Patient information from the BMJ Group

# Constipation in children

In this section



## Constipation in children

Most children get constipated from time to time. But if your child has constipation that doesn't go away, they may need treatment to get back to normal.

We've brought together the best research about constipation in children and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for your child.

## What is constipation in children?

If your child is constipated they don't pass a stool often enough. And when your child does 'do a poo', it hurts because the stools are hard and dry. Many children get constipated from time to time. But if your child has this problem a lot they may need treatment.

Most children with constipation don't have anything physically wrong with them. Usually they've just got into the habit of not going very often. Treatment can help your child break this habit. It may take some time, so you'll need to be patient.

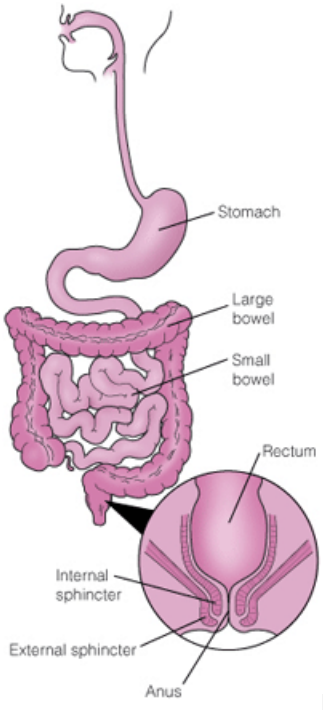
## Key points for children with constipation


Most children with constipation don't have anything physically wrong with them.

- Many children get constipation from time to time, and usually it goes away on its own after a few days. But in some children it turns into an ongoing problem.
- Even after just one painful bout of pushing out hard and dry stools, your child may become afraid of passing stools again.
- So your child may form a habit of holding in stools to avoid the pain.
- This can lead to the kind of constipation that lasts and that isn't likely to go away on its own (called chronic constipation).
- If your child regularly passes small, hard stools (like pellets), or passes a stool less than two times a week, or says that 'doing a poo' hurts, they could have chronic constipation. [1] [2]
- Chronic constipation is most likely to happen between the ages of 2 and 4, when your child is potty training.
- There are treatments that can help your child break the habit and get back to normal. Treatments can also prevent constipation coming back.

## What happens normally?

To understand what goes wrong when children have constipation it helps to know a little about what happens in your child's body during a normal bowel movement. Here's how a bowel movement works. [3]




Waste from food leaves your body through your anus as stool.

- After you eat, food goes down to your stomach and bowels. Your bowels (also called your small and large intestines) are a long tube that runs from your stomach to your anus . Your bowels remove nutrients and water from food.
- Whatever's left over is waste that your body doesn't need. The waste forms solid lumps (stools) that are pushed into your back passage ( rectum ).
- When a lot of stools build up in your rectum, its walls stretch a bit. This feeling tells you that you need to go to the toilet.
- A ring of muscle around the end of your rectum (called the internal anal sphincter) relaxes and opens. This lets the stool pass into a small tube just before your anus, called the anal canal.
- To push the stool out of your body you must relax another ring of muscle around your anus (called the external anal sphincter). You also have to tighten your stomach muscles, so that they press on your rectum and help push the stool out.
- You shouldn't have to try too hard to pass a stool. The stool should be soft and moist.

- Most children need to empty their bowels just after they've eaten, when they wake up, or at both times. It's at these times that their bowels are most active.

- You can take certain steps to help your child empty their bowels regularly. To learn more, see Keeping your child's bowels healthy .

### How often should my child pass a stool?

There aren't any rules about how many times your child should pass a stool in a day or a week. What's normal for one child may not be normal for another.

Here's what we know from studies on children. [4]

- In the first four months of life, a baby may 'poo' as often as four times a day or as little as once every two days. Both of these patterns are normal.

- As babies get older, they 'poo' less often and their stools get bigger and more solid.

- By the time they're 1 year old, children usually 'do a poo' about twice a day.

- When they're 3 or 4 years old, children may 'poo' as often as three times a day or as little as three times a week.

Remember that these are only averages. If your child goes less often or more often than this, it doesn't mean there's definitely something wrong. But if your child usually has small, hard stools (like pellets), or passes a stool less than two or three times a week, or says that 'doing a poo' hurts, they could be constipated. [1] [2]

## What happens when a child is constipated?

Most of the steps your child goes through to pass a stool happen automatically. Your child doesn't have any control over them. The only part they can control is the very last step, when the ring of muscle around the anus needs to relax to let stools out.

If your child tightens these muscles instead of relaxing them, the anus stays closed. This is the most common reason why children get constipation. Children usually tighten the muscles when they've found passing a stool painful in the past.

- Tightening the muscles puts off the urge to 'poo'.

- Then stools build up, and the next time your child gets the urge to go, it's even harder and more painful to push the stools out.

- So your child may tighten the muscles more and put off the urge to go to the toilet even longer.

- As this cycle goes on, more and more stools build up in your child's bowels.

- The longer the stools stay there, the more water is removed, making the stools harder and dryer.
- Hard and dry stools are more difficult to push out than soft, moist ones, so your child will need to strain. Children soon learn that this hurts.
- To stop the pain, they tense the muscles around the anus more, making it even harder and more painful to 'do a poo'.

### An ongoing problem

If your child keeps holding in stools, the constipation gets worse. Here's why. [5] [6] [7]

- Stools build up and stretch your child's rectum more than usual.
- A stretched-out rectum makes it harder for your child to sense the need to pass a stool. Your child may not feel the urge until their bowels are very full.
- If your child doesn't use the stomach muscles for pushing very often, the muscles may get weaker and out of practice. This makes it harder to push stools out.
- The longer stools stay in your child's bowels, the bigger and harder they get, and the more painful they can be to push out.
- After a while, your child may find it very hard to relax enough to open their bowels. Tensing up when trying to 'poo' just becomes a habit.
- This keeps your child's constipation going. Doctors call this chronic constipation.

## Constipation: why my child?

Most children who have ongoing (chronic) constipation don't have anything physically wrong with them. More than half of children with bad constipation just start holding in stools because they've had one experience of a painful 'poo'. [8] Or there may be something else that makes them avoid passing stools.

