mucofalk® taken	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day
Bowel movement	Yes No	Yes No	Yes No
Consistency	Hard Soft Watery	Hard Soft Watery	Hard Soft Watery
Discomfort	Yes No	Yes No	Yes No
General well-being	○ Good○ Okay○ Poor	○ Good○ Okay○ Poor	○ Good○ Okay○ Poor
You can also downlo			

Thursday	Friday	Saturday	Sunday
Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters
Yes No	Yes No	Yes No	Yes No
1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day
○ Yes ○ No	Yes No	Yes No	Yes No
Hard Soft Watery	Hard Soft Watery	Hard Soft Watery	Hard Soft Watery
Yes No	Yes No	Yes No	Yes No
⊙ Good ⊙ Okay ⊙ Poor	© Good ○ Okay ○ Poor	⊙ Good ⊙ Okay ⊙ Poor	© Good ○ Okay ○ Poor

Stool diary Week 2	Monday	Tuesday	Wednesday
Date:			
Liquids consumed per day	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters
Physical activities (e.g. walking, hiking)	Yes No	Yes No	Yes No
Number of times Mucofalk® taken	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day
Bowel movement	Yes No	Yes No	Yes No
Consistency	Hard Soft Watery	Hard Soft Watery	Hard Soft Watery
Discomfort	Yes No	Yes No	Yes No
General well-being	⊙ Good⊙ Okay⊙ Poor	⊙ Good⊙ Okay⊙ Poor	○ Good○ Okay○ Poor

Thursday	Friday	Saturday	Sunday
Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters	Less than 2 liters More than 2 liters
Yes No	Yes No	Yes No	Yes No
1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day	1 / day 2-3 / day 4-6 / day
○ Yes ○ No	Yes No	Yes No	Yes No
Hard Soft Watery	Hard Soft Watery	Hard Soft Watery	Hard Soft Watery
Yes No	Yes No	Yes No	Yes No
⊙ Good ⊙ Okay ⊙ Poor	© Good ○ Okay ○ Poor	⊙ Good ⊙ Okay ⊙ Poor	© Good ○ Okay ○ Poor

Mucofalk

Digestion. In Balance. Naturally.

Thanks to the gentle power of psyllium husks.

Reliable support for

- Chronic constipation
- Constipation-predominant irritable bowel syndrome
- ✓ Diarrhea of various causes
- Painful bowel movements of various causes, e.g. from hemorrhoids



Pharmacies Only

www.mucofalk.de

Mucofalk® Apple/Orange/Fit Ispaghula husk $3.25\ g$ / $5\ g$ granules. For use in adults and adolescents from 12 years of age. Active ingredient: Ispaghula husk (Plantago ovata seed shells), ground. Contains sucrose. High sodium content. Please read the package leaflet. Therapeutic indications: Persistent

(chronic) Constipation. Conditions in which easier bowel movements with soft stool are desirable, e.g. cracks in the skin of the anal canal canal fissures), haemorrhoids, painful bowel movements following rectal or anal surgery. Supportive treatment in diarrhoea due to various causes. Conditions in which an increased daily fibre intake may be advisable, e.g. as supportive treatment in irritable bowel syndrome in which constipation predominates. Additionally for Mucofalk® Fit: as an adjuvant to diet in hypercholesterolaemia (raised blood fat values). Date of information:

For information on risks and side effects, please read the package leaflet and consult your doctor or pharmacist.



Dr. Falk Pharma GmbH Leinenweberstr. 5 79108 Freiburg | Germany www.drfalkpharma.com