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For most people the passage of liquid stools, or diarrhea, is a symptom that lasts for a couple of days, then resolves itself, typically within one week. These short-term episodes are typically due to infections after consuming contaminated food or drink. The average American has an episode of acute (severe or sudden onset) diarrhea every few years. For other people, diarrhea may be a more chronic/long-term problem, occurring for months to years. In fact, about 5% of the population has reported diarrhea lasting more than a month in any year.

Chronic or recurring diarrhea (loose, watery, or frequent stools) can occur in many different digestive disorders. If you have anything more than mild, short-term diarrhea, you should consult a physician to obtain a diagnosis and receive specific treatment.

### What may cause Chronic Diarrhea?

**Malabsorption:** The digestion and absorption of nutrients are complicated processes. If digestion and

absorption are not working, unabsorbed nutrients may cause extra water to remain in the gastrointestinal (GI) tract causing bowel movements (BMs) to be more liquid. Sometimes malabsorption will happen with just one nutrient (for instance, lactose), and diarrhea will improve if that nutrient is removed from the diet.

#### Gastrointestinal (GI)

tract is the system of connected digestive organs starting with the mouth, proceeding through the esophagus, stomach, intestines, and anus.

Malabsorption is when the body does not fully digest and/or absorb of nutrients from food.

When multiple nutrients are malabsorbed (for example when the pancreas is not functioning at 100% or when the surface of the intestine is damaged), this can lead to weight loss. People also may develop diarrhea if they eat foods that contain poorly absorbed substances. Sorbitol, for example, is a chemical that cannot be absorbed by the body. If too much is consumed in what we eat or drink, it causes more water to remain in the gastrointestinal (GI) tract.

Food intolerances: Some patients have a reaction to certain foods called an immunological reaction that can cause damage to the lining of the small intestine. One example of this is in celiac disease; where the immunological reaction is to a protein called gluten. The gluten causes the absorptive cells in the GI tract to become sick and creates inflammation in the small intestine.

#### **Immunological**

reactions is how your body recognizes and defends itself against bacteria, viruses, and substances that appear foreign and harmful.

**Gluten** is a protein found in wheat, barley, and rye.

Inflammation is a reaction that happens in tissues, which includes redness, swelling, tenderness, pain, and heat.

For most food intolerances, removing the offending food from the diet cures diarrhea. Often a dietitian can help with these elimination diets.

IFFGD's **Dietitian Listing** is a resource that allows you to search for a dietitian that is in your area or treats a specific condition. https://www.iffgd.org/resources/dietitian-listing.html



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**Bile acid malabsorption:** Bile acids are made by the liver and help with fat digestion. Ordinarily, they are recycled by the last part of the small intestine and are sent back to the liver for reuse. If this recycling is interrupted, excess amounts of bile acid may enter the colon. This can cause bile acids to interfere with water and salt absorption and stimulate *motility*, causing diarrhea. Bile acid diarrhea may be the cause of diarrhea in up to 50%

of people originally diagnosed with chronic functional diarrhea. Accurate diagnosis is critical to guide treatment. It is

**Motility** is movement in the body (in this context, usually movement of food through the GI tract).

important to thoroughly discuss all symptoms with a healthcare provider. Doing so helps your provider determine the best testing options, your diagnosis, and how to treat your condition.

#### Small intestinal bacterial overgrowth (SIBO): Normally,

the inside of the small intestine is relatively free of bacteria. If the number of bacteria increases, this is referred to as small intestinal bacterial

Small intestinal bacterial overgrowth (SIBO) occurs when there is an excessive number of bacteria in the small intestine.

overgrowth (SIBO). Antibiotics and probiotics have been used for treatment, but they may provide only temporary benefit if the problem underlying SIBO has not yet been discovered.

#### **Gut Dysbiosis**

The gut microbiota is the made up of bacteria, viruses & fungi in the gut. It helps with digestion, maintaining the immune system, and

**Gut Dysbiosis** is when the diversity of bacteria in the digestive system is abnormal.

protecting against disease. The diversity of the gut microbiome is essential for a healthy digestive system.



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When this diversity is disturbed, intestinal function may be affected, and diarrhea may result.

Inflammatory bowel disease (IBD): Inflammation of the lining of the intestine may reduce absorption of water from the intestine and cause diarrhea. In addition to some chronic infections, such as tuberculosis or amebiasis (disease caused by a parasite). IBD includes Crohn's disease, ulcerative colitis, and microscopic colitis. Treatment aimed at reducing inflammation can help diarrhea caused by IBD.

