

Patient information from the BMJ Group

Crohn's disease

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Crohn's disease

If you've been told you have Crohn's disease, you might have mixed feelings. It's a long-term illness, and can cause unpleasant symptoms, such as diarrhoea or bleeding in your bowel. But some people will have had symptoms for many years without knowing what's wrong. So, it can come as a relief to be diagnosed and start treatment. Drugs can control the symptoms of Crohn's, but in the long term, some people end up needing surgery.

We've brought together the best research about Crohn's disease 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 you.

What is Crohn's disease?

If you have Crohn's disease, you get patches of inflammation on your bowel. This can cause unpleasant symptoms such as diarrhoea and weight loss. It can also cause more serious complications, such as a blockage in your bowel.

If you've been told you have Crohn's disease, you might have mixed feelings. You'll probably be worried about learning to live with a long-term illness. Equally, some people have symptoms of Crohn's for years before finding out what's wrong. So, you might feel that it's a positive step to get diagnosed and start treatment.

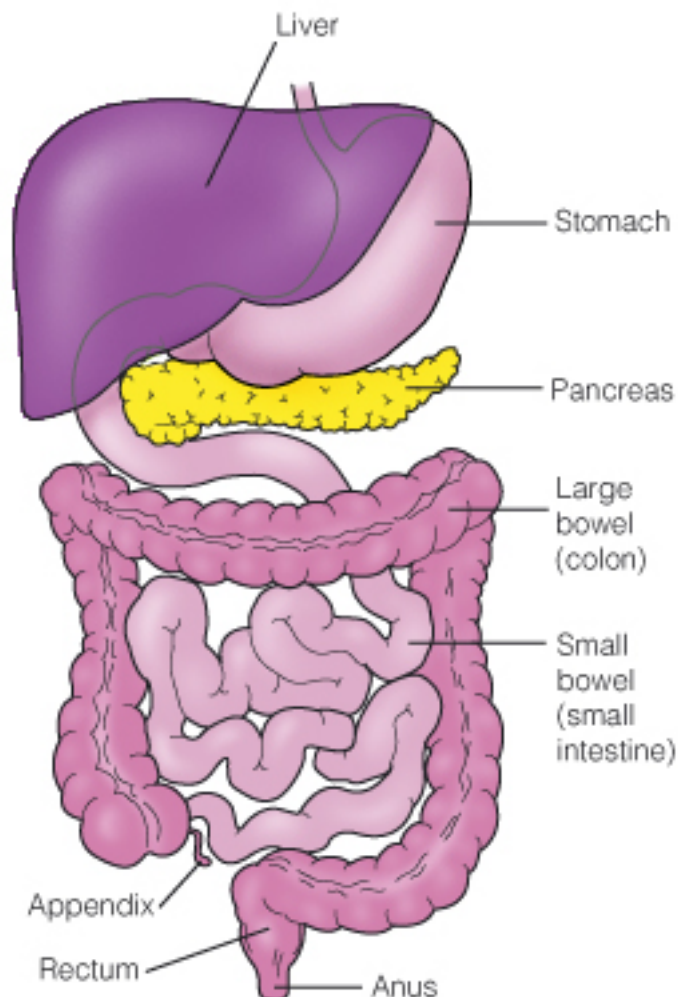
Key points about Crohn's disease

- You're not alone if you have Crohn's disease. It affects tens of thousands of people in the UK.
- The most common symptoms of Crohn's are diarrhoea, stomach pain, and weight loss. Some people get bleeding in their bowel. Too much bleeding can cause anaemia, which makes you feel extremely tired.
- The symptoms of Crohn's are unpleasant, but they tend to come and go. There are likely to be periods when you feel fine, or only get mild symptoms. There will also be times when you get a flare-up of Crohn's and your symptoms get worse.

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- In the long term, Crohn's can cause more serious problems, such as a narrow section in your bowel that gets blocked easily. Some people with Crohn's end up needing surgery. Surgery can be used to repair or remove a damaged part of the bowel.
- No treatment can completely get rid of Crohn's. Even after surgery, Crohn's disease can come back. However, there are good treatments that can treat a flare-up when it happens, and longer-term treatments to prevent flare-ups in the first place.
- Changes to your lifestyle and diet can help you stay healthy. There are times when your doctor might recommend a liquid diet. If you smoke, one of the best things you can do to help yourself is to give up.