For example, some hold on too long because they're embarrassed to use a public toilet, or because the one available is dirty, uncomfortable, or isn't private. Others hold on because they don't want to stop some activity they're involved in. These problems often happen when your child is first learning to control bowel movements.

Very few children with ongoing constipation have a medical condition that's causing the problem. These children tend to have more severe constipation, as well as other problems. The condition is usually diagnosed during infancy because the symptoms are so bad. To learn more, see Medical conditions linked to constipation .

Certain things increase your child's chances of getting constipated. These are called risk factors. The most common risk factor for getting constipation as a child is having a painful 'poo'.

The things listed here can increase your child's chances of getting constipation. But bear in mind that even if your child has one of these risk factors, it doesn't mean they will definitely get constipation. It just means your child is more likely to be affected than a child who doesn't have the risk factor.

## Problems with diet

Certain things about your child's diet can affect their chances of getting constipation.

- Not drinking enough water or not eating enough high-fibre food can make stools harder, drier, and more difficult to push out. To learn more, see Eating more high-fibre food .

- Drinking too much milk can fill toddlers up and stop them eating solid food. If they don't have enough bulky food in their bowels, they may not get the urge to 'poo'. [9] Some parents think their child's constipation is from an allergy to cow's milk. There is evidence that this might be the case for some children. [10] But milk is good for children, so you should discuss cutting milk out of your child's diet with your GP or health visitor before doing it.

- There's not enough evidence to know whether bottle-fed babies are more likely to get constipated than breastfed babies. But bottle-fed babies may get constipated if they don't drink enough water. And breastfed babies often have delays of many days before passing normal stools. [11]

- Children who are very overweight (obese) are more likely to have constipation and soiling. [12] (Soiling is when liquid stools leak out into the underwear of children with constipation, but they don't realise it.)

## Holding in stools

Putting off going to the toilet can increase the chances that your child will get constipation. Your child may try to hold in stools because they: [9] [13]

- Had pain when 'doing a poo' in the past

- Have a sore or cracked anus (doctors call this an anal fissure ). This can make 'doing a poo' painful

- Don't like smelly toilets or toilets away from home, and may want to wait until getting home

- Are too busy playing to take a break

- Have a very active imagination. For example, one study found children didn't want to pass a stool because they worried their 'poo' would drown.

About 1 in 5 children start to hold in stools when they begin potty training. [14]

### Changes in daily routine

Going on holiday, moving house, or changing schools can trigger constipation in your child. For bottle-fed babies, it can happen with a change from one formula of milk to another.

### Not being active

Not doing much physical activity can make your child's bowels sluggish, so food passes through them more slowly.

### Constipation in your family

Constipation can run in families. This might be because of how the bowels work. In some families, people need to have a lot of stools in their bowels before they feel the urge to go to the toilet.

### Medicines

Your child can get constipation as a side effect of these medicines:

- Painkillers
- Certain cough medicines
- Anticonvulsants (drugs to control seizures)
- Antihistamines (drugs for treating allergies)
- Iron supplements.

## What are the symptoms of constipation in children?

Constipation can be very uncomfortable. Your child may say they have a stomach ache or that 'doing a poo' hurts.

Here are some signs that your child may be constipated.

- Fewer bowel movements than normal: your child may not have a bowel movement for several days.
- Pain and straining when passing stools: stools that your child holds in for a long time get hard and dry. These are more difficult to pass, and your child may say it hurts. They may get anxious and upset trying to go to the toilet.

- Stomach ache: your child may get cramps and feel bloated and queasy because of the build-up of stools in the bowels. These feelings go away after your child 'does a poo'. But they'll come back if your child's bowels fill up too much again.

- Small, dry, and hard stools: the bowels take water out of stools, so the stools dry out and get hard if they stay in there too long. Some children with constipation pass small amounts of pellet-like stools fairly often. Others won't pass a stool for several days or longer because they can't or don't want to. Or they may eventually pass stools that are so big and hard they block the toilet.

- Avoiding the toilet: your child may try to avoid the toilet. When on the toilet, children with constipation may stiffen their buttocks and legs and brace themselves against the floor, rocking back and forth.

- Not having any urge to 'do a poo': if your child stays constipated, they may not even get the urge to pass a stool. This happens because stools build up and stretch your child's back passage ( rectum ). A stretched rectum needs more stools in it before your child senses the need to push them out. This keeps the constipation going.

- Feeling a bowel movement isn't finished: if your child's stools are dry and hard to pass, some stay in the bowels after a bowel movement. So your child may feel like they still have to go.

- Sore bottom: the skin around the anus can tear if your child has to strain. It can feel sore and become cracked. You might see bright red blood or light red streaks in your child's stools or underwear. Treating your child's constipation should stop this. Once the stools are soft again, the skin on your child's bottom should heal.

- Unpleasant smell: if your child is holding in stools there might be an unpleasant smell. This may be because some wind or stool is leaking out into your child's underwear.

If your child has bad constipation they may also get these symptoms.

- Dribbling urine: Your child may dribble urine into their underwear, they may have to wee more often than usual, and they may wet the bed. These things happen because the stools in your child's bowels press on the bladder and the muscles that control urination. This lets urine leak out more easily. Your child may even get a urinary tract infection because of the dribbling. The good news is that, once the constipation improves, these things clear up, too. [15]

- Leaking of liquid or loose stools: Your child may leak watery stools into their underwear. It happens when large stools get stuck and block your child's bowel. Liquid stools above the blockage flow around it and out. Your child may scratch or rub around their anus because it's irritated by the watery stools. [16]

If your child has very bad constipation they may get these symptoms, too:

- Fever
- Vomiting
- Weight loss.

These more serious symptoms happen in only a few children with constipation. But if they happen in your child, see your doctor urgently.

## How do doctors diagnose constipation in children?

If your child is constipated all the time it's best to see your GP, because your child may need treatment.

Your GP will ask you questions and examine your child to make sure constipation, and not something else, is responsible for their symptoms and to find out what might be causing it.

