

Constipation in Adults

Constipation is a common problem. It means either going to the toilet less often than usual to empty the bowels, or passing hard or painful stools (also called faeces, motions or poo). Constipation may be caused by not eating enough fibre, or not drinking enough fluids. It can also be a side-effect of certain medicines, or related to an underlying medical condition. In many cases, the cause is not clear. Laxatives are a group of medicines that can treat constipation. Ideally laxatives should only be used for short periods of time until symptoms ease.

Note: there is a separate leaflet called '*Constipation in Children*'.

What is constipation?

Constipation is common. If you are constipated it causes one or more of the following:

- Faeces (stools or motions) become hard, and difficult or painful to pass.
- The time between toilet trips increases compared with your usual pattern. (**Note:** there is a large range of normal bowel habit. Some people normally go to the toilet to pass faeces 2-3 times per day. For others, 2-3 times per week is normal. It is a **change** from your usual pattern that may mean that you are constipated.)
- Sometimes crampy pains occur in the lower part of your abdomen. You may also feel bloated and feel sick if you have severe constipation.

What are the causes of constipation?

Known causes include the following:

- **Not eating enough fibre (roughage)** is a common cause. The average person in the UK eats about 12 grams of fibre each day. But, 18 grams per day is recommended. Fibre is the part of plant food that is not digested. It remains in your gut. It adds bulk to the faeces, and helps your bowels to work well. Foods high in fibre include: fruit, vegetables, cereals and wholemeal bread.
- **Not drinking much** may make constipation worse. Stools are usually soft and easily passed if you eat enough fibre, and drink enough fluid. However, some people need more fibre and/or fluid than others in order to avoid constipation.
- **Some special slimming diets** are low in fibre, and may cause constipation.
- **Some medicines** can cause constipation as a side-effect. Examples are painkillers (particularly those with codeine, such as co-codamol, or very strong painkillers, such as morphine), some antacids, some antidepressants (including amitriptyline) and iron tablets, but there are many others. See the list of possible side-effects on the leaflet that comes with any medicine that you may be taking. Tell a doctor if you suspect a medicine is making you constipated. A change of medication may be possible.
- **Various medical conditions** can cause constipation. For example, an underactive thyroid, irritable bowel syndrome, some gut disorders, and conditions that cause poor mobility, particularly in the elderly.
- **Pregnancy.** About 1 in 5 pregnant women will become constipated. It is due to the hormone changes of pregnancy that slow down the gut movements. In later pregnancy, it can simply be due to the baby taking up a lot of room in the tummy and the bowels being pushed to one side.

Unknown cause (idiopathic)

Some people have a good diet, drink a lot of fluid, do not have a disease or take any medication that can cause constipation, but still become constipated. Their bowels are said to be underactive. This is quite common and is sometimes called functional constipation or primary constipation. Most cases occur in women. This condition tends to start in childhood or in early adulthood, and persists throughout life.

Do I need any tests?

Tests are not usually needed to diagnose constipation, because symptoms are often typical.

However, tests may be advised if you have any of the following:

- If regular constipation is a new symptom, and there is no apparent cause, such as a change in diet, lifestyle, or medication. This is known as a 'change in bowel habit' and should be investigated if it

lasts for more than about six weeks.

- If symptoms are very severe and not helped with laxative medication.
- If other symptoms develop. More worrying symptoms include: passing blood from your bowel; weight loss; bouts of diarrhoea; night-time symptoms; a family history of colon cancer or inflammatory bowel disease (Crohn's disease or ulcerative colitis); or other unexplained symptoms in addition to constipation.

What can I do to ease and to prevent constipation?

These measures are often grouped together and called **lifestyle advice**.

Eat foods that contain plenty of fibre

Fibre (roughage) is the part of plant food that is not digested. It stays in your gut and is passed in the stools (faeces). Fibre adds bulk and some softness to the stools. High-fibre foods include the following:

- Wholemeal or whole-wheat bread, biscuits and flour.
- Fruit and vegetables. Aim to eat *at least* five portions of a variety of fruit and vegetables each day. One portion is: one large fruit such as an apple, pear, banana, orange, or a large slice of melon or pineapple; OR two smaller fruits such as plums, satsumas, etc; OR one cup of small fruits such as grapes, strawberries, raspberries, cherries, etc; OR one tablespoon of dried fruit; OR a normal portion of any vegetable (about two tablespoons); OR one dessert bowl of salad.
- Wholegrain breakfast cereals such as All-Bran®, Bran Flakes®, Weetabix®, Shredded Wheat® and muesli. A simple thing like changing your regular breakfast cereal can make a big difference to the amount of fibre you eat each day.
- Brown rice, and wholemeal spaghetti and other wholemeal pasta.