How your bowels normally work



Crohn's disease can cause inflammation in any part of your bowels.

Your bowels, also called your intestines, are part of your digestive system. This system is made up of all the organs in your body that help to digest food. Food passes through your bowels after it's been broken down by your stomach.

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Your bowels have muscular walls that move in waves to carry food along. As food moves through your bowels, your body can absorb the nutrients it contains. The part of your bowels right below your stomach is called the small bowel, or small intestine. It's actually the longest part of your bowels, but it's also the narrowest, which is why it gets its name. It's a narrow tube about 6 metres (20 feet) long, and about 3 centimetres (just over an inch) wide. It sits curled up inside your abdomen. ^[1]

Your small bowel leads into your large bowel, or large intestine. This part is about 1.5 metres (5 feet) long, and much wider than the small bowel. ^[1]

The last section of your large bowel is called the rectum. Your rectum holds stools until they leave your body through your anus.

What happens if I have Crohn's disease?

If you have Crohn's, you get patches of **inflammation** on your bowel. The inflammation can happen anywhere, although it's the small bowel that's most likely to be affected. You might hear the term **inflammatory bowel disease (IBD)**. This is a broad term for illnesses that cause inflammation in your bowel, and includes Crohn's.

We don't know why people with Crohn's disease get inflammation. The main theory is that your bowel overreacts to something, possibly the natural, 'friendly' bacteria that live in your bowels. This overreaction seems to trigger your **immune system** and cause inflammation.

The inflammation can cause pain, and may also stop your bowels working properly. For example, food might pass through too quickly, causing diarrhoea. This is the most common symptom of Crohn's. Or the inflammation could become bad enough to create a narrow section of bowel that gets blocked easily. Other common symptoms include losing weight, tiredness or bleeding in the bowel.

As well as affecting your bowels, Crohn's can affect other parts of your body that food passes through, such as your mouth or your anus. ^[2] For example, you might get ulcers in your mouth, or a tear in the skin around your anus.

If you have severe Crohn's disease, the inflammation can get bad enough to damage the walls of your bowel. For example, scar tissue might build up in your bowel, creating a narrow section. This is called a **stricture**. Or an abnormal passage could form between your bowel and another part of your body. For example, you can get a tunnel between your bowel and your bladder, or even between your bowel and your skin. This is called a **fistula**. To read more, see [Complications of Crohn's disease](#).

For most people, the symptoms of Crohn's come and go. There will probably be times when you feel pretty much fine. But when Crohn's flares up, it can have a big impact on your life. For about 15 in 100 people who've had Crohn's disease for between five and 10 years, their symptoms are bad enough to stop them working full time. ^[3] However, the majority of people can manage the condition with drugs. Lifestyle changes, such as giving up smoking, can also improve the outlook.

Crohn's disease: why me?

Crohn's disease can have a big impact on your life, and it's understandable to want to know what caused it. Unfortunately, there isn't a clear answer. Doctors don't know why some people get Crohn's disease. It probably happens because of a combination of things rather than one particular cause. Here are some of the factors that may play a part. ^[5] ^[6] ^[7]

- Your **genes**. Some people may be more likely to get Crohn's than others because of the genes they've inherited from their parents.
- Your immune system. Inflammation is one of the ways your body reacts to an illness or an injury, and it's your immune system that's responsible for producing inflammation. If you have Crohn's, your immune system seems to overreact to something, producing too much inflammation in your bowels. But we don't know exactly what causes your immune system to act in this way.
- Bacteria. Some doctors think that Crohn's happens because of bacteria growing in your bowel. It might be that some people have an immune system that overreacts to bacteria in the bowel, causing inflammation. Some doctors think that a particular type of bacteria, called *Mycobacterium avium paratuberculosis*, might be to blame. However, this theory has never been proved. Taking **antibiotics** to kill bacteria doesn't seem to get rid of the symptoms of Crohn's disease.
- Your lifestyle, your diet, or the environment you live in. There are things about your life that can mean you're more likely to get Crohn's disease. They don't cause Crohn's directly, but they do seem to increase the risk. The main risk factor is smoking. Some doctors think that eating lots of sugar might also increase the risk of getting Crohn's, but this is just a theory.

