

# Irritable bowel syndrome

## IBS

Peer reviewed by Dr Caroline Wiggins, MRCGP

Last updated by Dr Rachel Hudson, MRCGP

Last updated 9 Sept 2024

✓ Meets Patient's **editorial guidelines**

Est. **9 min** reading time

IBS stands for irritable bowel syndrome, and it is a long-term chronic condition of the gut (bowel) that causes episodes of tummy (abdominal) cramps, bloating and either **constipation** or **diarrhoea**. IBS is a problem with how the bowel works.

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## What is IBS?

IBS stands for irritable bowel syndrome and may not cause any harm to your body but sometimes causes a lot of discomfort. It isn't known exactly what causes IBS, but



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microbiome of the bowels. The symptoms can range from mild to severe. There is no cure for IBS but some simple lifestyle changes and treatments usually make the symptoms much better.

## What causes IBS?

Exactly what causes IBS isn't known. It may have something to do with overactivity of part or parts of the gut (bowel) within the digestive system.

Food is passed along the bowel by regular squeezes (contractions) of the muscles in the wall of the bowel wall. Pain and other symptoms may develop if the contractions become abnormal or overactive. The area of overactivity in the gut may determine exactly where you feel the pain and 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 nervous system 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 lives. Symptoms tend to become worse during times of stress, depression and 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 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 gut.
- In recent years there has been increasing interest in the links between the gut microbiome, the brain and IBS. The microbiome is the combination of bugs (eg, bacteria and viruses) that are found in the gut. Patients with IBS have a different



microbiome pattern to those without IBS. The connections between the gut and the brain are known as the 'gut-brain axis' and it is this link which has led to the use of psychological therapies sometimes being used to treat IBS.

See the separate feature [Which foods trigger irritable bowel syndrome?](#)

## What are the symptoms of IBS?

The symptoms of IBS vary from person to person.

They include:

### Pain and discomfort

This may occur in different parts of the tummy (abdomen). Pain usually comes and goes. The length and severity 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.

### Bloating

Bloating and swelling of your tummy which may develop from time to time. You may pass more wind than usual.

### Changes in stools:

- Some people have bouts of **diarrhoea**, some have bouts of **constipation** and some get a combination of both.
- The stools may become small and pellet-like. Sometimes the stools become watery or more loose. At times, mucus may be mixed with the stools.
- There may be a feeling of not emptying the back passage (rectum) after bowel movements.
- Some people have urgency, which means they have to get to the toilet quickly. You may feel an urgent need to go to the toilet several times shortly after getting up.
- **Other IBS symptoms which sometimes occur** – these symptoms include:
  - **Feeling sick (nausea).**



- **Headache.**
- Belching.
- Poor appetite.
- Tiredness.
- **Heartburn.**
- Bladder symptoms (an associated irritable bladder).

Some people have occasional mild symptoms. Others have unpleasant long-term symptoms. 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 or constipation.
- 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:** remember that passing blood is **not** a symptom of IBS. You should tell a doctor if you pass blood or have other 'red flag' symptoms such as weight loss, difficulty in swallowing, and vomiting.

## How common is IBS?

IBS is common. It is thought to affect about 1 in 5 people in the UK at some time in their lives. In IBS, the function of the gut is upset, yet all parts of the gut look normal, even when looked at under a microscope. IBS can affect anyone at any age but it most often first develops in young adults and tends to be more common in those with a family history of IBS. Women are affected more often than men.

## How is IBS diagnosed?

There is no test that confirms the diagnosis of IBS. A doctor can usually diagnose IBS from the typical symptoms, and tests are used to rule out other conditions.



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Your doctor will check that there is nothing else going on. Usually this will include an examination of your tummy (abdomen) and back passage (rectum) and some simple tests.

A **blood test** and **stool (faeces) test** are often taken to help rule out other conditions (see below). The tests that are often considered to rule out these conditions include:

- **Full blood count (FBC)** – to rule out lack of iron in the blood (anaemia), which is associated with various gut (bowel) 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. A stool test called a FIT test may also be used to check whether you have any bleeding from your bowel, which may be a sign of bowel cancer.

More complicated tests such as **gastroscopy** or **colonoscopy** (to 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 else could it be?

Some conditions produce symptoms which can be confused with IBS. These include:

- **Crohn's disease** (inflammatory bowel disease).
- **Ulcerative colitis**.
- **Coeliac disease**.
- **Diverticulosis**.
- **Gut infection**.
- Various tumours including cancer of the colon or ovary or a group of cancers



IBS does not cause colon cancer, but a person who has IBS may develop colon cancer later in life. A key factor in colon cancer is inflammation, and while IBS does cause pain and discomfort, it doesn't cause inflammation.