**Drug side-effects:** Many drugs cause diarrhea as a side-effect. It is important to review all the medicines that you are taking with your healthcare provider (both prescription drugs and over-the-counter (OTC) medications or supplements). Some examples of medications commonly taken that may cause diarrhea as a side-effect are antibiotics, antacids, antidepressants, and proton pump inhibitors (PPIs).

**Previous surgeries or radiation treatments:** Operations on the stomach, intestines or gallbladder, and radiation therapy directed at the abdomen or pelvis can cause chronic diarrhea. Be sure to discuss your medical history with your healthcare provider, even if you don't think that it might relate to having diarrhea.

**Fecal incontinence:** Accidental passage of stool from the anus (fecal incontinence) is not necessarily related to the severity of diarrhea. In most cases, fecal incontinence is due to problems with the anal sphincter or pelvic floor muscles and is treated differently. Be sure to let your healthcare provider know if you are passing stool accidentally.

Other illnesses: Diarrhea may be part of other diseases, particularly diseases affecting the *endocrine system*, such as the thyroid, adrenal glands, and pancreas. These usually present with other symptoms in addition to diarrhea, so be sure to mention all your symptoms to your healthcare provider.

The **endocrine system** is a network of glands that secrete chemicals called hormones to help your body function properly.

Inflammatory bowel disease (IBD) is a chronic GI condition of ongoing inflammation of all or part of the digestive tract.



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### Irritable bowel syndrome (IBS):

Irritable bowel syndrome (IBS) is a disorder characterized by two key elements:

 an abdominal component generally described as pain/discomfort and  alterations in bowel habits including changes in stool texture and/or frequency.

Treatments for IBS might target abdominal pain as well as diarrhea. If treatments fail to improve symptoms, further tests may be needed.

### What to expect from a healthcare provider in diagnosing chronic diarrhea:

As you can see from the above, there are many reasons why you might be experiencing chronic or recurring diarrhea (loose, watery, or frequent stools). They can occur in many different digestive disorders and as a side effect of medications, a symptom of another disease or even caused by a previous surgery. If you have anything more than mild, short-term diarrhea, you should consult a physician to obtain a diagnosis and receive specific treatment. It is important for your healthcare provider to know about the onset of your diarrhea, its impact on your life, any previous testing you have been through and all treatments you have tried (both prescription and OTC). It is also important to discuss all medication you are current taking, and any other medical condition you have been diagnosed with. Along with a thorough discussion on these items, your healthcare provider may want to do a physical examination, which can sometimes give important clues to the cause of diarrhea.

In addition, the following may be discussed:

**Diet history:** Be sure to mention any associations that you have noticed between food that you eat and symptoms, past dietary treatments that you have tried, and whether your weight has gone up, down, or stayed the same. It may be helpful to keep a food and symptom diary to help identify which foods, drinks, and supplements may be leading to or worsening your diarrhea.

**Related Fact Sheets from IFFGD 147** –Personal Daily Diary

Laboratory tests: Your healthcare provider may order blood and stool tests. These can include a complete blood count, serum chemistry tests, a screening test for celiac disease, and thyroid tests. Stool tests often include tests for infection or inflammation.

**Imaging:** Your healthcare provider may decide to do a type of testing called imaging to see your abdominal organs. This is done with a *CT or MRI scan* of the abdomen and helps your healthcare provider see your liver, pancreas, stomach, small intestine and colon.

**Computed tomography (CT) scan** is a test that uses a series of X-rays and a computer to produce a 3D image of the inside of your body.

Magnetic resonance imaging (MRI) is a test that uses a large magnet and radio waves to look inside your body.



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**Endoscopy:** Your healthcare provider may want to look inside your stomach, intestine and colon with upper gastrointestinal *endoscopy* and *colonoscopy*. These procedures are used to inspect the lining and to obtain biopsies (samples) from the wall of your stomach and intestine for analysis.

Colonoscopy may also be recommended if you are between 45 to 75 years old for colon cancer screening.

An **endoscopy** is a simple test that does not involve cutting into the body. A physician using a long flexible tube called an endoscope. It is placed into the mouth, down the esophagus, and into the stomach and beginning of the small intestine. This tube has a camera and light on the end. This tool allows your physician to see inside your GI tract during the test.

A **colonoscopy** is a similar test that examines the lower portion of the GI tract. This flexible tube is inserted through the anus, into the rectum and large intestine.

#### **About IFFGD**

The International Foundation for Gastrointestinal Disorders (IFFGD) is a 501(c)(3) nonprofit education and research organization. We work to promote awareness, scientific advancement, and improved care for people affected by chronic digestive conditions. Our mission is to inform, assist, and support people affected by gastrointestinal disorders. Founded in 1991, we rely on donors to carry out our mission. Visit our website at: www.iffgd.org.

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