What are the symptoms of Crohn's disease?

Crohn's disease can affect people in different ways. The symptoms you get are also likely to come and go. There are likely to be periods when you feel fine, but at other times your symptoms might suddenly get worse.

Most symptoms of Crohn's disease happen because there are patches of **inflammation** on your bowels. Some [other bowel diseases](#) cause similar symptoms to Crohn's. This can make it hard for doctors to be sure whether you have Crohn's disease, and it often gets mistaken for other illnesses. It can be very frustrating to have unpleasant symptoms and not be able to find out what's causing them.

The most common symptom is **diarrhoea** that lasts longer than six weeks. ^[8] Short bouts of diarrhoea are often caused by a stomach bug, but Crohn's disease can cause diarrhoea that lasts a long time. Some people only get diarrhoea at night.

There are other common symptoms. ^[8]

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- Pain in your abdomen. About 7 in 10 people get this. You might get sharp, cramping pain or a dull ache. The pain is often around your belly button, but it's also possible to get pain on your lower right side, which sometimes gets mistaken for [appendicitis](#).
- Weight loss. About 6 in 10 people lose weight without trying to.
- Blood or mucus in your stools. Between 4 and 5 out of 10 people get this problem. Blood in your stools can be bright red or almost black.
- Anaemia . If you get bleeding in your bowels that lasts a long time, the blood loss can make you anaemic. This means your blood can't carry enough oxygen around your body. Anaemia makes you feel very tired.

If your bowels aren't working properly, your body might not be able to absorb all the nutrients it needs from food. You might not get all the vitamins and minerals you need.

As well as causing inflammation in your bowels, Crohn's disease can sometimes cause inflammation in other parts of your body. You might get joint inflammation and pain ([arthritis](#)), a rash, mouth ulcers, or red and inflamed eyes. ^[4] These problems might flare up at the same time as your other Crohn's disease symptoms.

In some studies, up to 3 in 10 people got symptoms of Crohn's disease that affected parts of their body outside their bowels. ^[4] However, lots of the research looks at people with more severe Crohn's disease. The average person with Crohn's may be less likely to get these problems.

How do doctors diagnose Crohn's disease?

There's no simple test that can tell you whether or not you have Crohn's disease. Your doctor will talk to you about your symptoms, and you may need several different tests before your doctor is sure you have Crohn's disease.

It can be difficult for doctors to diagnose Crohn's disease. The symptoms vary from person to person, and lots of the symptoms can also be caused by other illnesses. Some people have Crohn's for a long time before they find out what's wrong, and this can be very frustrating. To find out about other conditions that have similar symptoms to Crohn's, see [What else might it be?](#)

The tests you have will look for signs of Crohn's and also help to rule out other, similar conditions. The best test for Crohn's uses a tiny camera on the end of a flexible tube to look inside your bowel. Other tests you might need include blood tests, stool tests and [x-rays](#) . ^[8]

Seeing your doctor

Your doctor will probably ask whether you've had symptoms like tiredness, [diarrhoea](#) , stomach pain or weight loss. He or she will look for other possible causes of your

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symptoms too. For example, your doctor might ask whether you've been travelling to countries where you might have picked up an [infection](#) .

Your doctor will also want to feel your abdomen. He or she is looking for tender spots, or any lumps that could be signs of scarring or a blockage. Your doctor might want to look inside your mouth or examine the skin around your back passage (anus).

Your doctor will probably weigh you. Having Crohn's disease can mean you lose weight, so it can be helpful to keep track of your weight over time.

You may be asked to give a stool sample. This can be checked under a microscope to make sure your symptoms aren't being caused by [parasites](#) or an infection.

Tests your doctor might order

There are several tests that can help your doctor be more certain about diagnosing Crohn's disease. Here are some you might have. The best is colonoscopy, which looks directly inside your bowel for signs of inflammation.

- [Blood tests](#)
- [X-rays](#)
- [Sigmoidoscopy](#)
- [Colonoscopy](#)

How common is Crohn's disease?

