Irritable Bowel Syndrome

Irritable bowel syndrome (IBS) is a common gut disorder. The cause is not known. Symptoms can be quite variable and include tummy (abdominal) pain, bloating, and sometimes bouts of diarrhoea and/or constipation. Symptoms tend to come and go. There is no cure for IBS, but symptoms can often be eased with treatment.

What is irritable bowel syndrome (IBS) and who gets it?

IBS is a common functional disorder of the gut. A functional disorder means there is a problem with the function of a part of the body, but there is no abnormality in the structure. So, in IBS, the function of the gut is upset, but all parts of the gut look normal, even when looked at under a microscope. IBS causes various symptoms (listed below). Up to 1 in 5 people in the UK develop IBS at some stage in their life. IBS can affect anyone at any age, but it commonly first develops in young adults. IBS is slightly more common in women than it is in men.

What are the symptoms of irritable bowel syndrome (IBS)?

- **Pain and discomfort** may occur in different parts of the tummy (abdomen). Pain usually comes and goes. The length of each bout of pain can vary greatly. The pain often eases when you pass stools (faeces) or wind. Many people with IBS describe the pain as a spasm or colic. The severity of the pain can vary from mild to severe, both from person to person, and from time to time in the same person.
- **Bloating** and swelling of your abdomen may develop from time to time. You may pass more wind than usual.
- **Changes in stools**:
    - Some people have bouts of diarrhoea, and some have bouts of constipation.
    - Some people have bouts of diarrhoea that alternate with bouts of constipation.
    - Sometimes the stools become small and pellet-like. Sometimes the stools become watery or more loose. At times, mucus may be mixed with the stools.
    - There may have a feeling of not emptying the back passage (rectum) after going to the toilet.
    - Some people have urgency, which means they have to get to the toilet quickly. A morning rush is common. That is, they feel an urgent need to go to the toilet several times shortly after getting up. This is often during and after breakfast.

- **Other symptoms which sometimes occur** - include:
    - Feeling sick (nausea).
    - Headache.
    - Belching.
    - Poor appetite.
    - Tiredness.
    - Backache.
    - Muscle pains.
    - Feeling quickly full after eating.
    - Heartburn.
    - Bladder symptoms (an associated irritable bladder).

Some people have occasional mild symptoms. Others have unpleasant symptoms for long periods. Many people fall somewhere in between, with flare-ups of symptoms from time to time. Some doctors group people with IBS into one of three categories:

- Those with abdominal pain or discomfort, and the other symptoms are mainly bloating and constipation.

- Those with abdominal pain or discomfort, and the other symptoms are mainly urgency to get to the toilet, and diarrhoea.
- Those who alternate between constipation and diarrhoea.

However, in practice, many people will not fall neatly into any one category, and considerable overlap occurs.

Note: passing blood is **not** a symptom of IBS. You should tell a doctor if you pass blood.

Do I need any tests for irritable bowel syndrome (IBS)?

There is no test that confirms the diagnosis of IBS. A doctor can usually diagnose IBS from the typical symptoms.

However, a blood sample or stool (faeces) test is commonly taken to do some tests to help rule out other conditions such as Crohn's disease, ulcerative colitis, coeliac disease, cancer of the ovary, gut infections, etc. The symptoms of these other diseases can sometimes be confused with IBS. Tests done commonly include:

- Full blood count (FBC) - to rule out lack of iron in the blood (anaemia), which is associated with various gut disorders.
- Erythrocyte sedimentation rate (ESR) or C-reactive protein (CRP) - which can show if there is inflammation in the body (which does not occur with IBS).
- A blood test for coeliac disease.
- In women, a blood test to rule out cancer of the ovary, called CA-125.
- A stool test to look for a protein called faecal calprotectin. This may be present if you have Crohn's disease or ulcerative colitis, but is not present in IBS.

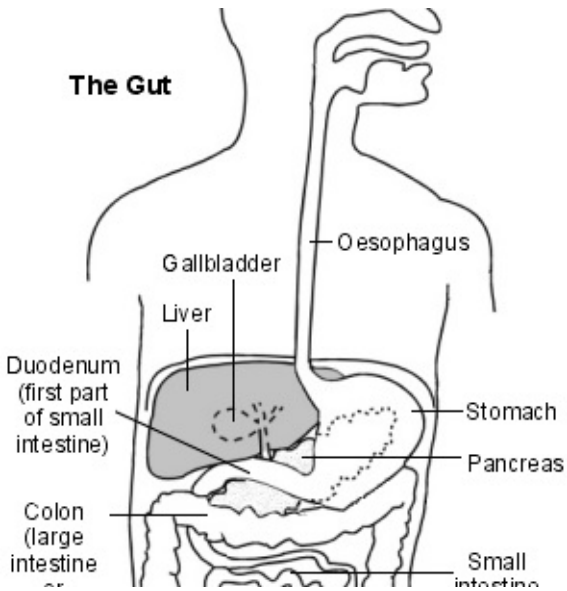
More complicated tests such as gastroscopy (a look into the bowel with a special telescope) are not usually needed. However, they may be done if symptoms are not typical, or if you develop symptoms of IBS in later life (over the age of about 50) when other conditions need to be ruled out.