Although the effects of a high-fibre diet may be seen in a few days, it may take as long as four weeks. You may find that if you eat more fibre (or take fibre supplements - see below), you may have some bloating and wind at first. This is often temporary. As your gut becomes used to extra fibre, the bloating or wind tends to settle over a few weeks. Therefore, if you are not used to a high-fibre diet, it is best to increase the amount of fibre gradually.

Note: have lots to drink when you eat a high-fibre diet or fibre supplements. Drink at least two litres (about 8-10 cups) per day. This is to prevent a blockage of the gut, which is a rare complication of eating a lot of fibre without adequate fluid. See below in the section 'bulk-forming laxatives' for an explanation.

A separate leaflet in this series, called '*Fibre and Fibre Supplements*', gives more details on high-fibre foods.

Have plenty to drink

Aim to drink at least two litres (about 8-10 cups) of fluid per day. You will pass much of the fluid as urine, but some is passed out in the gut and softens the stools. Most sorts of drink will do, but alcoholic drinks can be dehydrating and may not be so good. As a start, try just drinking a glass of water 3-4 times a day in addition to what you normally drink.

Sorbitol

Sorbitol is a naturally occurring sugar. It is not digested very well and draws water into the gut, which has an effect of softening the stools. In effect, it acts like a natural osmotic laxative (osmotic laxatives are explained later). So, you may wish to include some foods that contain sorbitol in your diet. Fruits (and their juices) that have a high sorbitol content include: apples, apricots, gooseberries, grapes (and raisins), peaches, pears, plums, prunes, raspberries and strawberries. The concentration of sorbitol is about 5-10 times higher in dried fruit. Dried or semi-dried fruits make good snacks and are easily packed for transport - for example, in a packed lunch.

Exercise regularly, if possible

Keeping your body active helps to keep your gut moving. It is well known that disabled people, and bed-bound people (even if just temporarily whilst admitted to hospital), are more likely to get constipated.

Toileting routines

Do not ignore the feeling of needing the toilet. Some people suppress this feeling if they are busy. It may result in a backlog of faeces that is difficult to pass later. When you go to the toilet, it should be unhurried, with enough time to ensure that you can empty your bowel.

When mobility is limited - for example, in people who are frail or who have dementia - it is important for carers to see that they have sufficient help to get to the toilet at the time they need to go; also, that they have a regular, unhurried toilet routine, with privacy. As a rule, it is best to try going to the toilet first thing in the morning, or about 30 minutes after a meal. This is because the movement (propulsion) of faeces through the lower bowel is greatest in the mornings and after meals (due to the gastrocolic reflex).

Positioning on the toilet is also important, especially for elderly people with constipation. Western-style toilets actually make things more difficult - squatting is probably the best position in which to pass stools. Putting a small footstool under your feet is a simple way to change your toilet position to aid the passage of stools. Relax, lean forward and rest your elbows on your thighs. You should not strain and hold your breath to pass a stool.

What are the treatments for constipation?

Treatment with a laxative is needed only if the lifestyle measures above do not work well. It is still worth persisting with these methods, even if you end up needing to use laxatives.

For short-term uncomplicated constipation, you may even choose to treat yourself (without visiting the GP), by buying laxatives in the pharmacy or supermarket. In short-term constipation, laxatives can be stopped once the stools become soft and easily passed again. You should probably visit your GP if you are struggling to manage short-term constipation yourself, or if you have longer-term (chronic) constipation. All of the different types of laxative are available on prescription.