It is therefore important that patients with IBS report new symptoms, or a change in their symptoms, to their doctors, particularly worrying ones such as bleeding, even if they have been treated for IBS for many years.

## How to treat IBS

There are many different methods of treating IBS. All will have an effect on some people, but none will help in every person with IBS.

Many people with mild IBS symptoms don't need any treatment. No treatment is likely to take away symptoms completely; however, treatment can often ease symptoms and improve your bowel habits and quality of life.

## What lifestyle changes can help alleviate IBS symptoms?

- **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, weight loss and when you took any formal exercise. This may identify triggers, such as a food, alcohol, or emotional stress and may show if exercise helps to ease or to prevent symptoms.

## Home remedies for IBS

The National Institute for Health and Care Excellence (NICE) recommends that people with IBS might want to try probiotics, which can be bought over the counter. They should be tried for twelve weeks whilst monitoring the effect.



## What is the best diet for IBS?

Some people with IBS find that certain foods can trigger symptoms or make symptoms worse, and benefit from a low FODMAP diet. **See the separate leaflet called IBS diet sheet for more details.**

## Irritable bowel syndrome medications

### Antispasmodic medicines for tummy (abdominal) pain

These are medicines that relax the muscles in the wall of the gut. There are several types of **antispasmodics** – for example, **alverine citrate**, **mebeverine**, **hyoscine** and **peppermint oil**. The pain may ease with medication but may not go away completely.

### Treating constipation

Constipation is sometimes a main symptom of IBS. If so, it may help if you increase the soluble fibre in your diet. 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 have IBS.

A medicine called **linaclotide** works in a completely different way to other medicines for treating constipation. It has been shown to reduce pain, bloating and constipation symptoms.

### Treating diarrhoea

An antidiarrhoeal medicine (for example, **loperamide**) may be useful if diarrhoea is a main symptom. The dose of loperamide needed to control diarrhoea varies considerably.

### Treating bloating

Peppermint oil may help with bloating and wind. For some people peppermint oil (or peppermint tea) also helps with tummy (abdominal) pains and spasms.

### Antidepressant medicines

A **tricyclic antidepressant** is sometimes used to treat IBS. An example is amitriptyline. Tricyclic antidepressants are used in a variety of painful conditions, including IBS. **SSRI antidepressant medicines** (for example, **fluoxetine**) can also be used for IBS. They may work by affecting the way you feel pain.



## Alternative IBS treatments

### Psychological therapies

Any stressful situation (for example, family problems, work stress, examinations) may trigger symptoms of IBS in some people. Examples of psychological therapies are **cognitive behavioural therapy (CBT)**, hypnotherapy and psychotherapy. Psychological therapies can be very effective for some people with IBS.

### What is the outlook for IBS (prognosis)?

IBS usually causes symptoms long-term and often stays with you for the rest of your life. However, the symptoms tend to come and go. You may have long spells without any symptoms, or may have only mild symptoms.

Treatment can often help to ease symptoms when they flare up. IBS often improves with time and, in some cases, symptoms clear up for good at some stage.

#### Further reading and references


- **Ruepert L, Quartero AO, de Wit NJ, et al** [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list\\_uids=21833945](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=21833945); Bulking agents, antispasmodics and antidepressants for the treatment of irritable bowel syndrome. Cochrane Database Syst Rev. 2011 Aug 10;(8):CD003460.
- **Irritable bowel syndrome in adults: diagnosis and management of irritable bowel syndrome in primary care** <https://www.nice.org.uk/guidance/cg61/chapter/introduction>; NICE Clinical Guideline (February 2008, updated April 2017)
- **Bohn L, Storsrud S, Liljebo T, et al** [http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list\\_uids=26255043](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=26255043); Diet low in FODMAPs reduces symptoms of irritable bowel syndrome as well as traditional dietary advice: a randomized controlled trial. Gastroenterology. 2015 Nov;149(6):1399-1407.e2. doi: 10.1053/j.gastro.2015.07.054. Epub 2015 Aug 5.
- **Irritable bowel syndrome** <https://cks.nice.org.uk/topics/irritable-bowel-syndrome/>; NICE CKS, August 2023 (UK access only)



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- **Wu Y, Li Y, Zheng Q, et al**  ([http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list\\_uids=38999862](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Abstract&list_uids=38999862)); The Efficacy of Probiotics, Prebiotics, Synbiotics, and Fecal Microbiota Transplantation in Irritable Bowel Syndrome: A Systematic Review and Network Meta-Analysis. *Nutrients*. 2024 Jul 2;16(13):2114. doi: 10.3390/nu16132114.

## Article history

The information on this page is written and peer reviewed by qualified clinicians.

- **Next review due: 8 Sept 2027**

- **9 Sept 2024 | Latest version**

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**Dr Caroline Wiggins, MRCGP**



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