

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

## CONSTIPATION

**WHAT IS IT?**

Constipation occurs when a person does not have regular bowel movements, resulting in stools that are hard or too small, difficult to pass, or infrequent (less than 3 times per week). Constipation usually occurs when too much water is absorbed from the stool because of its delayed passage through the colon.

Constipation can result from a change in diet, exercise pattern, or daily routine. Certain medications (iron, opiate medication, etc.) and aging can also increase constipation. Usually multiple factors are involved.

**WHAT ARE OTHER SYMPTOMS?**

Constipation can cause a feeling of general discomfort and abdominal fullness. Sometimes chronic constipation can lead to hemorrhoids. This is because increased pressure from forcing out hard stools causes the blood vessels in the rectum to become enlarged and inflamed. Please refer to our patient handout on hemorrhoids for more information.

**WHAT STEPS CAN I TAKE TO DECREASE CONSTIPATION?**

Dietary fiber and bulk-forming laxatives (fiber supplements) are the most physiologic and effective ways to treat constipation. Fiber helps the stool retain water and promote its movement through the colon.

**■ INCREASING FIBER**

The goal for fiber intake should be 20-35 grams/day. Refer to the nutrition label on food packages for information on fiber content.

- ❖ Start by increasing fresh fruits and vegetables, beans, and whole grains in your diet.
- ❖ In addition to consuming high fiber foods, consider adding raw bran (2-6 tbsp per meal) followed by a glass of water or another beverage, to reach your fiber goal.
- ❖ If needed, add a fiber supplement (also known as bulk-forming laxatives). Supplements should be taken with at least 8 ounces of fluid.
- ❖ Increase your fiber intake gradually every 3-5 days to avoid gas and bloating.

**Fiber naturally found in foods:**

- ❖ Breads/Cereals: whole grain wheat, bran, or granola breads; whole grain cereals such as Fiber One, Bran Flakes, Raisin Bran, and Shredded Wheat; oatmeal, rolled oats, brown rice, granola, and unbuttered popcorn.
- ❖ Vegetables: raw spinach, lettuce, tomatoes, celery sticks, green peppers; cooked peas, broccoli, brussel sprouts, carrots, zucchini, spinach, string beans, squash, cabbage, sweet potatoes, cauliflower; legumes (beans and lentils).
- ❖ Fruits: fresh fruits with skins such as apples and pears; citrus, prunes, prune juice, dates, figs, raisins, and applesauce. Prunes also contain a mild colonic stimulant.
- ❖ Nuts: peanuts, almonds

**Fiber supplements (Bulk-forming laxatives):**

- ❖ Both natural fiber and commercial fiber preparations are available in a variety of forms. They work by adding bulk and water to your stools so they can pass more easily through the intestines.
- ❖ Examples include psyllium (Metamucil, Konsyl), calcium polycarbophil (FiberCon), methylcellulose (Citrucel), and wheat dextrin (Benefiber). They are safe to use and need to be taken on a daily basis in order to work.
- ❖ Take these products with at least 8 ounces of fluid. Increase the dose gradually every 3-5 days to avoid bloating and cramping.

**■ OTHER LIFESTYLE CHANGES**

- ❖ Stay hydrated. 6-8 glasses of water per day are recommended. Alcohol and excessive caffeine are not considered to be “good” fluid intake as they dehydrate the body. However, drinking a caffeinated beverage first thing in the morning can help stimulate a bowel movement.
- ❖ Limit foods that are low in fiber and high in fat and sugar, such as ice cream, cheese, and processed foods.
- ❖ Obey the urge. Holding a bowel movement will only cause stool to build up. Plus, if you ignore your body’s signals to have a bowel movement, the signals will become weaker over time.

- ❖ Try to have a bowel movement after meals because colonic motility naturally increases after eating. An ideal time is after breakfast because colonic motility is highest in the morning. Take your time, and don't rush.
- ❖ Exercise most days of the week to keep your digestive system healthy. Physical activity increases muscle activity in the intestines so stool doesn't sit around and harden.

