

LAXATIVES

When your bowels do not move as frequently as usual and the faeces are hard and difficult to pass, you are suffering from constipation. The most common cause is lack of sufficient fibre in your diet; fibre supplies the bulk that makes the faeces soft and easy to pass. The simplest remedy is more fluid and a diet that contains plenty of foods that are high in fibre, but laxative drugs may also be used.

Ignoring the urge to defecate can also cause constipation, because the faeces become dry, hard to pass, and too small to stimulate the muscles that propel them through the intestine.

Certain drugs may be constipating: for example, opioid analgesics, tricyclic antidepressants, and antacids containing aluminium. Some diseases, such as hypothyroidism (underactive thyroid gland) and scleroderma (a rare disorder of connective tissue characterized by the hardening of the skin), can also lead to constipation.

The onset of constipation in a middle-aged or elderly person may be an early symptom of bowel cancer. Consult your doctor about any persistent change in bowel habit.

Why they are used

Since prolonged use is harmful, laxatives should be used for very short periods only. They may prevent pain and straining in people suffering from either hernias or haemorrhoids (p.71). Doctors may prescribe laxatives for the same reason after childbirth or abdominal surgery. Laxatives are also used to clear the bowel before investigative procedures such as colonoscopy. They may be prescribed for patients who are elderly or bedridden because lack of exercise can often lead to constipation.

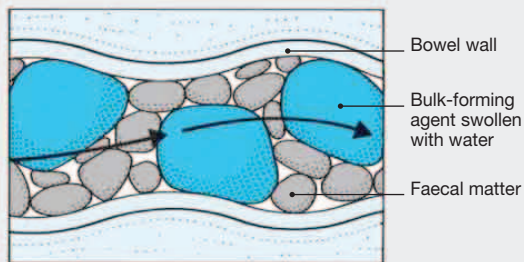
How they work

Laxatives act on the large intestine – by increasing the speed with which faecal matter passes through the bowel, or increasing its bulk and/or water content.

ACTION OF LAXATIVES

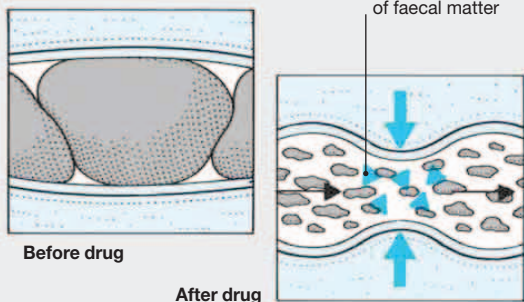
Bulk-forming agents

Taken after a meal, these agents are not absorbed as they pass through the digestive tract. They contain particles that absorb many times their own volume of water. By doing so, they increase the bulk of the bowel movements and thus encourage bowel action.



Stimulant laxatives

These laxatives are thought to encourage bowel movements by acting on nerve endings in the wall of the intestines that trigger contraction of the intestinal muscles. This speeds the passage of faecal matter through the large intestine, allowing less time for water to be absorbed. Thus faeces become more liquid and are passed more frequently.



Stimulants cause the bowel muscles to contract, increasing the speed at which faecal matter goes through the intestine. Bulk-forming laxatives absorb water in the bowel, thereby increasing the volume of faeces, making them softer and easier to pass. Lactulose also causes fluid to accumulate in the intestine. Osmotic laxatives act by keeping water in the bowel, and thereby make the bowel movements softer. This also increases the bulk of the faeces and enables them to be passed more easily. Lubricant liquid paraffin preparations make bowel movements softer and easier to pass

without increasing their bulk. Prolonged use can interfere with absorption of some essential vitamins.

Risks and special precautions

Laxatives can cause diarrhoea if taken in overdose, and constipation if overused. The most serious risk of prolonged use of most laxatives is developing dependence on the laxative for normal bowel action. Use of a laxative should therefore be discontinued as soon as normal bowel movements have been re-established. Children should not be given laxatives except in special circumstances on the advice of a doctor.

TYPES OF LAXATIVES

Bulk-forming agents These are relatively slow acting but are less likely than other laxatives to interfere with normal bowel action. Only after consultation with your doctor should they be taken for constipation accompanied by abdominal pain because of the risk of intestinal obstruction.

Stimulant (contact) laxatives These are for occasional use when other treatments have failed or when rapid onset of action is needed. Stimulant laxatives should not normally be used for longer than a week as they can cause abdominal cramps and diarrhoea.

Softening agents These are often used when hard bowel movements cause pain on defecation – for example, when haemorrhoids

are present, or after surgery when straining must be avoided. Liquid paraffin was once used for the relief of faecal impaction (blockage of the bowel by faecal material), but it can cause side effects and has generally been replaced by docusate sodium.

Osmotic laxatives Preparations containing magnesium carbonate or citrate may be used to evacuate the bowel before investigative procedures or surgery. They are not normally used for long-term relief of constipation because they can cause chemical imbalances in the blood.

Lactulose is an alternative to bulk-forming laxatives for the long-term treatment of chronic constipation. It may cause stomach cramps and flatulence but is usually well tolerated.

COMMON DRUGS

Stimulant laxatives

Bisacodyl
Dantrol
Docusate
Glycerol
Senna
Sodium picosulfate

Bulk-forming agents

Bran
Ispaghula
Methylcellulose *
Sterculia

Softening agents

Arachis oil
Liquid paraffin

Osmotic laxatives

Lactulose *
Magnesium citrate
Magnesium hydroxide *
Macrogols
Magnesium sulphate
Sodium acid phosphate

* See Part 3