Crohn's disease is fairly rare but is becoming more common. Twice as many new cases are diagnosed now, compared with the 1950s. ^[9] Studies suggest that around 115,000 people in the UK have Crohn's disease, but the actual number could be higher. ^[10]

Crohn's disease can affect people at any age. However, it's most often diagnosed in people between the ages of 16 and 30. ^[11] ^[12]

Crohn's seems to be slightly more common in women than men, but not by much. ^[12] Most studies have found that between 5 and 6 out of 10 people who get Crohn's are women.

What treatments work for Crohn's disease?

No treatment can get rid of Crohn's disease completely, but there are lots of ways of keeping it under control.

Changes to your lifestyle can help, and if you get a flare-up of symptoms, drug treatment can help you get better. Your doctor might also recommend taking medicine regularly to

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stop your symptoms coming back. Surgery is sometimes used for complications caused by Crohn's disease.

Key points about treating Crohn's disease

- When you get a flare-up of symptoms, you'll probably take treatment for a few weeks or months to help you get better.
- The first choice of treatment is usually a group of drugs called [steroids](#). Their full name is corticosteroids, and they're similar to chemicals your body makes naturally. Drugs called [aminosalicylates](#) are another option.
- If you need additional treatment, you might also take a drug that affects your immune system, such as [azathioprine or mercaptopurine](#). If your symptoms are severe and other treatments haven't worked, your doctor might suggest taking [infliximab](#) or a similar drug called [adalimumab](#).
- Doctors sometimes recommend long-term treatment to help stop symptoms coming back. You might take [azathioprine or mercaptopurine](#) or a drug called [methotrexate](#).
- Several of the drug treatments for Crohn's work by stopping your [immune system](#) from working at full strength. As a side effect, these drugs can increase your risk of getting infections, which can sometimes be serious. You might need antibiotics to treat any infections you get.
- If you have Crohn's disease, your [diet and lifestyle](#) can affect the symptoms you get. There's good research showing that smokers get fewer symptoms if they manage to [give up](#). [Liquid foods](#) that are easy to digest are helpful for some people.
- There are likely to be times when you feel well, and get very few symptoms or even none at all. During times when your symptoms are mild enough to put up with, going without treatment may be an option.
- Crohn's disease can sometimes cause severe problems (complications), such as damage to your bowel or a blockage that won't let food pass through. To read more, see [Complications of Crohn's disease](#). You might need [surgery](#) if you get one of these problems.

Treatments for Crohn's disease

The symptoms of Crohn's vary from person to person. The symptoms you get are also likely to come and go over time. There will probably be times when you don't feel ill at all. The exact treatment you need at any particular time will depend on the symptoms you're getting and how severe they are.

We've looked separately at the different approaches to treating Crohn's.

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- [Drug treatments for a flare-up of symptoms](#) : Taking drugs for a few weeks or months can help you get rid of a flare-up. Drugs called steroids (short for corticosteroids) tend to be the first-line treatment, but there are also other drugs you can try. [More...](#)
- [Drug treatments to prevent symptoms](#) : If you're getting symptoms a lot, regular drug treatment may help. But long-term treatment to prevent symptoms also means a bigger risk of side effects. [More...](#)
- [Diet and lifestyle treatments to prevent symptoms](#) : There might be times when your doctor recommends a liquid diet. Giving up smoking can also help with the symptoms of Crohn's. [More...](#)
- [Surgery for Crohn's disease](#) : Some people with Crohn's end up needing surgery to repair or remove a damaged section of bowel. This is unlikely to be the first treatment you need. Many people go years without needing to have surgery. [More...](#)

Treatment Group 1

Drug treatments for a flare-up of Crohn's disease

Symptoms of Crohn's disease can come and go. You might find there are times when you don't have many symptoms, or even none at all. This is called being in remission. At other times, you might get a flare-up of symptoms. When this happens, your doctor can prescribe drug treatments to get rid of the flare-up and help you get back into remission.