### Getting details about symptoms

Your doctor might ask these questions to find out if your child has constipation and how bad it is: [20]

- How often does your child usually pass a stool? Has this changed recently?
- What do the stools look like? Are they big or small, hard or soft, formed or loose? What colour are they?
- How hard is it for your child to pass a stool? Does your child strain? And how long does it usually take?
- Does your child say it hurts when passing a stool? Do they get upset?
- Does your child put off going for a 'poo'?
- Does your child get a stomach ache in between bowel movements? Does it go away after your child has done a poo?
- When did the symptoms begin?
- Is there any blood on the toilet paper or in your child's stools or underwear?
- Does your child always have symptoms, or do they come and go?
- Is your child less hungry than usual?

- Is your child losing weight? Are they feverish or vomiting?
- Does your child ever leak very soft or liquid stools into their underwear (if your child is out of nappies)?

## Working out what's causing the constipation

Your doctor will also try to work out what's causing your child's constipation. They may ask these questions:

- Do other members of your family have constipation? (It can run in families.)
- What's your child's diet like? (Not getting enough water and fibre may cause constipation.)
- Has your child's daily routine changed? For example, have they started a new school or been on holiday? Are they upset about something, like a big change in family life? (Changes like this can trigger constipation.)
- Is your child taking any medicines, herbal remedies, or diet supplements such as iron tablets?
- What's your child's behaviour like? (Holding in stools may be a way to get attention.)

Your doctor may also ask you questions that you find upsetting, such as whether your child might have been abused. This is just to check all possible causes of your child's problem. Try to answer as best you can.

To get more information your doctor may ask you to write down what your child eats and how often they 'do a poo' for several days.

## Examining your child

Your doctor may look at your child's bottom to see if it's red or cracked and to check for signs of leaking stool. [25]

Your doctor may also put a finger inside your child's anus to check if:

- The muscles that let out stools are working properly
- Your child's rectum feels normal inside
- There's a little or a lot of stool in your child's bowel, and how soft or hard it is.

However, this is not usually necessary. [25] And your doctor should ask your child's permission first.

### Making the diagnosis

After talking to you and examining your child, there's a good chance your GP will be able to tell if your child has constipation and what's causing it. Your child probably won't need any tests.

But your doctor may suggest tests if: [20]

- They aren't sure your child has constipation
- Your child has serious symptoms (fever, vomiting, or weight loss)
- Your doctor thinks a medical condition could be causing the constipation.

To learn more, see Tests for constipation in children .

### Referral to a specialist

Most children with constipation can be successfully treated by their own doctor. However, your child may be referred to a specialist if:

- Your child's doctor isn't sure what's causing the constipation
- The problem continues for more than about six months
- Your child often accidentally soils underwear or the bed
- The constipation is seriously interfering with normal life, such as school.

A specialist looking after children with constipation will probably be a paediatrician (a doctor specialising in children's conditions) or a gastroenterologist (a doctor specialising in digestive problems).

## How common is constipation in children?

Many children get constipation occasionally. Usually it lasts only a few days. But if a child is constipated for longer it can be more serious.

We're not sure how many children get this ongoing type of constipation (called chronic constipation) because parents don't always take their child to the doctor. But here's what we know from the research.

- About 33 in 100 children aged 4 to 7 are constipated at any one time. [17]
- 5 in 100 primary school children get constipation for more than six months. [18]

- Chronic constipation is most common in children between the ages of 2 and 4, when they're potty training. [19]
- In about 25 in 100 children, constipation starts when the child is still a baby. [20]
- Constipation causing bad stomach ache is a common cause of admission to casualty. [19]

Sometimes, liquid stools leak out into the underwear of children with constipation, but they don't realise it. This is called **encopresis**. Again, we don't know exactly how many children have this problem.

- Some studies say that it happens to about 3 in 100 children who are 4 years old and 2 in 100 children who are 5 years old. [21]
- It's most common in children aged 2 to 4. [21]
- It happens in boys more often than in girls. [21]

## What treatments work for constipation in children?

Most children get constipation from time to time. Usually it lasts just a few days and clears up without any treatment. But in some children it doesn't go away and it may get worse.

If your child has ongoing constipation (called chronic constipation) the good news is that treatments can help. But it can take a while for treatments to work, so you'll need to be patient.

## Key points about treating constipation in children

- If you're worried about your child's constipation, see your doctor. The problem can get worse if you wait.
- Giving your child food with lots of fibre is likely to help with constipation. Some examples of high-fibre foods your child might eat are whole-grain breakfast cereals, raw carrots, and apples.
- Constipation is often treated with medicines called laxatives that help get your child's bowels moving.
- There are several different types of laxative. There is evidence that the type of laxative that makes stools softer is likely to work.
- Laxatives that make stools softer are also used if your child's bowels become completely blocked with large, hard stools (called **impacted faeces**).

- You can take some steps to help your child stay regular. To learn more, see Keeping your child's bowels healthy .

Which treatments work best? We've looked at the research and given a rating for each treatment according to how well it works.

For more help in deciding what treatment is best for your child, see How to use research to support your treatment decisions.

## Treatment Group 1

## Treatments for constipation in children

### Treatments that are likely to work

- Eating more high-fibre foods : Eating foods that have lots of fibre makes your child's stools bulkier and easier to pass. More...

- Laxatives to make stools softer : These medicines are also called osmotic laxatives. They help the bowels add water to the stools so that they are easier to pass. Examples are lactulose and macrogols (brand names Idrolax, Movicol, Movicol Paediatric Plain). More...

### Treatments that need further study

- Other types of laxative : These medicines make passing stools easier. There are different types that work in different ways. Examples are bisacodyl (Dulcolax) and senna (Ex-Lax, Senokot). More...

- Non-drug treatments : These include biofeedback (therapy to help your child learn to relax the right muscles to let stools out), keeping a diary, and further toilet training. More...

- Probiotics : These are tiny organisms, usually bacteria, that are similar to those that live naturally in your bowels and help digestion. More...

## What will happen to my child?

Most children get constipation from time to time. Usually it lasts just a few days. But for some children the constipation goes on and on. If it's not treated properly it can get worse.

