

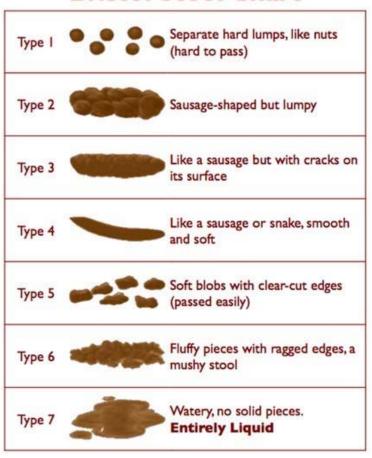
Constipation

What is constipation?

Constipation is a condition in which a person has uncomfortable or infrequent bowel movements. Generally, a person is considered to be constipated when bowel movements result in passage of small amounts of hard, dry stool, usually fewer than three times a week.

Ideally, patients should have soft bowel movements each day and should resemble Type 4 on the Bristol Stool Chart.

Bristol Stool Chart





What causes constipation?

Hard, dry stools are the result of the colon absorbing too much water. Normally, as food moves through the colon (also known as the large intestine) the colon absorbs water while forming stool (waste products). Muscle contractions then push the stool toward the rectum, and, by the time the stool reaches the rectum, most of the water has been absorbed, making the stool solid.

When the colon's muscle contractions are slow or sluggish, the stool moves through the colon too slowly, resulting in too much water being absorbed. Additionally, if a child is dehydrated more water will be taken from the colon to provide water to the vital organs of the water, resulting in harder stool. Some of the most common causes of constipation include:

- Medications
- Lack of exercise
- Not enough liquids
- Not enough fiber in the diet
- Irritable bowel syndrome
- Ignoring the urge to have a bowel movement
- Changes in habits or lifestyle
- Problems with intestinal function

What are the symptoms of constipation?

Although each child may experience constipation differently, symptoms can include:

- Difficult and painful bowel movements
- Small "ball like" stool
- Bowel movements fewer than three times a week



- Feeling bloated or uncomfortable
- Feeling sluggish
- Abdominal pain, frequently characterized on the lower left side

The symptoms of constipation may resemble other medical conditions or problems. Always consult the child's physician for a diagnosis.

How is constipation diagnosed?

The child's physician will look at the child's entire medical history, as well as the duration and severity of the constipation. The physician will also take into account the patient's age and whether there is blood in the stool, recent changes in bowel habits or weight loss. Some patients may also need an abdominal X-ray so that the physician can see the extent of the constipation inside the patient's body.

Why is it important to treat constipation?

Constipation is much more than not being able to "go." Eliminating a child's constipation may also:

- Reduce the child's urinary tract infections, as about 10% of children with constipation have recurrent urinary tract infections.
- Reduce abdominal discomfort.
- Reduce episodes of incontinence. Constipation occupies a large amount of space in the abdomen, which often leads to dysfunction of the bladder. This can cause incontinence, urgency of urination, frequency of urination or a sensation of having to urinate when there is little or no urine to urinate.
- Reduce the amount of daytime urine accidents, as one-third of constipated children experience daytime incontinence (urine accidents).
- Improve the child's vesicoureteral reflux, as constipated children with reflux are more likely to have breakthrough infections.



• Decrease a child's stool accidents and stool leaking. Often stool accidents (known as encopresis) is actually a sign of constipation. Families should make an appointment with their child's doctor to get help determining if the child's diarrhea may actually be stool leakage due to constipation.

In addition, children who have chronic constipation are at risk for the following:

- Complications such as hemorrhoids, which occur by straining to have a bowel movement or anal fissures (tears in the skin around the anus), which occur when hard stool stretches the sphincter muscle. This can result in rectal bleeding.
- Rectal prolapse in which a small amount of intestinal lining pushes out from the anal opening.
- Fecal impaction, which takes place when the hard stool packs the intestine and rectum so tightly that the normal pushing action of the colon is not enough to expel the stool.
- Long-term constipation can also cause diverticulitis as an adult.

How is constipation treated?

Specific treatment for constipation is determined by the child's physician based on:

- The child's age, overall health and medical history.
- Extent of the constipation.
- Any other medical conditions or medications the child may be taking.

Treatments may include the following:

Polyethylene glycol 3350 (Miralax®)

This is an osmotic laxative that is very well tolerated and effective in children. It has limited side effects that can include gas, nausea, vomiting, diarrhea and abdominal pain. A child should take Miralax® once a day according to the instructions on the packaging or according to the doctor's instructions. The dose should help the child to have one to two



soft stools each day without diarrhea.

Increasing water intake

An increase in water will help soften stools naturally.

Learn more about how much water a child should drink each day.

Increasing fiber intake

An increase in fiber while increasing water can help reduce constipation in some children. This can be done by increasing fruit (especially dried fruit mangos or raisins) and vegetable intake, as well as through fortified foods like Fiber One® cereal or a fiber powder. It is very important to increase water and fiber—not just fiber. Increasing fiber without increasing water can make constipation worse.

How much fiber should my child eat?

Caregivers can use this equation to determine how much fiber their child should be eating:

The Child's Age + 5 = the amount of grams of fiber the child should eat each day.

(Example: A child who is 5 years old should eat 10 grams per day.)

Daily toilet-sitting time

Children who are constipated should be placed on the toilet about 15 to 30 minutes after a meal for about five minutes or longer. This is the time period that the normal gastrocolic reflex usually stimulates the bowels to move after eating. If the child's feet do not reach the ground while sitting on the toilet, place a stool or other object under their feet for support.

What are good fiber sources?

There are a variety of foods that can be great sources of fiber in a child's diet:

Fiber-enriched cereals



- Whole grain items
- Whole wheat items (such as whole wheat bread)
- Fiber rich granola bars or cereals
- Oats
- Beans
- Vegetables, especially green leafy vegetables
- Fruit, especially apples, raisins, pears, prunes and figs