Chronic (persistent) constipation can be more difficult to treat. Laxatives are usually needed for longer periods (sometimes even indefinitely) and they should not be stopped abruptly. Chronic constipation is sometimes complicated by a backlog of hard stools building up in the bowel (faecal loading) or even partially blocking it (impaction). If loading and impaction occur they need to be treated first, often with much higher doses of laxatives. Then a normal maintenance dose of laxatives is used to keep the bowels moving.

There are four main groups of laxatives that work in different ways:

- Bulk-forming laxatives.
- Stimulant laxatives.
- Osmotic laxatives.
- Faecal (stool) softener laxatives.

Bulk-forming laxatives

Sometimes these are known as fibre supplements. These increase the bulk of your faeces in a similar way to fibre. They can have some effect within 12-24 hours but their full effect may take several days to develop.

- Unprocessed bran is a cheap fibre supplement. If you take bran, it is best to build up the amount gradually. Start with two teaspoons a day, and double the amount every five days until you reach about about 1-3 tablespoons per day. You can sprinkle bran on breakfast cereals, or mix it with fruit juices, milk, stews, soups, crumbles, pastries, scones, etc.
- Other fibre supplements include ispaghula (psyllium), methylcellulose, sterculia, wheat dextrin, inulin fibre, and whole linseeds (soaked in water).

There are various branded products that contain these ingredients. Examples are:

- Fibrelief®, Fybogel®, Isogel®, Ispagel® Orange and Regulan® all contain ispaghula.
- Celevac® contains methylcellulose.
- Normacol® and Normacol Plus® both contain sterculia.

A note of caution: fibre and bulk-forming laxatives partly work by absorbing water (a bit like blotting paper). The combination of bulk-forming laxatives and fluid usually produces soft, bulky faeces which should be easy to pass out. When you eat a high-fibre diet or take bulk-forming laxatives:

- You should have plenty to drink. At least two litres per day (8-10 cups). The faeces may become dry and difficult to pass if you do not have enough to drink. Very rarely, lots of fibre or bulk-forming laxatives and not enough fluid can cause an obstruction in the gut.

- You may notice an increase in wind (flatulence) and abdominal bloating. This is normal and tends to settle down after a few weeks as the gut becomes used to the increase in fibre (or bulk-forming laxative).

Occasionally, bulk-forming laxatives can make symptoms worse if you have very severe constipation. This is because they may cause abdominal bloating and discomfort without doing much to clear a lot of faeces which are stuck further down the gut. See a doctor if you feel that bulk-forming laxatives are making your symptoms worse.

Stimulant laxatives

These stimulate the nerves in the large bowel (the colon and rectum, sometimes also called the large intestine). This then causes the muscle in the wall of the large bowel to squeeze harder than usual. This pushes the faeces along and out. Their effect is usually within 8-12 hours. A bedtime dose is recommended so you are likely to feel the urge to go to the toilet sometime the following morning. Stimulant laxative suppositories act more quickly (within 20-60 minutes). Possible side-effects from stimulant laxatives include abdominal cramps, and long-term use can lead to a bowel that is less active on its own (without laxatives). This can be thought of as a 'lazy bowel'.

Stimulant laxatives include bisacodyl, dantron, docusate, glycerol, senna and sodium picosulfate. These medicines can be prescribed on a prescription in the unbranded (generic) form. Commercially branded versions (proprietary brands) contain the same ingredients, but are generally only available for purchase over-the-counter. Examples include:

- Dulcolax® contains bisacodyl.
- Dioctyl®, Docusol® and Norgalax Micro-enema® all contain docusate.
- Manevac® and Senokot® are both brands that contain senna. Senokot® tablets are not available on prescription. Manevac® also contains the bulk-forming laxative ispaghula.
- Dulcolax Perles® contain sodium picosulfate.

Osmotic laxatives

These work by retaining fluid in the large bowel by osmosis (so less fluid is absorbed into the bloodstream from the large bowel). There are two types - lactulose and a group called macrogols (also called polyethylene glycols). Lactulose can be bought over-the-counter as Duphalac®, Lactugal® and Regulose®. Movicol®, Movicol®-Half and Movicol® Paediatric Plain all contain macrogols and are available on prescription.

Lactulose can take up to two days to have any effect so it is not suitable for the rapid relief of constipation. Possible side-effects of lactulose include abdominal pain and bloating. Some people find the taste of lactulose unpleasant. Macrogols acts much faster, and can also be used in high doses to clear faecal loading or impaction.