What causes irritable bowel syndrome (IBS)?

The cause is not clear. It may have something to do with overactivity of part or parts of the gut. The gut is a long muscular tube that goes from the mouth to the back passage (anus). The small and large bowel (also called the small and large intestine) are parts of the gut inside the tummy (abdomen). Food is passed along by regular squeezes (contractions) of the muscles in the wall of the gut. Pain and other symptoms may develop if the contractions become abnormal or overactive. The area of overactivity in the gut may determine whether constipation or diarrhoea develops.

The cause of overactivity in parts of the gut is not clear. One or more of the following may play a part:

- Overactivity of the nerves or muscles of the gut. It is not known why this may occur. It may have something to do with overactivity of messages sent from the brain to the gut. Stress or emotional upset may play a role. About half of people with IBS can relate the start of symptoms to a stressful event in their life. Symptoms tend to become worse during times of stress or anxiety.
- Intolerance to certain foods may play a part in some cases. However, this is thought to be only in a small number of cases.
- Infection and germs (bacteria) in the gut. IBS is not caused by an ongoing gut infection. However, in about some cases, the onset of symptoms seems to follow a bout of a gut infection with diarrhoea and being sick (vomiting), called gastroenteritis. So, perhaps a virus or other germ may sensitise or trigger the gut in some way to cause persisting symptoms of IBS.



- Oversensitivity to pain. People with IBS feel more pain when their gut is expanded (dilated) than those without IBS. They may have a lower threshold for experiencing pain from the guts.

What are the treatments for irritable bowel syndrome (IBS)?

Many people are reassured that their condition is IBS, and not something more serious such as colitis. Simply understanding about IBS may help you to be less anxious about the condition, which may ease the severity of symptoms. Symptoms often settle for long periods without any treatment. In some cases, symptoms are mild and do not require treatment.

There are many different treatments that may be tried for IBS. All will have an effect on some people, but none will help in every person with IBS. No treatment is likely to take away symptoms completely, but treatment can often ease symptoms and improve your quality of life.

If symptoms are more troublesome or frequent, one or more of the following treatment options may be advised:

Treatment option 1: lifestyle changes

- **Exercise**. Regular exercise is known to help to ease symptoms.
- **Managing stress levels**. Stress and other emotional factors may trigger symptoms in some people. So, anything that can reduce your level of stress or emotional upset may help.
- **Keeping a symptom diary**. It may help to keep a food and lifestyle diary for 2-4 weeks to monitor symptoms and activities. Note everything that you eat and drink, times that you were stressed, and when you took any formal exercise. This may identify triggers, such as a food, alcohol, or emotional stresses, and may show if exercise helps to ease or to prevent symptoms. If you are advised to try a particular treatment, it may be sensible to keep a symptom diary before and after the start of the treatment. For example, before changing the amount of fibre that you eat, or taking a probiotic (explained later), or starting medication. You may wish to jot down in the diary the type and severity of symptoms that you have each day for a week or so. Keep the diary going after you start treatment. You can then assess whether a treatment has improved your symptoms or not.

Treatment option 2: dietary changes

A healthy diet is important for all of us. However, some people with irritable bowel syndrome (IBS) find certain foods of a normal healthy diet can trigger symptoms or make symptoms worse. See separate leaflet called Irritable Bowel Syndrome Diet Sheet for more details.

General dietary advice for IBS

Current national guidelines about IBS include the following points about diet, which may help to minimise symptoms:

- Have regular meals and take time to eat at a leisurely pace.
- Avoid missing meals or leaving long gaps between eating.
- Drink at least eight cups of fluid per day, especially water or other non-caffeinated drinks. This helps to keep the stools (faeces) soft and easy to pass along the gut.
- Restrict tea and coffee to three cups per day (as caffeine may be a factor in some people).
- Restrict the amount of fizzy drinks that you have to a minimum.
- Don't drink too much alcohol. (Some people report an improvement in symptoms when they cut down from drinking a lot of alcohol.)
- Consider limiting intake of high-fibre food (but see the section above where an increase may help in some cases).
- Limit fresh fruit to three portions (of 80 g each) per day.
- If you have diarrhoea, avoid sorbitol, an artificial sweetener found in sugar-free sweets (including chewing gum) and in drinks, and in some diabetic and slimming products.