### **WHAT MEDICATIONS ARE AVAILABLE?**

If you are not responding to an increase in fiber and lifestyle changes, other laxative options are available:

- **Stool softeners** work by making it easier for water within the colon to enter the stool.
  - ❖ Effectiveness: Tends to be less effective than other laxatives. May take a week or more to work. A review of studies concluded that psyllium (Metamucil) was better at improving stool frequency.
  - ❖ Side effects & safety: Generally safe and has few side effects.
  - ❖ Example: Docusate (Colace) 100mg 2 pills taken once a day.
- **Hyperosmolar laxatives** are poorly absorbed or unabsorbable compounds that soften stool by retaining water that is already in the colon.
  - ❖ Effectiveness: Good results but generally take 1-2 days to work.
  - ❖ Side effects & safety: Can cause gas and bloating; patients with kidney or heart problems should avoid regular use of these products.
  - ❖ Examples: Polyethylene glycol (MiraLax), lactulose, and sorbitol. MiraLax is preferred because of less gas and bloating.
    - The typical starting dose for MiraLax is 17gm of powder dissolved in 8oz of water once daily; titrate the dose up or down (to a maximum of 34gm daily) as needed.
    - If you are not responding to MiraLax, try decreasing the dose to 8.5 to 17gm daily and adding a stimulant laxative every 2-3 days as needed.
- **Stimulant laxatives** cause the muscles of the intestine to move contents along more rapidly and increase the amount of water in the stool.
  - ❖ Effectiveness: Very effective. Stimulant laxatives taken by mouth usually work in 6-8 hours.
  - ❖ Side effects & safety: Can cause intestinal cramping. Due to the risk of dehydration and electrolyte abnormalities, regular use of these products should be avoided.
  - ❖ Examples: Senna (Ex-Lax or Senokot), bisacodyl (Dulcolax or Correctol), and laxatives that contain cascara (castor oil).
- **Saline laxatives** contain non-absorbable ions such as magnesium, sulfate, phosphate, and citrate. These ions remain in the colon and cause water to be drawn into the colon. Magnesium may also have mild stimulatory effects on the colonic muscles.
  - ❖ Effectiveness: Potent and act within a few hours.
  - ❖ Side effects & safety: Diarrhea and cramping are possible. These products should not be used on a regular basis due to the risk of dehydration and electrolyte imbalance. Individuals with impaired kidney function should avoid use of magnesium-containing laxatives.
  - ❖ Examples: Milk of Magnesia (magnesium hydroxide) is the most commonly used and mildest of the saline laxatives. Other examples include magnesium citrate and sodium phosphate.
- **Suppositories and enemas** can be considered in patients with severe constipation who are not responding to the above measures. They generally work faster than treatments taken by mouth.
  - ❖ Suppositories can help liquefy stool in patients who are obstructed. They usually work in 15-60 minutes. Examples include glycerin or bisacodyl suppositories.
  - ❖ Enemas are usually not necessary but can be helpful with impaction, which is hardening of stool in the rectum. Disimpaction should be attempted manually first. If disimpaction is not successful, then an enema may be considered. Defecation usually occurs between a few minutes to one hour after insertion. No more than one enema should be used without the advice of your medical provider. Enemas should not be used in patients with heart or kidney problems.
- **Other treatments** requiring a specialist referral may be necessary in patients with severe constipation resistant to usual treatment options.

### **SEEK MEDICAL CARE IF YOU HAVE ANY OF THE FOLLOWING:**

- ❖ Blood in your stool.
- ❖ Abdominal pain.
- ❖ Severe pain with bowel movements.
- ❖ Unexpected weight loss.
- ❖ Constipation for 3 weeks or more, despite increasing fiber and making lifestyle changes.

**RECOMMENDED WEBSITES:** [www.mayoclinic.org](http://www.mayoclinic.org), [patients.gi.org](http://patients.gi.org)