Stronger osmotic laxatives (such as magnesium salts and phosphate enemas) can be used to clear the bowel quickly and in situations such as before bowel surgery.

Faecal softeners

These work by wetting and softening the faeces. The most commonly used is docusate sodium (which also has a weak stimulant action too). Bulk-forming laxatives also have some faecal-softening properties. Arachis (peanut) oil enemas are occasionally used to soften impacted faeces in the rectum (lowest part of the colon, just before the anus).

Liquid paraffin used to be commonly used as a faecal softener. However, it is now not recommended as it may cause side-effects such as seeping from the anus and irritating the skin, and it can interfere with the absorption of some vitamins from the gut.

Which laxative should I use and for how long?

The one recommended by your doctor or pharmacist will depend on factors such as your own preference, the symptoms of constipation that you have, possible unwanted effects, your other medical conditions, and cost. However, as a general rule:

- Treatment with a bulk-forming laxative is usually tried first.
- If faeces remain hard despite using a bulk-forming laxative, then an osmotic laxative tends to be

- tried, or used in addition to a bulk-forming laxative.
- If faeces are soft but you still find them difficult to pass then a stimulant laxative may be added in.
- High doses of the macrogol osmotic laxatives are used to treat faecal loading and impaction - this should be under the supervision and advice of a doctor.

You should use a laxative only for a short time, when necessary, to get over a bout of constipation. Once the constipation eases, you should normally stop the laxative. Some people get into the habit of taking a laxative each day 'to keep the bowels regular' or to prevent constipation. This is not advised, especially for laxatives which are not bulk-forming.

Other treatments

Constipation is usually helped by the above treatments. Mostly, laxatives are taken by mouth (orally). In some cases, it is preferable also to treat constipation by giving medication via the anus (back passage).

Suppositories are pellet-shaped laxatives that are inserted into the rectum, via the anus. Glycerol suppositories act as a stimulant within the rectum, encouraging the passing of stools. Sometimes, an enema is needed in severe constipation. An enema is a liquid that is inserted into the rectum and lower colon, via the anus. Enemas can be used to clear out the lower bowel (rectum) in severe constipation.

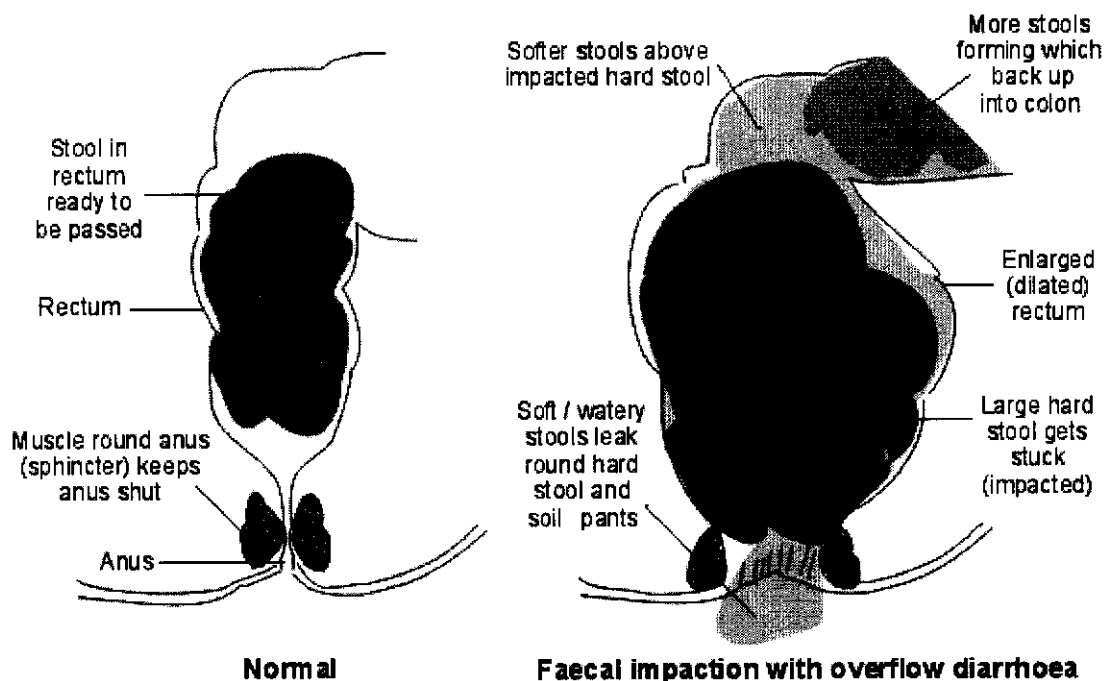
Other treatments may be advised by a specialist for people with severe constipation who have not been helped by the treatments listed above.

