

## Understanding Chronic Constipation in Your Child

Chronic constipation is one of the most common ailments of the intestinal tract in children. Yet, many parents and children are not well-informed about why it happens, how to treat it, and what problems may arise if the condition is untreated. To help your understanding of chronic constipation, here are some answers to questions parents frequently ask about chronic constipation. Every child is different and each raises specific questions. We hope after reading these questions you will add to your own to the list and discuss them with us.

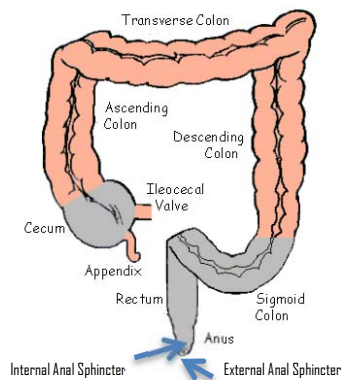
### What is a normal bowel habit?

Normal bowel habits vary tremendously and may range from three bowel movements per day to painless passage of one normal bowel movement 3-4 per week. A child or adult is usually considered to have severe chronic constipation if he regularly has large painful stools.

### What controls defecation?

Defecation is a complex business that depends on the successful interaction of learned and involuntary behavior. The diagram below of the normal human colon indicates some of the involved parts. The rectum, the lowest part of the bowel, collects fecal material as it is formed and passed on from the upper colon. The fecal material is prevented from leaking out of the rectum by the action of two muscles – the internal anal sphincter and the external anal sphincter (the external sphincter is the muscle you can voluntarily squeeze shut when attempting not to defecate).

Under normal conditions these sphincters are closed, but when stool enters the rectum, the internal sphincter relaxes. There is no control over this relaxation. Stool then presses on the external sphincter, creating the urge to defecate. During defecation, both sphincters relax and stool is evacuated both by muscle activity in the colon and voluntary forceful “bearing down.” If one does not wish to defecate, one forcefully contracts the external sphincter, pushing stool back up into the colon away from the sphincters, and the urge to defecate disappears.



### Why and how does a child develop chronic constipation?

The “how” part of the questions is easy; the “why” is complex. If a child repeatedly resists the urge to defecate and withholds stool in the rectum, a large mass of stool may accumulate. This mass becomes less easy to pass as

it becomes larger and more dried out. One of two things may then occur. The child may eventually be unable to resist the urge to defecate and with tremendous effort may pass a huge stool, thus relieving the rectal pressure until another fecal mass accumulates. He may, however be unable or unwilling to pass the stool regardless of its size. His rectal muscles and the external sphincter become fatigued with the effort of retaining stool and in time partially relax. Liquid fecal material from high in the colon trickles down around the solid obstruction in the rectum, and small amounts leak uncontrollably through the anus. The child has no sensation of the passage of stool and no control over this action, which is called fecal soiling or encopresis. This pattern of fecal retention, constipation, and soiling may result from a number of causes:

1. Defecation may be painful because of a crack or fissure in the anus, a very common problem in children and one made worse every time the child passes a large stool.
2. A child who has a brief illness with poor food intake, fever, and no physical activity often develops constipation that may persist after the acute illness passes.
3. Girls and boys may be very fussy about using bathrooms other than those at home and may become constipated by refusing to defecate in school toilets.
4. Some children, because of emotional problems or inappropriate attempts at toilet training, will voluntarily withhold stool until the problem of fecal soiling results.
5. Some children with muscle disease or neurologic disorders may be constipated.
6. Finally, in a large group of constipated children no cause is found.

Whatever primary cause, once the pattern is established the problem perpetuates itself with stool retention leading to dislike or inability to defecate. That leads in turn to more voluntary withholding of stool.

### Is constipation harmful?

Fecal material is a normal inhabitant of the colon and is not poisonous to the body. Constipation is often thought to cause a variety of symptoms, including headache, bad breath, hyperactivity, and poor school performance. There is no proof of this. Occasionally, children who have a huge fecal collection in the colon will be tired and somewhat irritable with poor appetite or abdominal pain. These symptoms usually pass with relief of constipation. The colon will not rupture even with huge fecal masses, but some real complication may result. The large fecal mass may press on the urinary bladder and the ureters (the tubes that bring urine from the kidneys to the bladder), causing obstruction or infection in the bladder or kidneys. Occasionally, the hard stool may irritate the lining of the colon until a small ulcer is formed. The ulcer may bleed, and small amounts of bright red blood may be noted in bowel movements or on underwear.

## How is constipation treated?

Many different ways of treating constipation are used. We will discuss with you the specific details for your child. In general, the program prescribed will attempt to help your child retrain his bowel, which has become somewhat stretched out and inefficient because of chronic stool retention.

1. First, the collection of feces in the colon is removed. This may require laxatives by mouth or suppositories by rectum. This procedure should need to be done only once, but is necessary before bowel training can take place.
2. When the colon is empty, steps will be taken to ensure easy passage of stool. These include giving a stool softener or mild laxative, altering the diet to include more bran, encouraging your child to sit on the toilet at regular times each day to attempt to defecate, giving him adequate time to defecate, and encouraging regular exercise.

Most commonly, we recommend MiraLAX® in sufficient quantity to produce 1 to 2 soft stools per day. During this period of retraining, it is necessary to keep the colon as empty as possible so it can regain some muscle tone and prevent an accumulation of stool that would lead to soiling again.

Your doctor may recommend other treatments, such as mineral oil 1 to 4 tablespoons per day with a stool softener, such as Citracal®, as an alternative to MiraLAX®.

This phase of treatment may last **6 to 12 months**. During this time, any physical or emotional problems that may have given rise to chronic constipation in the first place will be discussed and dealt with.

3. After this intensive retraining period, a gradual reduction in medication will be attempted. In many children, retraining will have been so successful that medications may be stopped altogether.