

MANAGEMENT OF CONSTIPATION

CONSTIPATION OVERVIEW — Constipation refers to a change in bowel habits, but it has varied meanings. Stools may be too hard or too small, difficult to pass, or infrequent (less than three times per week). People with constipation may also notice a frequent need to strain and a sense that the bowels are not empty.

Constipation is a very common problem. Each year more than 2.5 million Americans visit their healthcare provider for relief from this problem. Many factors can contribute to or cause constipation, although in most people, no single cause can be found. In general, constipation occurs more frequently as you get older.

Constipation is **EXTREMELY COMMON** after surgery, and is usually caused by opiate pain medications that are usually given during the procedure (such as morphine), as well as pain pills patients may need to take at home after surgery (such as oxycodone, hydrocodone, or tramadol). It is **EXTREMELY IMPORTANT** that patients take stool softeners after surgery to prevent constipation. If you become constipated after surgery, we recommend you take over the counter Miralax until you have a bowel movement. It is safe to take several doses of this per day. Other over the counter medications such as milk of magnesia, bisacodyl, and senna also work well. Because constipation is such a common problem after surgery, and because of the opioid abuse crisis in the United States, and other risks of opiates, we recommend that you use non-opiate pain medications (Tylenol / Ibuprofen / Aleve) after surgery, instead of opiates, when possible. Talk to your providers with questions.

CONSTIPATION DIAGNOSIS — Constipation can usually be diagnosed based upon your symptoms and a physical examination. You should also mention any medications you take regularly since some medications can cause constipation.

You may need a rectal examination as part of a physical examination. A rectal examination involves inserting a gloved finger inside the rectum to feel for any lumps or abnormalities. This test can also check for blood in the stool.

Further testing may be ordered in some situations, for example, if you have had a recent change in bowel habits, blood in the stool, weight loss, or a family history of colon cancer. Testing may include blood tests, x-rays, sigmoidoscopy, colonoscopy, or more specialized testing if needed.

When to seek help — Most people can treat constipation at home, without seeing a healthcare provider. However, you should speak with a healthcare provider if the problem:

- Is new (i.e., represents a change in your normal pattern)
- Lasts longer than three weeks
- Is severe
- Is associated with any other concerning features such as blood on the toilet paper, weight loss, fevers, or weakness

CONSTIPATION TREATMENT — Treatment for constipation includes changing some behaviors, eating foods high in fiber, and using laxatives or enemas if needed.

You can try these treatments at home, before seeing a healthcare provider. However, if you do not have a bowel movement within a few days, you should call your healthcare provider for further assistance.

Behavior changes — The bowels are most active following meals, and this is often the time when stools will pass most readily. If you ignore your body's signals to have a bowel movement, the signals become weaker and weaker over time.

By paying close attention to these signals, you may have an easier time moving your bowels. Drinking a caffeine-containing beverage in the morning may also be helpful.

Increase fiber — Increasing fiber in your diet may reduce or eliminate constipation. The recommended amount of dietary fiber is 20 to 35 grams of fiber per day. By reading the product information panel on the side of the package, you can determine the number of grams of fiber per serving

Many fruits and vegetables can be particularly helpful in preventing and treating constipation (See chart below). This is especially true of citrus fruits, prunes, and prune juice. Some breakfast cereals are also an excellent source of dietary fiber.

Fiber side effects — Consuming large amounts of fiber can cause abdominal bloating or gas; this can be minimized by starting with a small amount and slowly increasing until stools become softer and more frequent.

LAXATIVES — If behavior changes and increasing fiber does not relieve your constipation, you may try taking a laxative. A variety of laxatives are available for treating constipation. The choice between them is based upon how they work, how safe the treatment is, and your healthcare provider's preferences.

In general, laxatives can be categorized into the following groups:

Bulk forming laxatives — These include natural fiber and commercial fiber preparations such as:

- Psyllium (Konsyl; Metamucil; Perdiem)
- Methylcellulose (Citrucel)
- Calcium polycarbophil (FiberCon; Fiber-Lax; Mitrolan)
- Wheat dextrin (Benefiber)

You should increase the dose of fiber supplements slowly to prevent gas and cramping, and you should always take the supplement with plenty of fluid.

