



# Abdominal Pain, Diarrhea, and Constipation

**Many people with cystic fibrosis (CF) have gastrointestinal (GI) disturbances that can affect their quality of life. These may include abdominal pain, diarrhea, and constipation.**

## What Can Cause Abdominal Pain, Diarrhea, and Constipation in CF?

People with CF may have one or more of these symptoms. They may be related to CF or caused by other conditions. Sometimes one problem, like constipation, can cause another, like pain. There are many possible causes of these GI symptoms:

- CF directly affects the GI tract. Most people with CF have poor functioning of the pancreas (known as “pancreatic insufficiency”) and need to take enzymes to properly digest and absorb food, which helps prevent diarrhea, constipation, or pain. However, even if your body makes enough pancreatic enzymes (also known as “pancreatic sufficient”), you can also have these symptoms.
- People with CF often get other GI problems which can cause such symptoms as acid reflux, inflammation of the intestine or pancreas (pancreatitis), gallstones, or a blockage in the stomach or intestines.
- CF-related diabetes can cause abnormal function of the nerves to the GI organs, which then can cause slow emptying of the stomach (gastroparesis) and intestines.
- Some medications can cause GI side effects directly. For example, opioids used to treat pain can worsen constipation. Medications used to treat CF may also lead to problems that cause GI symptoms, such as Small Intestinal Bacterial Overgrowth (SIBO).

High stress, anxiety, or depression can cause or worsen these GI symptoms. Other conditions, like irritable bowel syndrome or an over-active or under-active thyroid (hyperthyroidism or hypothyroidism), can also result in abdominal pain, diarrhea, or constipation.

## What Can I Do to Help?

Describe your symptoms to your CF care team, including how they started, whether they come and go, whether they are worsening, any triggers, and what makes them better. It is also important to communicate the severity of your symptoms, if possible using a scale like “mild,” “moderate,” and “severe.” Also note the quality of the symptoms—how you describe the sensation in words (like “pain” or “discomfort”). Finally, your CF care team will want to know about related problems, like your mood, eating patterns, and any difficulty with doing activities that are important to you.

When symptoms become persistent, there may be self-management strategies that can help you cope:

- If you are having diarrhea or constipation, stay as well-hydrated as you can and try eating smaller and more frequent meals. If you are having trouble continuing to eat, contact your CF team.
- If you are prescribed pancreatic enzymes, carry them with you so you can take them with every meal and snack. Check the bottle to make sure your enzymes are not expired, and store them at room temperature.
- Consider keeping a symptom diary like the one below to see whether your diet and other factors are contributing to your GI symptoms.

- You can try over-the-counter medications for diarrhea or constipation. Probiotics can be tried for either problem. Constipation may be treated with over-the-counter polyethylene glycol (like Miralax®) or senna. If these symptoms do not respond promptly, consult your CF team.
- If stress is high, consider using a self-management approach to help you; your CF care team may be able to offer you training in approaches like relaxation, guided imagery, or progressive muscle relaxation.
- Staying physically active can help ease stress and anxiety, and keep your gastrointestinal tract working well.

## What Can My CF Care Team Do to Help?

Your CF care team may want to order tests to evaluate possible causes of your symptoms and help provide guidance on the most appropriate treatment addressing the underlying disorder. They may prescribe medicines or other treatments, or they may recommend that you see a physician who specializes in the GI problems that people with CF experience.

## What Are Some Medical Treatments?

- If you are taking pancreatic enzymes, your CF team may first try to find the best dose of this medication for you, adjust nutrition, or use a proton pump inhibitor medication (especially for children) to help enzymes work.
- Abdominal pain or diarrhea that persists is sometimes treated with medications, such as certain antidepressants, gabapentin, or a change in antibiotics.
- For constipation that persists after over-the-counter treatments are tried, prescription drugs may be used, such as linaclotide, lubiprostone, plecanatide, or prucalopride.
- Poor glucose control is associated with GI symptoms. If you have CF-related diabetes, your CF team may measure your glucose and adjust your medications.

## When Should I See My CF Care Team?

Consult your team immediately if you experience abrupt changes in your symptoms, such as severe abdominal symptoms with or without fever, vomiting bile or blood, or bloody stool. Occasionally, people with CF develop sudden abdominal pain as a result of a serious problem, like a bowel obstruction. If abdominal pain is worsening, your CF team will want you to get tests in order to identify the cause.

## What Can I Expect if I Use Highly Effective CFTR Modulators?

Your pancreatic enzyme dose may need an adjustment, and changes in your eating habits may contribute to the beneficial effects of CFTR modulators.

- You may experience weight gain. For people with CF, nutrition has an important impact on lung health. If you are concerned about the physical or emotional effects of gaining weight, talk to your CF team.
- Some individuals may notice changes in the movement of food and contents through the stomach and intestines.
- People have reported changes in the way that normal contractions and functions of the stomach and intestines are sensed, which can cause discomfort. If you experience this, nerve moderating agents may be helpful (such as nortriptyline, duloxetine, or gabapentin; consult your provider to see which option works best for you).

## Gut Health Symptom Diary

Use this diary to record your symptoms, activity level, food and beverage intake, mood and other triggers. You can review it with your CF provider.

	<b>MORNING</b> (5 am – 11 am)	<b>AFTERNOON</b> (12 pm – 5 pm)	<b>EVENING</b> (6 pm – 8 pm)	<b>NIGHT</b> (9 pm – 4 am)
Food/beverages consumed				
Bowel habits				
Symptoms				
Medicines				
Exercise				
Mental Wellbeing				

Source: Adapted from <https://sibosurvivor.com/low-fodmap-diet/>