

Childhood Constipation

What Is Constipation?

Constipation is a very common problem in children – it means a build-up of stool (bowel movements, BMs, poop) in the bowels with passage of stool that is usually dried, hard, and large. This can cause decreased frequency in stooling, pain with passing stools, straining, and distress. Sometimes, even though your child is having a bowel movement every day, your child may still be experiencing constipation! While constipation is often an embarrassing problem, it happens to most children at some point, and it is rarely caused by a serious condition.

Common signs include:

- Stomach pain or cramps
- Large stool that clogs the toilet (sometimes needing a plunger)
- Stools that are type 1, 2, or 3 on the Bristol Stool Chart
- Painful passage of stool
- Increased straining or pushing to pass stool
- Decreased frequency of stool
- Difficulties passing urine (going pee), or needing to urinate often
- Blood on top of stool or on toilet paper with wiping
- Leakage of stool into underwear
- Behavioural problems, including fear of/avoiding going to the toilet, poor appetite, and crankiness

Constipation - Truth or False?

o "It is a psychological problem."

This is **FALSE**: a well-defined mechanism explains the process of constipation.

"Holding the stool for prolonged periods allow toxins to harm my child."

This is **FALSE**: the stools are simply stored in the large bowel until expelled. There are no toxins produced by constipation!

"This is a disease."

This is **FALSE**: constipation is not a disease, but it is a common problem.

o "My child will need surgery."

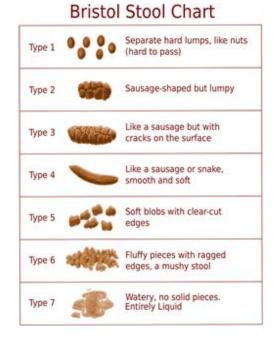
This is **FALSE**: constipation is not "fixed" with surgery. **Lifestyle changes are more important.**

Who gets Constipation?

Almost everyone will experience constipation during their lifetime – up to 25% of visits to the doctor are related to constipation! In children, there are certain predictable times when constipation comes on. These include:

- Transition from breast milk to formula or milk
- Introduction of cereals/solids
- Introduction of table foods

- Start of toilet training
- Start of school
- Birth of new sibling



What causes Constipation?

The most common cause of constipation in children is "functional fecal retention," where stool is withheld for more than a few days. Withholding behaviours, where children "hold in" stools for as long as possible, often start because of a frightening or painful experience during early childhood. These behaviours often cause children to start avoiding the toilet. Some behaviours can include tensing up, crossing the legs, standing on toes, and pushing against a wall. While these often look like the child is straining (trying to push out a stool), they are often a child trying to hold the stool in. Other lifestyle factors can also contribute to stool retention, including not eating enough fibre, not drinking enough fluids, decreased physical activity, stress, and some medications (e.g., anti-depressants, antacids, narcotics)

With prolonged withholding of stool, the rectum (the bottom part of the large intestine that holds stool) can become stretched out due to a buildup of stool; this is called fecal impaction. An over-stretched rectum does not work properly, so stool continues to build up, worsening the problem. Sometimes, stool begins to leak out and around the impaction, and may unintentionally leak out into the underwear – this is often mistaken for diarrhea when it may be caused by constipation! At this stage, children often lose the ability to sense to urge to defecate (go produce a stool). *This act is usually beyond the control of the child and is not their fault.*

Are there Special Tests for Constipation?

A thorough history and physical examination by an experienced physician is usually all that is required. Sometimes x-rays are helpful in determining the severity.

Very rarely, there are other causes of constipation beyond functional fecal retention. In these cases, the doctor will decide on which tests to do depending on response to consistent treatment.

How do we Treat Constipation?

The goal of treatment is to have soft, painless bowel movements (Bristol Stool Chart type 4 or 5) on a regular basis with no soiling.

Step 1: Initial bowel clean-out

Weight	Step 1: Bowel Cleanse	Minimum Recommended
	with PEG 3350	Fluid intake
7-10 kg (15-22 lbs)	2 teaspoons (10 mL) in	700-1000 mL / day
_	100 mL twice a day for 3	-
	days	
11-13 kg (23-29 lbs)	3 tsp (15 mL) in 150 mL	1000-1200 mL/day
_	twice a day for 3 days	-
14-19 kg (30-42 lbs)	4 tsp (20 mL) in 300 mL	1200-1500 mL/day
_	twice a day for 3 days	-
20-34 kg (43-75 lbs)	1 cap (25 mL) in 250 mL	1500-1800 mL/day
	twice a day for 3 days	-
35-50 kg (76-110 lbs)	1 cap (25 mL) in 250 mL	2000 mL/day
	3 times a day for 3 days	-
More than 50 kg (110 lbs)	2 caps (50 mL) in 500 mL	2000 mL/day
_	3 times a day for 3 days	

^{**}if your child has heart, kidney, or complicated medical issues, please consult your doctor first

The goal of this step is to completely "clean out" the stool in your child's bowels. If you feel that your child has not had a successful bowel movement, you may need to repeat this step. This step is best done when your child can be at home. For children who still are unable to have a successful bowel movement, your doctor may want you to use a stronger agent called *Pico-Salax*. Please *only* do this under the advice of a physician (*next page*...)