It's hard to say what will happen if your child has ongoing constipation. Doctors call this chronic constipation.

Not many studies have looked at ongoing constipation. But here's what we know. [21]

- Constipation can be uncomfortable and stressful for your child, but usually it isn't serious.

- If your child has constipation it doesn't mean that they will get bowel problems (such as bowel cancer) later in life.
- Your child is more likely to get better if the constipation is treated early. One study found that treatment worked better for children younger than 2 years than for those older than 2. [21]
- Your child is more likely to get long-lasting constipation if they are constipated while very young and if constipation is common in your family. [22]
- Up to one-third of children continue to be constipated as they get older. [23]

If your child's bowels become completely blocked with large, hard stools (called **impacted faeces**) your doctor will probably prescribe a type of laxative called a macrogol (one brand name is Movicol Paediatric Plain). [24]

As a last resort, your child may need hospital treatment. This is rare. In hospital, your child might need their bowel cleared with an enema (liquid put into your child's rectum). Your child will usually be given a sedative before this is done. Occasionally, if your child's constipation is very bad, their doctor may give them a general anaesthetic and then remove the hard, packed stools. [24] But doctors don't often use these procedures nowadays.

## Questions to ask your doctor

If you've been told that your child has constipation you may want to talk to your GP to find out more.

Here are some questions that you might want to ask.

- Why did my child get constipation?
- Is there anything wrong with my child?
- Will the constipation get better on its own, or will my child need treatment?
- What kind of treatment works best?
- How long will my child need this treatment?
- Does the treatment have any side effects?
- Will the constipation come back when the treatment stops?
- Is there anything I can do to help?

- Should I change my child's diet?

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# Treatments:

## Eating more high-fibre food

In this section


This information is for people who have a child with constipation. It tells you about eating more high-fibre food, a treatment used for constipation in children. It is based on the best and most up-to-date research.

### Does it work?

It is likely to help. There is some evidence that if your child eats more food with lots of fibre in it, it will probably help reduce their constipation.

### What is it?

Fibre is the part of food that the body can't break down fully and use as nutrition. It passes straight through your child's digestive system and becomes part of your child's stools.

Eating foods high in fibre makes stools more bulky, so it's easier for them to pass through your child's digestive system and out of the body. Fibre can also make stools softer because it holds onto water.

High-fibre foods include whole-grain cereals, bread and pasta, root vegetables, nuts, and fruit. For example, a banana has about three grams (about one-tenth of an ounce) of fibre, a piece of whole wheat bread has two grams (about one-fourteenth of an ounce), and two shredded-wheat cereal biscuits have five grams (about one-fifth of an ounce). Usually you can find out how much fibre a food has by reading the label.

Here are some ways to help your child get more fibre. [27] Encourage your child to:

- Start the day with a bowl of whole-grain cereal
- Eat pieces of fruit instead of drinking fruit juice
- Eat brown rice and whole-grain bread and pasta rather than the white versions
- Eat high-fibre snacks, such as raw carrots.

Ask your health visitor about introducing high-fibre food to your young child's diet.

You could also look at children's cookbooks, or at websites that have childrens' recipes, for high-fibre recipes that children would like.

## How can it help?

Your child is likely to have more bowel movements and less pain in their abdomen after eating more fibre.

We found one small, good-quality study (called a randomised controlled trial). [28] It included 31 children aged between 4 and 11 years. More than half of the children had soiling (encopresis). This is when liquid stools leak out into the underwear of children with constipation, but they don't realise it. These children first had their bowel cleared with an enema (liquid that's put into the rectum) if they were completely blocked with large, hard stools (called impacted faeces).

Some of the children were given a fibre supplement each day for four weeks. Other children had a dummy supplement (a placebo). The study found:

- Only 2 in 10 children were still constipated after being treated with fibre
- More than 5 in 10 children given the placebo treatment still had fewer than three bowel movements a week
- Only 1 in 10 children treated with fibre had pain in their abdomen
- More than 4 in 10 children given the placebo had pain in their abdomen
- Both doctors and parents of about 5 in 10 of the children said the children were successfully treated for both constipation and soiling by taking fibre supplements
- But only about 1 in 10 children were better after taking a placebo.

Eating more fibre may also help prevent soiling. This is when liquid stools leak out into the underwear of children with constipation, but they don't realise it.

But if your child's bowels are completely blocked with large, hard stools (known as impacted faeces), they may need another treatment to clear this first.

## How does it work?

Eating a diet low in fibre causes constipation. Fibre makes stools bulkier and softer, so they travel through your child's bowels faster and more easily. This stops the stools from drying out (the bowels take water out of stools). Heavier and more slippery stools are easier to push out.

## Can it be harmful?

Eating food containing a lot of fibre isn't likely to be harmful.

## How good is the research on eating more high-fibre foods?

There hasn't been much good research on whether high-fibre foods or a fibre supplement help with constipation.

We found one small, good-quality study (called a randomised controlled trial). [28] It included 31 children aged between 4 and 11 years.

We also found a large summary, or systematic review of studies of treatments for constipation. [29] The review found two studies on fibre.

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# Laxatives to make stools softer

In this section


This information is for people who have a child with constipation. It tells you about laxatives to make stools softer, a treatment used for constipation in children. It is based on the best and most up-to-date research.

## Do they work?

They are likely to help. Laxatives that make stools softer will probably help your child pass a stool more often. Your child is likely to have more frequent bowel movements and feel less pain. This type of laxative is also used if your child's bowels get completely blocked with large, hard stools (known as impacted faeces).

## What are they?

Laxatives are medicines that help get your child's bowels moving and make it easier to 'do a poo'.

There are different types of laxatives. Here we've looked at laxatives to make stools softer. Doctors call these **osmotic laxatives**. They help the bowels add water to the stools, so they are easier to pass. [30] Examples include:

- Macrogols (brand names Idrolax, Movicol, Movicol Paediatric Plain). These often come as a powder in sachets that you dissolve in a drink. These are also known as polyethylene glycols.