Hyperosmolar laxatives — Hyperosmolar laxatives include:

- Polyethylene glycol (MiraLAX, GlycoLax)
- Lactulose
- Sorbitol

Polyethylene glycol is generally preferred since it does not cause gas or bloating and is available in the United States without a prescription. Lactulose and sorbitol can produce gas and bloating. Sorbitol works as well as lactulose and is much less expensive.

Saline laxatives — Saline laxatives such as magnesium hydroxide (Milk of Magnesia) and magnesium citrate (Evac-Q-Mag) act similarly to the hyperosmolar laxatives.

Stimulant laxatives — Stimulant laxatives include senna (e.g., Black Draught, Ex-Lax, Fletcher's, Castoria, Senokot) and bisacodyl (eg, Correctol, Doxidan, Dulcolax).

Some people overuse stimulant laxatives. Taking stimulant laxatives regularly or in large amounts can cause side effects, including low potassium levels. Thus, you should take these drugs carefully if you must use them regularly.

However, there is no convincing evidence that using stimulant laxatives regularly damages the colon, and they do not increase the risk for colorectal cancer or other tumors.

New treatments — Lubiprostone (Amitiza), linaclotide (Linzess), plecanatide (Trulance), plecanatide (Motegrity), and tenapanor (Ibsrela) are prescription medications that treat severe constipation. They are expensive, but may be recommended if you do not respond to other treatments.

Pills, suppositories, or enemas? — Laxatives are available as pills that you take by mouth or as suppositories or enemas that you insert into the rectum. In general, suppositories and enemas work more quickly compared to pills, but many people do not like using them.

Healthcare providers occasionally recommend prepackaged enema kits containing sodium phosphate / biphosphate (Fleet) if you have not responded to other treatments. These are not recommended if you have problems with your heart or kidneys, and should not be used more than once unless directed by your healthcare provider.

Constipation treatments to avoid

- Emollients – Emollient laxatives, principally mineral oil, soften stools by moisturizing them. However, other treatments have fewer risks and equal benefit.
- Natural products – A wide variety of natural products are advertised for constipation. Some of them contain the active ingredients found in commercially available laxatives. However, their dose and purity may not be carefully controlled. Thus, these products are not generally recommended.

A variety of home-made enema preparations have been used throughout the years, such as soapsuds, hydrogen peroxide, and household detergents. These can be extremely irritating to the lining of the intestine and should be avoided.

Amount of fiber in different foods

Food	Serving	Grams of fiber
Fruits		
Apple (with skin)	1 medium apple	4.4
Banana	1 medium banana	3.1
Oranges	1 orange	3.1
Prunes	1 cup, pitted	12.4
Juices		
Apple, unsweetened, with added ascorbic acid	1 cup	0.5
Grapefruit, white, canned, sweetened	1 cup	0.2
Grape, unsweetened, with added ascorbic acid	1 cup	0.5
Orange	1 cup	0.7
Vegetables		
Cooked		
▪Green beans	1 cup	4.0
▪Carrots	1/2 cup sliced	2.3
▪Peas	1 cup	8.8
▪Potato (baked, with skin)	1 medium potato	3.8
Raw		
▪Cucumber (with peel)	1 cucumber	1.5
▪Lettuce	1 cup shredded	0.5
▪Tomato	1 medium tomato	1.5
▪Spinach	1 cup	0.7
Legumes		
▪Baked beans, canned, no salt added	1 cup	13.9
▪Kidney beans, canned	1 cup	13.6

▪Lima beans, canned	1 cup	11.6
▪Lentils, boiled	1 cup	15.6
Breads, pastas, flours		
Bran muffins	1 medium muffin	5.2
Oatmeal, cooked	1 cup	4.0
White bread	1 slice	0.6
Whole-wheat bread	1 slice	1.9
Pasta and rice, cooked		
▪Macaroni	1 cup	2.5
▪Rice, brown	1 cup	3.5
▪Rice, white	1 cup	0.6
▪Spaghetti (regular)	1 cup	2.5
Nuts		
Almonds	1/2 cup	8.7
Peanuts	1/2 cup	7.9

To learn how much fiber and other nutrients are in different foods, visit the United States Department of Agriculture (USDA) FoodData Central website.

Data from: USDA FoodData Central. Available at: <https://fdc.nal.usda.gov/> (Accessed on October 11, 2019).