Pico-Salax cleanout – only if advised by your doctor

Age	Pico-Salax	Fluid requirement
1-5 years of age	1/4 sachet per treatment	500-1000 mL fluids with each
		treatment, within 3 hours
6-12 years of age	½ sachet per treatment	1000-1500 mL fluids with each
		treatment, within 3 hours
13-18 years of age	1 sachet per treatment	1500-2000 mL fluids with each
		treatment, within 3 hours

Tips for taking Pico-Salax:

- No prescription is needed. This is available over-the-counter.
- It comes as a powder in a sachet. Dissolve it in 150 mL of fluid and follow it with the above amount of fluids within 3 hours. This medication can make your child feel sick to your stomach, but it is important that they continue to drink the solution. Try giving small amounts of liquids more frequently, drinking ginger ale, or taking anti-nausea medication, like Gravol® (available without a prescription).
- Drink a variety of fluids, not just water, when taking Pico Salax.
- This medication might taste salty or unpleasant. Try taking it with liquids with a strong taste (e.g., juice), sucking on candy or lozenges, or rinsing with mouthwash after taking it.
- Call Healthlink (8-1-1) if your child feels unwell or has very bad stomach pain after taking the medication, or call 9-1-1 if your child has swelling or hives, vomiting that does not stop, feels faint, or faints.

After taking Pico-Salax, the stool should be liquid. Eventually, it should look yellowish and clear, like urine, with no solid stool clumps. If this is not the case, your doctor may want you to repeat this cleanout.

Step 2: "Retrain the bowels" and Prevent Constipation

Weight	Step 2: Maintenance with PEG	Minimum Recommended Fluid
	3350	intake
7-10 kg (15-22 lbs)	2 teaspoons (10 mL) once a day	700-1000 mL / day
11-13 kg (23-29 lbs)	3 tsp (15 mL) once a day	1000-1200 mL/day
14-19 kg (30-42 lbs)	4 tsp (20 mL) once a day	1200-1500 mL/day
20-34 kg (43-75 lbs)	1 cap (25 mL) once a day	1500-1800 mL/day
35-50 kg (76-110 lbs)	1 cap (25 mL) once a day	2000 mL/day
More than 50 kg (110 lbs)	1 cap (25 mL) once a day	2000 mL/day

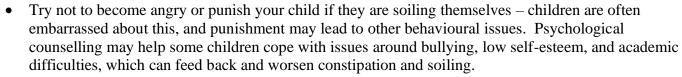
PEG 3350 (Restoralax®, Laxaday®) is an effective laxative that is safe for long-term use. It is recommended to give a consistent daily dose (instead of giving a dose every now and then) for at least 6 months to "retrain" the bowel. With good treatment, a stretched rectum will usually return to its normal size.

Step 3: Preventing Constipation with Lifestyle Changes

In addition to using PEG 3350, there are some lifestyle changes that will help prevent relapsing into constipation and withholding:

- Increase fiber and fluid intake per the above table. Plain water is best!
- Regular physical activity children need at least 1 hour of moderate physical activity every day *Next page*...

- Establish a daily bathroom routine:
 - O Try to use the toilet after every meal and after school, for 5-10 minutes each time. Going after meals helps the body use natural reflexes to help with the passage of stool. Sitting for longer than 5-10 minutes is not helpful and may make things worse! If you find your child is straining (pushing down hard), it may be helpful to have your child blow into a closed fist, like a trumpet this will help relax the muscles around the anus.
 - Encourage your child to "listen to their body" and use the toilet as soon as they have the urge to. This includes using use the toilet at school for bowel movements, not just at home.
 - o No distractions while on the toilet (e.g., phones, tablets, books).
 - o A calendar with stickers can be handy for monitoring progress!
 - o Reinforce good body mechanics
 - Having an appropriately sized toilet seat, sitting up straight, and having their knees up to the level of the hips will help place the body in a normal squatting position, which helps reduce the need to strain. A foot stool can help with this.



• Carefully planned and consistent rewards for appropriate behaviours work well for many children. Some kids might like a sticker chart to help motivate them.

What to Do if Your Child Becomes Constipated Again

Constipation is curable! It can be an ongoing problem, but it is important not to get discouraged. Children often relapse, and may require another clean-out to bring things back under control. If your child....

• Has had no bowel movement in 1-2 days, has stools that are getting harder, stools are hurting to pass, having mild – moderate abdominal pain

Then...

You may need to increase the amount of PEG 3350 for a few days, and/or consider giving your child a stimulant medication (please discuss with your physician).

• Has had no bowel movement in 4 days, having worsening abdominal pain, or having stool accidents

Then...

You may need to repeat "Step 1" and clean-out the bowel again. Please discuss with your physician if you plan on using Pico-Salax again.

When to Contact Your Health Care Provider:

Severe pain, pain over 30 minutes, or inconsolable Fever Vomiting

Losing weight, or not eating/drinking

Waking up from sleep to pass stool Painful cracks around the anus (anal fissures) Intestine droops out of the anus (anal prolapse) Still constipated (type 1, 2, or 3 stools) after following the treatment plan for 2 weeks

Useful resources:

- Constipation in babies and children: http://www.albertahealthservices.ca/assets/info/nutriti
 <a href="http://www.albertahealthservices.ca/assets/info/nutriti
 <a href="http://www.albertahealths
- "The Poo in You" constipation and encopresis: https://www.youtube.com/watch?v=UetRlZnFgEI
- Pulse Canada: pulsecanada.com
- Functional constipation infographic: https://www.echokt.ca/fc-infographic
- https://www.youtube.com/watch?v=YmguZaA9bOw &t=6s