Are there any complications of chronic (long-term) constipation?

Short-term constipation or intermittent bouts of constipation are unlikely to cause any long-term problems. Sometimes a split or tear in the anal skin (an anal fissure) can occur with the passage of a particularly big or hard stool. This is very painful, and there may be a small amount of fresh red blood on the toilet paper. Treatment of an anal fissure involves lifestyle measures (mentioned earlier) to keep the stools soft, and perhaps laxatives too, to keep the stools really easy to pass. Local anaesthetic ointment or glyceryl trinitrate (GTN) ointment can be prescribed by your GP to ease the pain and help relax the muscles around the anus, to help the fissure to heal.

Chronic constipation and long-term use of laxatives can mean that your bowel becomes sluggish and 'lazy'. This means that the bowel doesn't work very well on its own, without medication. Constipation then becomes a vicious cycle and even more chronic. Try to avoid getting into this situation in the first place, and consult your GP for advice. Some people with persistent and severe constipation do require regular laxatives.

Severe chronic constipation can result in faecal impaction. This is something that is more likely in the elderly and infirm. Basically, a large mass of hard stool blocks the rectum. The mass is too big to pass and the rectum is stretched and enlarged, so the muscles within it don't work so well to push stools out. Sometimes people with this problem think that they have diarrhoea. This is because liquid stool from above the blockage, leaks round the big lump of stool, and out of the anus. This is known as overflow diarrhoea. In this situation you may also have faecal incontinence - that is, you have no control over this liquid stool leaking out. Faecal impaction with overflow diarrhoea is likely if you have been getting progressively more constipated, and then get liquid stools, possibly explosive, and without much control. If a doctor or nurse examines the back passage, the hard stool can often be felt, confirming the diagnosis. The diagram below shows this process:



In order to treat impaction, higher doses of laxatives need to be used. Movicol® is often used, and sometimes enemas or suppositories. Temporarily, symptoms of diarrhoea may worsen, but it is important to keep up with treatment, to clear the blockage. After the large mass of stool is cleared, laxatives are often needed for a while (or perhaps even long-term or intermittently), to prevent the problem recurring.

Natural treatments for constipation

Prunes

Prunes (dried plums) have long been thought of as effective for constipation. However, up until recently, there had been little scientific proof of this. But, a research trial published in 2011 (cited at the end) lends support to the belief that prunes are good for treating constipation.

In the trial, 40 adults with persistent constipation were studied as to the effect of prunes versus ispaghula (psyllium) - a commonly used treatment for constipation. Briefly, on average, 50 g of prunes (about 6 prunes) twice daily seemed to be better at easing constipation than 11 g ispaghula taken twice daily. This is just one small trial, but does seem to confirm many people's belief that prunes are good for easing constipation.

The Beverley-Travis Natural Laxative Mixture

This recipe (detailed below) was studied in a research trial that involved older people in a care home. A treatment group was compared to a non-treatment group. The conclusion of the study stated that "the Beverley-Travis natural laxative mixture, given at a dosage of 2 tablespoons twice daily, is easy to use, cost-effective, and more effective than daily prescribed laxatives at producing normal bowel movements". So, it may be worth a try.

- **Recipe ingredients** - one cup each of: raisins; pitted prunes; figs; dates; currants; prune juice concentrate.
- **Directions** - combine contents together in grinder or blender to a thickened consistency. Store in refrigerator between uses.
- **Dose** - two tablespoons twice a day. Increase or decrease dose according to consistency and frequency of bowel movements.

References

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For the planned review period see the Data Creation and Quality Control Process.