- Lactulose (Duphalac, Lactugal, Regulose). This often comes as a liquid solution your child can take mixed in a drink or from a spoon.

You can buy some of these laxatives without prescription from a pharmacy, and you may need to get a prescription from your doctor for the others. But if your child has ongoing (chronic) constipation, it's best to see your doctor before using this treatment.

Some over-the-counter medicines have age restrictions. Ask your pharmacist or check the packaging yourself.

For more information about taking laxatives, see Laxatives and your child . You may also want to read about the Other types of laxative .

## How can they help?

Laxatives that make stools softer can help your child have a bowel movement.

Children with constipation who take these laxatives are likely to pass stools more often and more easily. [33] [34] Your child is also less likely to soil themselves. [35] (Soiling is when liquid stools leak out into the underwear of children with constipation, but they don't realise it.)

Macrogols may work better than lactulose. A review of studies (a systematic review ) found that children taking macrogols had one more stool per week compared with children taking lactulose. Children taking macrogols were also less likely to need to take additional laxatives. [33]

Doctors sometimes suggest that children who take laxatives are also given some toilet training. This means teaching your child good toilet habits. There are several types of toilet training. To find out more, see Toilet training .

## How do they work?

Laxatives that make stools softer pull water into your child's bowels. This makes the stools easier for your child to push out. [30]

Laxatives help your child to 'do a poo' more often, so the stools will be softer and easier to pass. This should help ease your child's fear of having painful bowel movements. And if your child's rectum has become stretched, it will slowly get back to its normal size, making constipation less likely.

## Can they be harmful?

Like most medicines, laxatives can have side effects. But these aren't usually serious. [33] [35]

Your child may get fewer side effects with a laxative that makes stools softer than with other types of laxative . [33] [36]

Some people worry that their children may become dependent on taking laxatives so they have to continue to take them. But there's no evidence that this happens. [32]

Your child may get: [33] [37]

- Stomach cramps
- Wind (flatulence)
- Belching
- Bloating
- Nausea
- Mild diarrhoea.

They may also feel thirsty.

The research also shows that your child will probably have fewer side effects if they are treated with a macrogol (Movicol) rather than with lactulose. [35] One study found that children who took lactulose had:

- More pain in their abdomen
- More pain when passing a stool
- More straining during a bowel movement.

Your child may get fewer side effects if they are given osmotic laxatives (lactulose and macrogols) than if they are given senna. One study showed that children given a type of laxative to help push stools out (senna) had more side effects than children who took lactulose. [36] Many more children had pain in their abdomen, diarrhoea, or bloating after taking senna.

### How good is the research on laxatives to make stools softer?

We found a review of studies (a systematic review) that looked at different types of laxatives, including laxatives to make stools softer (osmotic laxatives). The review included 18 studies with 1,643 people. [33]

However, it's worth noting that some of the studies looking at this were small or had problems that may make their findings less reliable.

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## Other types of laxative

In this section
Do they work?
What are they?
How can they help?

This information is for people who have a child with constipation. It tells you about the types of laxative used to treat constipation in children. It is based on the best and most up-to-date research.

## Do they work?

We're not sure. Laxatives to make stools softer (osmotic laxatives) will probably help your child pass a stool more often. But more research is needed to know how well other types of laxative work.

## What are they?

Laxatives are medicines that help get your child's bowels moving and make it easier to 'do a poo'. They come as syrups, powders, and also as tablets, which are swallowed or put inside your child's anus.

You can buy some laxatives without prescription from a pharmacy, or you can get a prescription from your doctor. But if your child has ongoing (chronic) constipation, it's best to see your doctor before using laxatives.

Some over-the-counter medicines have age restrictions. Ask a pharmacist or check the packaging.

### Types of laxatives

There are several different types of laxative.

- Laxatives that make stools softer: Examples are lactulose and macrogols (brand names Idrolax, Movicol, Movicol Paediatric Plain). We've looked at these separately (see Laxatives to make stools softer ).

- Laxatives that help push stools out: Examples are senna (Ex-Lax, Senokot), bisacodyl (Dulcolax), and sodium picosulfate (Laxoberal, Dulcolax Liquid, and Dulcolax Perles).

- Bulk-forming laxatives: These are like fibre supplements. These include ispaghula husk (Fybogel) and methylcellulose (Celevac). They aren't used very often.

- Lubricant laxatives: These are also called stool softeners. The most common one is mineral oil (liquid paraffin). It's not used very often. And mineral oil is not recommended for children under 3 years old.

To learn more about these medicines, see Laxatives and your child .

## How can they help?

Laxatives can help your child have a bowel movement.

But we don't know if all types of laxatives work in the long term for children who have ongoing constipation (called chronic constipation). There haven't been many good studies on this. [37] [33]

- Laxatives that make stools softer (osmotic laxatives) can help children pass stools more often and more easily (see Laxatives to make stools softer ). [33]

- Bulk-forming laxatives can make your child's stools heavier and softer, so they pass out of the body faster. But we don't know for certain how well this sort of laxative works for children.

- Lubricant laxatives can make your child's stools more slippery and easier to pass. The most common one is mineral oil (liquid paraffin). One study shows that children treated with liquid paraffin for ongoing constipation are more likely to have a bowel movement each day. [38] They are also less likely to soil themselves. (Soiling happens when liquid stools leak out into the underwear of children with constipation, but they don't realise it.) Other studies have found that children taking liquid paraffin have more bowel movements in a week than those taking lactulose (a type of laxative to make stools softer). [33]

- Laxatives that help push stools out can make your child's bowel muscles tighten (contract). But one study we looked at shows this type of laxative may not work very well. [38] Only half of the children treated with senna for ongoing constipation passed a stool each day. And almost half of the children still leaked liquid stools (soiled) daily.

## How do they work?

Laxatives are designed to help your child 'do a poo' more often, so their stools will be softer and easier to pass. This should help ease your child's fear of having painful bowel movements. And if your child's rectum has become stretched, it will slowly get back to its normal size, making constipation less likely. But we're not sure if the types of laxatives described here do work for chronic constipation.

Here's how the different types of laxatives work.

- Bulk-forming laxatives make your child's stools heavier and softer, so they pass out of the body faster.