Key points about drug treatments for a flare-up

- The first treatment your doctor suggests is likely to be a **steroid** . The full name of these drugs is corticosteroids, and they're similar to chemicals your body makes naturally to reduce the inflammation. However, steroids do have side effects, especially if you take them for a long time.
- If you can't take steroids or are worried about their side effects, your doctor might recommend a type of drug called an aminosalicylate. Aminosalicylates can help reduce your symptoms, although the improvements are likely to be fairly small.
- If you have two or more flare-ups of Crohn's in 12 months or your symptoms return when you lower your steroid dose, your doctor may recommend taking a drug that suppresses your immune system. These include azathioprine, mercaptopurine, and methotrexate.
- If you have severe Crohn's disease and other treatments haven't worked for you, your doctor might suggest a drug called infliximab or a similar drug called adalimumab. You have these drugs as a drip into a vein, and they need to be given by a specialist.

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- Doctors sometimes recommend antibiotics as a treatment for Crohn's. However, the research suggests they probably don't help, unless you've got extra problems caused by an infection.
- The drugs used to treat Crohn's disease can have side effects. These vary from person to person, but they can be serious. Talk to your doctor if you're getting problems. You may be able to switch to a different medicine or a lower dose.

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

For help in deciding which treatment is best for you, see [How to make the best decisions about treatment](#).

Drug treatments for a flare-up of Crohn's symptoms

Treatments that work

- [Steroid tablets](#) : Taking steroids can help you recover from an attack of symptoms, but these drugs have side effects. Steroids used to treat Crohn's include methylprednisolone (Medrone), prednisolone, and budesonide (brand names Budenofalk and Entocort). [More...](#)
- [Infliximab and adalimumab](#) : These drugs are used only for people with severe Crohn's disease, and if other treatments haven't worked. You take them as a drip into a vein. The brand name for infliximab is Remicade. The brand name for adalimumab is Humira. [More...](#)

Treatments that are likely to work

- [Aminosalicylates](#) : These drugs don't work as well as steroids but are less likely to cause side effects. They include mesalazine (brands include Asacol, Ipocol, and Salofalk), olsalazine (Dipentum), and sulfasalazine (Salazopyrin). [More...](#)
- [Methotrexate](#) : This is a drug that affects your immune system. It's given as an injection, usually once a week. It's often used to help with conditions that cause inflammation, including rheumatoid arthritis. You take this treatment along with a steroid. [More...](#)

Treatments that work, but whose harms may outweigh benefits

- [Azathioprine or mercaptopurine](#) : Both of these drugs work by suppressing your immune system. The brand name for azathioprine is Imuran. The brand name for mercaptopurine is Puri-Nethol. They can help people with Crohn's, but they take a long time to work and there's a risk of side effects. You take this treatment along with a steroid. [More...](#)

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Treatments that are unlikely to work

- [Antibiotics](#) : These drugs kill bacteria. They don't seem to make much difference to the symptoms of Crohn's. However, they'll be useful if you have an infection. [More...](#)

Treatments that are likely to be ineffective or harmful

- [Ciclosporin](#) : Ciclosporin is another drug that suppresses your immune system. It's often used to stop people rejecting organ transplants. One brand name is Neoral. [More...](#)

Treatment Group 2

Drug treatments to prevent symptoms of Crohn's disease

If you have Crohn's disease, there will probably be times when you only get mild symptoms, or even none at all. This is called being in remission. Drug treatments can help you stay in remission and prevent flare-ups of Crohn's. However, you'll need to balance this benefit against the side effects you might get from your medicines.

Key points about drug treatments to prevent symptoms

- Azathioprine and mercaptopurine both help to prevent symptoms of Crohn's if you take them regularly. However, they work by suppressing your immune system, so there's a risk of infections and other side effects. These drugs can also be helpful after surgery for Crohn's.
- Long-term treatment with methotrexate can also help to keep symptoms of Crohn's disease away. You'll probably need an injection once a week. However, it can make you more vulnerable to infections.
- An aminosalicylate called mesalazine may help people as a long-term treatment to prevent symptoms. Aminosalicylate might be useful to stop symptoms coming back after an operation.
- If you've taken [infliximab](#) or [adalimumab](#) to treat a flare-up of symptoms, carrying on taking it might stop your symptoms coming back. However, these drugs aren't used this way in the UK.
- Long-term treatment with a drug can increase your chances of getting side effects. If you're concerned about the side effects you're getting, ask your doctor about switching to a different medicine.
- Drugs can be effective, but there are also lifestyle changes you can make that help to stop symptoms of Crohn's coming back. If you're a smoker, giving up smoking is proven to prevent flare-ups of Crohn's. Replacing some of your meals with

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easy-to-digest, liquid food substitutes may also help prevent symptoms. To read more, see [Diet and lifestyle treatments for Crohn's disease](#) .