- If you have a lot of wind and bloating, consider increasing your intake of oats (for example, oat-based breakfast cereal or porridge) and linseeds (up to one tablespoon per day). You can buy linseeds from health food shops.

Fibre

The advice about fibre in treating IBS has changed somewhat over the years. Fibre (roughage - and other bulking agents) is the part of the food which is not absorbed into the body. It remains in your gut, and is a main part of stools. There is a lot of fibre in fruit, vegetables, cereals, wholemeal bread, etc. Some research studies have shown that a high-fibre diet helps symptoms in IBS; others have shown the opposite. In some people, perhaps particularly those with constipation, a high-fibre diet definitely helps. In others, often those with diarrhoea, a high-fibre diet makes symptoms worse. If you keep a symptom diary, you can work out which is true for you. Then you can adjust your fibre intake accordingly.

What seems to be the case is that the **type of fibre is probably important**. There are two main types of fibre - soluble fibre (which dissolves in water) and insoluble fibre. It is soluble fibre rather than insoluble fibre that seems to help ease symptoms in some cases. So, if you increase fibre, have more soluble fibre and try to minimise the insoluble fibre.

- Dietary sources of soluble fibre include oats, ispaghula (psyllium), nuts and seeds, some fruit and vegetables and pectins. A fibre supplement called ispaghula powder is also available from pharmacies and health food shops. This seems to be the most beneficial type of supplement.
- Insoluble fibre is chiefly found in corn (maize) bran, wheat bran and some fruit and vegetables. In particular, avoid bran as a fibre supplement.

The low-FODMAP diet

Recently, it has been discovered that a low-FODMAP diet may help some people with IBS.

FODMAP stands for **F**ermentable **O**ligosaccharides, **D**isaccharides, **M**onosaccharides, **a**nd **P**olyols. These are a group of carbohydrates found within foods, which may make IBS symptoms worse. Examples of foods to avoid in a low-FODMAP diet include:

- Certain fruits, such as apples, cherries, peaches and nectarines.
- Some green vegetables, such as peas, cabbage, broccoli and Brussels sprouts.
- Artificial sweeteners.
- Foods high in lactose, such as milk, ice cream, cream cheeses, chocolate and sour cream.

If you wish to try a low-FODMAP diet, you should discuss this with a dietician. It is difficult to cut down on so many foods, and keep eating a healthy diet without specialist advice. Your GP can arrange a referral to a dietician, and they can help you eat the right things.

Individual food intolerance

Some people with IBS find that one or more individual foods can trigger symptoms, or make symptoms worse (food intolerance or sensitivity). If you are not sure if a food is causing symptoms, it may be worth discussing this with a doctor who may refer you to a dietician. A dietician may be able to advise on an exclusion diet. For example, one meat, one fruit, and one vegetable. Then, advise on adding in different foods gradually to your diet to see if any cause the symptoms. It may be possible to identify one or more foods that cause symptoms. This can be a tedious process, and often no problem food is found. However, some people say that they have identified one or more foods that cause symptoms, and then can control symptoms by not eating them.

The foods that are most commonly reported to cause IBS symptoms in the UK are:

- Wheat (in bread and cereals).
- Rye.
- Barley.
- Dairy products.
- Coffee (and other caffeine-rich drinks such as tea and cola).
- Onions.

Probiotics

Probiotics are nutritional supplements that contain good germs (bacteria). That is, bacteria that normally live in the gut and seem to be beneficial. Taking probiotics may increase the good bacteria in the gut which may help to ward off bad bacteria that may have some effect on causing IBS symptoms. You can buy probiotic capsules (various brands) from pharmacies. The dose is on the product label. You can also buy foods that contain probiotic bacteria. These include certain milk drinks, yoghurts, cheeses, frozen yoghurts, and ice creams. They may be labelled as 'probiotic', 'containing bacterial cultures' or 'containing live bacteria'.

There is some evidence that taking probiotics may help to ease symptoms in some people with IBS. At present, there are various bacteria that are used in probiotic products. Further research is needed to clarify the role of probiotics and which one or ones are most helpful. In the meantime, if you want to try probiotics, you should keep to the same brand of probiotic-containing product for at least four weeks to monitor the effect. Perhaps try a different probiotic for at least a further four weeks if the first one made no difference.