- Lubricant laxatives make your child's stools more slippery and easier to pass.

- Laxatives that help push stools out make the muscles in your child's bowels tighten and squeeze harder than usual. This pushes stools through your child's bowels. Your child's rectum fills and empties more quickly, too, so your child 'does a poo' more often. [30]

## Can they be harmful?

Like most medicines, laxatives can have side effects. But these aren't usually serious.

Some people worry that their children may become dependent on taking laxatives so they have to continue to take them. But there's no evidence that this happens. [32]

Your child may get: [37]

- Stomach cramps
- Wind (flatulence)
- Belching
- Bloating
- Nausea
- Mild diarrhoea.

They may also feel thirsty.

Your child may get fewer side effects if they are given a type of laxative that makes stools softer (osmotic laxatives). These include lactulose and macrogol (Movicol). One study shows that children given a type of laxative to help push stools out (senna) had more side effects than children who took lactulose. [39] Many more children had pain in their abdomen, diarrhoea, or bloating after taking senna.

### Mineral oil (liquid paraffin)

Guidance for doctors says that liquid paraffin should not be given to children under 3 years old. [40] This is because using it regularly might stop your child's body absorbing important vitamins and minerals from food. Small amounts of the product may also be absorbed and cause abnormal changes to your child's bowels.

Doctors don't prescribe mineral oils such as liquid paraffin very often. Many experts don't recommend it, even for older children. [40]

## How good is the research on other types of laxative?

There hasn't been much research on other types of laxative for constipation in children. [33]

We haven't found any good-quality studies of bulk-forming laxatives. Examples of this type of laxative are ispaghula husk, methylcellulose, and sterculia.

We haven't found any good studies comparing lubricant laxatives with taking a dummy treatment (known as a placebo). The most common type of lubricant laxative is mineral oil (liquid paraffin). A couple of good-quality studies have shown that children taking liquid paraffin pass more stools each week than those taking lactulose, a type of laxative that makes stools softer.

One good-quality study also compared taking liquid paraffin and senna for ongoing (chronic) constipation.[38] Senna is a type of laxative that helps push stools out. It makes your child's bowel muscles tighten (contract).

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# Non-drug treatments

In this section


This information is for people who have a child with constipation. It tells you about non-drug treatments used to treat constipation in children. It is based on the best and most up-to-date research.

## Do they work?

We're not sure. Non-drug treatments for constipation that aim to change your child's behaviour don't seem to work when used on their own. It's possible that more good-quality research on these treatments might tell us more.

## What are they?

Some treatments for constipation try to help your child understand and change their toilet habits. These are sometimes known as behavioural treatments. Doctors sometimes combine this approach with medicines called laxatives, or the behavioural treatments might be used on their own.

### Toilet training

This means teaching your child which muscles to relax and tighten when having a bowel movement, so that it becomes easier to pass stools. Doctors sometimes suggest that children who take laxatives are given further toilet training. To learn more, see Toilet training.

### Keeping a diary

You can use a diary to record your child's eating habits as well as when they 'do a poo'. You might write down when your child has a drink, eats a high-fibre food such as an apple, and sits on the toilet, for example. You can use this as part of a reward system. You may want to give your child a reward for habits that might help them stay regular.

### Biofeedback

Biofeedback is based on the idea that you can learn to control some of the things that your body usually does automatically. In constipation, it can be used to teach children:

- How to tell when they need to open their bowels
- How to relax the right muscles to let stools out.

Biofeedback uses a machine called an electromyograph (EMG) to measure how tight the muscles around your child's anus and rectum are. Your child learns to use these muscles properly by practising and watching the results on a screen. To learn more, see More about biofeedback .

You may not be able to get biofeedback treatment for constipation on the NHS. There isn't enough evidence that it helps children who have chronic constipation.

## How can they help?

We're not sure if non-drug treatments can help if they're used on their own. There hasn't been enough research to be able to say for sure.

Two large studies found that biofeedback didn't seem to make much difference when it was added to treatment with laxatives. [42] [29]

But doctors sometimes suggest that children who take laxatives are given some more toilet training. Diaries and reward systems can also encourage good toilet habits.

## How do they work?

Children often get constipation because they tense the muscles around their anus. This keeps the anus closed, and stools can't pass out. So stools build up in your child's rectum.

The longer the stools sit there, the drier and harder they get. It's painful and difficult to push out dry, hard stools, so that makes your child tense even more. This keeps the constipation going. After a while, your child may not realise that they are tensing up. It just happens automatically.

Toilet training, diaries, and reward systems can teach your child good toilet habits. Biofeedback may help your child learn which muscles to tighten and relax to pass stools normally.

## Can they be harmful?

There isn't any evidence that non-drug treatments can harm your child. [42]

## How good is the research on non-drug treatments?

There hasn't been much research on non-drug treatments in children with constipation.

We found one big summary of the research (called a systematic review) that looked at eight studies on biofeedback in children with constipation. [43]

And we found a systematic review that looked at behavioural treatments. [29]

So we need more research to tell us if non-drug treatments work for constipation in children.

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# Probiotics

In this section


This information is for people who have a child with constipation. It tells you about probiotics, a treatment used for constipation in children. It is based on the best and most up-to-date research.

## Do they work?

We're not sure. There hasn't been enough research to be able to say for certain. Different studies have had different results.

## What are they?

We all have bacteria living in our bowels. Some of these bacteria are helpful, and help you to digest food. They're sometimes called 'friendly' bacteria. They stop harmful bacteria from growing in your bowels.

Taking probiotics helps to keep your levels of 'friendly' bacteria topped up. Enough of the bacteria survive your stomach acid to start growing in your bowels. [44]

There are lots of probiotic products around, often sold as yoghurts. You can also get them as pills or capsules.

## How can they help?

We found two studies looking at whether probiotics can help children with constipation. In one study, looking at the probiotic *Lactobacillus reuteri*, children taking the probiotic passed more stools. [45] However, a summary of the evidence, called a systematic review, looked at two other studies, which found taking the probiotic *Lactobacillus rhamnosus* made no difference. [29]

And another study, which looked at another probiotic called *Bifidobacterium lactis*, found that it didn't help. [46]

We need bigger studies to find out whether probiotics really can help children with constipation. But the research up to now suggests that they may not help much.

