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# Patient information: Constipation in adults

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#### **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. (See <u>"Etiology and evaluation of chronic constipation in adults"</u>.)

#### **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. (See <u>"Patient information: Flexible sigmoidoscopy"</u> and <u>"Patient information: Colonoscopy"</u>.)

**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 (ie, 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. (See "Management of chronic constipation in adults".)

**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 (<u>figure 1</u>).

Many fruits and vegetables can be particularly helpful in preventing and treating constipation (table 1). This is especially true of citrus fruits, prunes, and prune juice. Some breakfast cereals are also an excellent source of dietary fiber. (See "Patient information: High fiber diet".)

**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 (eg, 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®) is a prescription medication that treats severe constipation. It is expensive compared to other agents. However, it 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.

#### BIOFEEDBACK FOR CONSTIPATION

Biofeedback is a behavioral approach that may help some people with severe chronic constipation who involuntarily squeeze (rather than relax) their muscles while having a bowel movement [1].

#### WHERE TO GET MORE INFORMATION

Your healthcare provider is the best source of information for questions and concerns related to your medical problem.

This article will be updated as needed every four months on our web site (<a href="https://www.uptodate.com/patients">www.uptodate.com/patients</a>).

Related topics for patients, as well as selected articles written for healthcare professionals, are also available. Some of the most relevant are listed below.

#### **Patient Level Information:**

Patient information: Flexible sigmoidoscopy

<u>Patient information: Colonoscopy</u> <u>Patient information: High fiber diet</u>

## **Professional Level Information:**

Etiology and evaluation of chronic constipation in adults

Motility testing: When does it help?

Management of chronic constipation in adults

Treatment of irritable bowel syndrome

The following organizations also provide reliable health information.

National Library of Medicine

(www.nlm.nih.gov/medlineplus/constipation.html, available in Spanish)

National Institute on Diabetes and Digestive and Kidney Diseases

(http://digestive.niddk.nih.gov/ddiseases/pubs/constipation/)

The American Gastroenterological Association

(http://www.gastro.org/patient-center/digestive-conditions/constipation)

The American College of Gastroenterology

(www.acg.gi.org/patients/gihealth/constipation.asp)

#### [1-4]

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#### References

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- 2. Müller-Lissner SA, Kamm MA, Scarpignato C, Wald A. Myths and misconceptions about chronic constipation. Am J Gastroenterol 2005; 100:232.
- 3. Brandt LJ, Prather CM, Quigley EM, et al. Systematic review on the management of chronic constipation in North America. Am J Gastroenterol 2005; 100 Suppl 1:S5.
- 4. Wald A. Appropriate use of laxatives in the management of constipation. Curr Gastroenterol Rep 2007; 9:410.

## **GRAPHICS**

## **Nutrition label**

Nutrition			
Serving Size 1 Cup	(148g/5.3oz)		
Amount Per Serving			
Calories 100 Calori	ies from Fat 0		
9	% Daily Value*		
Total Fat 0g	0%		
Saturated Fat 0g	0%		
Cholesterol 0mg	0%		
Sodium 0mg	0%		
Potassium 720mg	21%		
Total Carbohydrate 26g 9%			
Dietary Fiber 3g	12%		
Sugars 3g			
Protein 4g			
Vitamin A 0%   ◆ Vitamin C 45%			
Calcium 2% • Iron	6%		
Thiamin 8% • Riboflavin 2%			
Niacin 8% • Vitar	nin B <sub>6</sub> 10%		
Folate 6% • Phos	sphorous 6%		
Zinc 2% • Mag	nesium 6%		
*Percent Daily Values are based on a 2,000 calorie diet.			

Dietary fiber content = 3 grams

This is an example of a nutrition label. To know how much fiber is in a food, look at the line that reads "dietary fiber." This product has 3 grams of fiber in each serving. %: percent.

## 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, w/ added ascorbic acid	1 cup	0.5		
Grapefruit, white, canned, sweetened	1 cup	0.2		
Grape, unsweetened, w/added ascorbic acid	1 cup	0.5		
Orange	1 cup	0.7		
Vegetables				
Cooked				
Green beans	1 cup	4.0		
Carrots	.5 cups 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 cup	17.4
Peanuts	1 cup	12.4

To learn how much fiber and other nutrients are in different foods, visit the United States Department of Agriculture (USDA) National Nutrient Database at: http://www.nal.usda.gov/fnic/foodcomp/search/. Created using data from the USDA National Nutrient Database for Standard Reference. Available at http://www.nal.usda.gov/fnic/foodcomp/search/.

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