Treatment option 3: medication which may help

Antispasmodic medicines for tummy (abdominal) pain

These are medicines that relax the muscles in the wall of the gut. Your doctor may advise one if you have spasm-type pains. There are several types of antispasmodics. For example, mebeverine, hyoscine and peppermint oil. They work in slightly different ways. Therefore, if one does not work well, it is worth trying a different one. If one is found to help then you can take it as required when pain symptoms flare up. Many people take an antispasmodic medicine for a week or so at a time to control pain when bouts of pain flare up. Some people take a dose before meals if pains tend to develop after eating. **Note**: pains may ease with medication but may not go away completely.

Treating constipation

Constipation is sometimes a main symptom of irritable bowel syndrome (IBS). If so, it may help if you increase your fibre as discussed earlier (that is, with soluble fibre such as ispaghula). Sometimes laxatives are advised for short periods if increasing fibre is not enough to ease a troublesome bout of constipation. It is best to avoid lactulose if you suffer with IBS.

A new medicine called linaclotide has been approved for people who have constipation as a main symptom of IBS. It works in a completely different way to other medicines for treating constipation. It is taken once a day and has been shown to reduce pain, bloating and constipation symptoms.

Treating diarrhoea

An antidiarrhoeal medicine may be useful if diarrhoea is a main symptom. Loperamide is the most commonly used antidiarrhoeal medicine for IBS. You can buy this at pharmacies as an over-the-counter medicine. You can also get it on prescription which may be more cost-effective if you need to take it regularly.

The dose of loperamide needed to control diarrhoea varies considerably. Many people use loperamide as required but some take it regularly. Many people learn to take a dose of loperamide in advance when they feel diarrhoea is likely to be a problem. For example, before going out to places where they know it may be difficult to find a toilet.

Treating bloating

Peppermint oil may help with bloating and wind. It is available over-the-counter or on prescription. For some people peppermint oil also helps with tummy pains and spasms.

Antidepressant medicines

A tricyclic antidepressant is sometimes used to treat IBS. In particular, it tends to work best if pain and diarrhoea are the main symptoms. An example is amitriptyline. (Tricyclic antidepressants have other actions separate to their action on depression. They are used in a variety of painful conditions, including IBS.) Other types of antidepressants, called selective serotonin reuptake inhibitors (SSRIs) are also occasionally used for IBS. For example, a tablet called fluoxetine. They may work by affecting the way you feel pain.

Unlike antispasmodics, you need to take an antidepressant regularly rather than as required. Therefore, an antidepressant is usually only advised if you have persistent symptoms, or frequent bad flare-ups that have not been helped by other treatments.

Possible new treatments

Various other treatments show promise. For example:

- Rifaximin is an antibiotic but mainly stays in the gut and very little is absorbed into the body. The theory is that it may kill some germs (bacteria) in the gut that may have some role in IBS. It is taken for two weeks. Further research is needed to clarify its role in IBS.
- A medicine called tegaserod seems to be useful for people with constipation.
- Studies have shown that certain Chinese herbal medicines may help to ease symptoms in some cases. However, results vary. So more research is needed to clarify their safety and usefulness.
- Newer medicines that affect certain functions of the gut are also being developed and may become useful treatments in the future.

Treatment option 4: other types of treatment

Psychological treatments (talking treatments)

Situations such as family problems, work stress, examinations, recurring thoughts of previous abuse, etc, may trigger symptoms of irritable bowel syndrome (IBS) in some people. People with anxious personalities may find symptoms difficult to control.

The relationship between the mind, brain, nervous impulses, and overactivity of internal organs such as the gut is complex. Psychological treatments are mainly considered in people with moderate-to-severe IBS:

- When other treatments have failed; or
- When it seems that stress or psychological factors are contributing to causing symptoms.

The National Institute of Health and Care Excellence (NICE) recommends that cognitive behavioural therapy (CBT), hypnotherapy or psychological therapy should be considered when your symptoms have not improved with medication after one year. However, some of these treatments may not be available on the NHS in your area, or there may be long waiting lists. There is also not so much evidence about how well they work as there is for some other treatment options.

What is the outlook (prognosis)?

In most people with irritable bowel syndrome (IBS), the condition tends to persist long-term. However, the severity of symptoms tends to wax and wane. You may have long spells without any symptoms, or with only mild symptoms. Treatment can often help to ease symptoms when they flare up. In some cases, symptoms clear for good at some stage. This is more likely if your IBS started after an infection (gastroenteritis).

IBS does **not** shorten your expected lifespan, it does **not** lead to cancer of the bowel, and does **not** cause blockages of the gut, or other serious conditions.

Further help & information

IBS Network

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Web: www.theibsnetwork.org

Further reading & references

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