## How do they work?

Probiotics top up the friendly bacteria in your bowels. But we don't know whether this reduces constipation in children.

## Can they be harmful?

Because probiotics are similar to bacteria that live naturally in your bowels they are unlikely to cause harm. But it's a good idea to check with your doctor before trying this treatment, especially if your child has other health problems. Also, bear in mind that probiotics are sold as supplements and aren't checked for quality and safety in the same way that medicines are.

## How good is the research on probiotics?

There's not enough research to know whether or not probiotics help children with constipation. We found several studies looking at this question. They looked at different probiotics and had different results. [45] [29] [46]

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## Further informations:

### Keeping your child's bowels healthy

We haven't looked at the research for this advice in as much detail as we've looked at the research on most of the treatments we cover (see Our method). But we've included this information here because you may be interested in it.

Your doctor may recommend the following steps to help keep your child's bowels healthy.

- Don't let your child wait to 'do a poo'. Encourage your child to go when they first get the urge.
- Give your child enough time. It can be hard for your child to 'poo' if they feel rushed. Set aside time for your child to sit on the toilet, and try to make this the same time every day. A good time may be after breakfast or lunch, when your child's bowels are most active. Make sure your child gets up early enough to eat breakfast and sit on the toilet.
- Encourage your child to eat more food that has lots of fibre in it. Fibre is found in whole-grain bread and cereals, and in fruit and vegetables. For more information, see Eating more high-fibre food .
- Make sure your child drinks lots of fluids. This helps their stools stay moist.

- Encourage your child to get lots of active play. This increases their bowel activity.
- Make sure your child sits on the toilet properly. If your child sits up straight, the small tube just before the anus (the anal canal) will also be straight. This makes it easier to push stools out. Your child may need to put their feet on a footstool placed in front of the toilet.
- If your child says that it hurts to 'poo', tell them to stop trying, and then try again later.

## Medical conditions linked to constipation

Some medical conditions that affect the nerves and muscles of your child's bowels can cause constipation. But remember that most children with constipation don't have any of these disorders.

### Hirschsprung's disease

Children who have this condition are born with it, and it causes very bad constipation. If a child has Hirschsprung's disease the nerves to their bowels haven't developed properly and the muscles that push stools out don't work well. This means stools build up in their bowels and stretch their bowels out.

This condition is also called **congenital megacolon**, which means a large colon caused by a condition they're born with. The colon is the part of the bowels that absorbs water and pushes out stools.

A child with Hirschsprung's disease will need surgery to remove the affected part of the bowels. If your child has Hirschsprung's disease you usually find out soon after their birth.

### Thyroid problems

Your thyroid gland makes hormones that your body needs to work properly. If your thyroid gland doesn't make enough of these hormones, you have what's called **hypothyroidism**. This can give you constipation. If your child has hypothyroidism they'll be given medicine to take regularly to replace the missing hormones.

Most children who get constipation because of thyroid problems have other symptoms, too. These include weight gain, not growing as quickly as they should, hair loss, and thick skin.

### Other medical conditions

Children with cerebral palsy and cystic fibrosis often get constipated because these conditions affect their digestive system.

## Tests for constipation in children

Your GP or specialist may suggest tests to see if your child has constipation and to work out what might be causing it. [16] [26] Your child may not need any of these tests or at most they will need one or two of them.

### X-ray of your child's abdomen

X-rays are pictures of the insides of your body. An X-ray of your child's abdomen shows the bowels and how much stool is in them. [16]

### Test for blood in your child's stools

For this test, you'll need to collect a stool sample and send it for laboratory analysis. Doctors call this test a **faecal occult blood test** ('occult' here means hidden). Blood in the stools often comes from a tear in your child's anus from pushing out large stools. Rarely, the blood can come from a more serious problem, like bleeding in the bowel, ulcers, or polyps.

### MRI scan of your child's spine

An MRI scan can help show problems with your child's spinal cord, such as a tumour. Spinal cord problems can keep the nerves that control bowel movements from working properly or keep your child from feeling the urge to 'poo'.

### A test of your child's bowel muscles

This test measures how well the muscles and nerves in your child's rectum and anus work. Doctors call it **anorectal manometry**. It isn't used very often. Your child might have this test to check if they have Hirschsprung's disease or to try to find out what's happening when your child tries to pass a stool.

During the test, a thin tube (called a catheter) is put into your child's rectum. A small balloon on the end is slowly filled up. This makes the muscles in your child's rectum and anus squeeze. Signals from the muscles are picked up by the catheter, and the strength of the squeeze is recorded by a machine. Your child might be asked to push and relax, as they do when passing a stool. [20] This test can show how full your child's rectum has to be before their nerves realise it's time to empty it.

## Laxatives and your child

If your child has constipation laxatives may help clear it up. Here are some things you need to know if your child takes these medicines. [31]

- If you're worried about your child's constipation, see your GP before you give them laxative medicines.

- Your doctor may prescribe a laxative that softens stools , such as lactulose. This works by adding water to your child's stools so the stools are easier to pass.
- If this doesn't work, your GP may suggest also giving your child a laxative that helps push out stools , such as senna. These laxatives work by making the muscles in your child's bowels tighten (contract), which helps push stools out of the body. But there hasn't been much research on whether these laxatives work.
- Some products have two laxatives in them. Each one works in a different way. Taking these might work better than taking just one laxative on its own.
- Your GP may start your child on a high dose of a laxative and slowly reduce it as the constipation eases.
- Your child may need to take laxatives for several months or longer before they 'do a poo' regularly and without any pain. It's important that your child keeps taking the laxative for as long as your GP advises. Constipation can come back if you stop treatment too soon.
- Make sure that your child drinks a full glass of water or juice with the laxative to help it work properly.
- Some people worry that their children may become dependent on taking laxatives so they have to continue to take the laxatives. But there's no evidence that this happens. [32]

## Toilet training

Doctors sometimes suggest that children with constipation are given toilet training. This means teaching your child good toilet habits. Your child might be advised to have toilet training in combination with taking medicines called laxatives.

The idea behind toilet training is to help your child re-learn which muscles to relax and tighten when having a bowel movement. This makes it easier to pass stools. Some children hold in their stools during a bowel movement by tensing muscles to keep their anus shut. If your child does this for long enough it becomes automatic, meaning they don't even realise it's happening.

Your child might be taught to:

- Sit on a toilet
- Relax their legs and feet

- Take a deep breath and hold it in while sitting up straight
- Push down while still holding their breath and pull in their stomach muscles to help push stools out.

You might be asked to do this with your child after meals at home.

Sometimes, a technique called **biofeedback** is used to help toilet training. To learn more, see More about biofeedback .

## More about biofeedback

There are different types of biofeedback. Here's what usually happens.

First your doctor does a test with a machine called an **electromyograph** (EMG). This machine measures how tight the muscles around your child's anus and rectum are.

- Your doctor puts thin probes inside your child's anus and rectum. This doesn't hurt. The probes send information to a computer.
- Your child is asked to squeeze their anus tightly and then to relax and push as if 'doing a poo'.
- As your child does these exercises, the activity in their muscles shows up as a pattern on the computer.
- The computer displays the pattern as sounds or pictures.
- Then your child looks at (or listens to) the pattern and compares it with the pattern made by someone who tightens and relaxes the muscles properly.
- Your doctor explains to your child why the patterns are different and tells your child how to use their muscles correctly.

Then your child practises 'doing a poo'.

- The probe in your child's rectum has a balloon on it. This balloon is filled with air, which gives your child the urge to 'do a poo'.
- Your child is asked to tighten their stomach muscles and relax the muscles around the anus to push out the balloon.
- Your child learns to use the cues from the sounds or pictures to train the muscles to tighten and relax in the right way.

The idea is that your child will eventually learn to sense the messages from their body without the machine, and learn how to relax instead of tensing the muscles around the anus, to let stools out.

It can take a long time to learn biofeedback. In the studies we looked at, children learning biofeedback had up to six sessions. Each session lasted about 45 minutes, and they took place once or twice a week. [41]

**Glossary:**

**anus**
The anus, which is at the end of the rectum, is where stools leave your body when you go to the toilet. Part of the anus is a muscle that helps you hold in the stool until you are on the toilet.

**rectum**
The rectum is the last 15 to 20 centimetres (six to eight inches) of the large intestine, ending with the anus (where you empty your bowels from).

**fibre**
Fibre is all the parts of food that the body can't absorb. This is why foods that are high in fibre make you have more bowel movements. When your body can't absorb something, it leaves your body in your stools. Foods high in fibre include wholemeal bread and cereals, root vegetables and fruits.

**allergy**
If you have an allergy to something (such as pollen or a medicine), your body always overreacts to it. The reaction happens because your immune system (your body's system for fighting infection) is too sensitive to it.

**anal fissure**
Your anus is the last part of your digestive system. It's the opening between your buttocks, where stools (faeces) come out. An anal fissure is a small crack, cut or sore on your anus.

**seizure**
A seizure (or fit) is when there is too much electrical activity in your brain, which results in muscle twitching and other symptoms.

**thyroid gland**
Your thyroid gland is a small organ that sits in your neck, just in front of your windpipe. It sends out a hormone called thyroxine. This acts on receptors within cells. By acting on the receptors it gives the cells a message to speed up their metabolism and work harder.

**hormones**
Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

**cerebral palsy**
Children with cerebral palsy have disabilities because they were injured while they were in the womb or during birth. They often have trouble moving some or all of their limbs. They may also have learning difficulties or seizures.

**cystic fibrosis**
Cystic fibrosis is a disease people are born with that gives them problems with their lungs and bowels. The main results are breathing and digestive problems.

**bladder**
Your bladder is the hollow organ at the top of your pelvis that stores urine. It is similar to a balloon, only with stronger walls. It fills up with urine until you go to the toilet.

**urinary tract infection**
A urinary tract infection (UTI) happens when bacteria invade the walls of your urinary tract, which includes your kidneys, bladder and urethra. An uncomplicated UTI is one that involves your bladder and urethra, but not your kidneys. A complicated UTI involves your kidneys and can be harder to treat. Doctors may refer to a kidney infection as pyelonephritis.

**enema**
An enema is liquid that is poured into the rectum to clean it out. Many people find it uncomfortable and embarrassing, but it helps a doctor to see the inside of the bowels.

**sedation**
A feeling of relaxation and calm, or the act of creating a feeling of calm by administering a drug.

**general anaesthetic**
You may have a type of medicine called a general anaesthetic when you have surgery. It is given to make you unconscious so you don't feel pain when you have surgery.

**fever**
If you have a fever, your body temperature is above 37 degrees Celsius (98.6 degrees Fahrenheit). With a fever you often get other symptoms, such as shivering, headache or sweating. A fever is usually caused by an infection.

**X-ray**
X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.

**ulcer**
An ulcer is an open sore. Ulcers can happen in many parts of your body, such as in your stomach, and the skin of your legs, mouth, or genitals.

**polyp**
A polyp is a growth that is found inside your body.

**MRI scan**
A magnetic resonance imaging (MRI) machine uses a magnetic field to create detailed pictures of the inside of your body.

**Hirschsprung's disease**
Hirschsprung's disease is a disease you're born with. The nerves in the last part of your colon and in your rectum don't develop. The end of your colon stays very narrow and won't relax and tighten to let stools pass through. So the stools build up above that area and stretch out the rest of your colon.This disease is also called congenital aganglionic megacolon. It can be treated with surgery.

**randomised controlled trials**
Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

**placebo**
A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

**systematic reviews**
A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

**laxative**
Laxatives are medicines that empty your bowels by making you go to the toilet more often than usual.

**diarrhoea**
Diarrhoea is when you have loose, watery stools and you need to go to the toilet far more often than usual. Doctors say you have diarrhoea if you need to go to the toilet more than three times a day.

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Last published: Apr 09, 2015