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

For help in deciding which treatment is best for you, see [How to make the best decisions about treatment](#).

Drug treatments to prevent symptoms of Crohn's

Treatments that are likely to work

- [Aminosalicylates](#) : These drugs can help to treat a flare-up, and a drug called mesalazine (brands include Asacol, Ipocol, and Salofalk) also seems to help prevent symptoms in the long term. Aminosalicylates might also have advantages for people who've had surgery for Crohn's disease. Other aminosalicylates include olsalazine (Dipentum), and sulfasalazine (Salazopyrin). [More...](#)
- [Infliximab and adalimumab](#) : Taking infliximab or adalimumab regularly can help keep your symptoms away. The brand name for infliximab is Remicade. The brand name for adalimumab is Humira. However, regular treatment with these drugs isn't usually recommended in the UK. [More...](#)
- [Methotrexate](#) : Having an injection of methotrexate once a week can help to prevent flare-ups of Crohn's disease. [More...](#)

Treatments that work, but whose harms may outweigh benefits

- [Azathioprine or mercaptopurine](#) : Taking these drugs regularly can help stop your symptoms coming back. They can also help keep symptoms away if you've had an operation for Crohn's disease. However, they can sometimes have serious side effects. The brand name for azathioprine is Imuran, and the brand name for mercaptopurine is Puri-Nethol. [More...](#)

Treatments that are likely to be ineffective or harmful

- [Ciclosporin](#) : Having regular treatment with ciclosporin doesn't prevent flare-ups of Crohn's disease. You might also get some serious side effects. One brand name for this treatment is Neoral. [More...](#)
- [Steroid tablets](#) : Although steroids are often used to treat a flare-up of Crohn's symptoms, continuing to take them regularly won't stop your symptoms coming back. Taking steroids for a long time can also cause some serious side effects. Steroids used to treat Crohn's include budesonide (brand names Budenofalk and Entocort), methylprednisolone (Medrone), and prednisolone. [More...](#)

Treatment Group 3

Diet and lifestyle treatments for Crohn's disease

Making changes to your lifestyle can help prevent symptoms of Crohn's disease. If you smoke, the most effective thing you can do is stop.

Key points about diet and lifestyle treatments

- Almost all the research shows that giving up smoking helps with the symptoms of Crohn's disease. You're likely to get fewer flare-ups if you give up. If you've had surgery for Crohn's, giving up smoking means you stay healthy for longer after your operation.
- Liquid food substitutes, a bit like milkshakes, can help you have fewer symptoms of Crohn's. They contain simple nutrients that are easy to digest. Soft or liquid foods can also be useful if you have problems with your bowel getting blocked.
- Fish oil supplements contain oils called omega-3 fatty acids. These are supposed to have health benefits, but the research isn't clear about whether they help with Crohn's disease.
- Probiotics are pills or yoghurts containing 'friendly' bacteria. These bacteria live naturally in your bowel and help digestion. However, there's not much research on whether they help people with Crohn's.
- If you have Crohn's, consider asking your doctor to refer you to a dietitian. Having Crohn's can sometimes make it difficult to eat, and you might not get all the vitamins or minerals you need. Getting professional advice about your diet can help.

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

For help in deciding which treatment is best for you, see [How to make the best decisions about treatment](#).

Diet and lifestyle treatments for Crohn's

Treatments that work

- [Giving up smoking](#) : If you're a smoker, giving up can mean you get fewer symptoms of Crohn's disease. Getting help from your doctor makes it easier to give up smoking. [More...](#)

Treatments that are likely to work

- [Liquid food](#) : Liquid food substitutes are sometimes called an elemental diet. They look like milk shakes, and offer simple nutrients that are easy to digest. Replacing

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just some of your meals with liquid food can help you have fewer symptoms of Crohn's. [More...](#)

Treatments that need further study

- [Fish oil supplements](#) : These supplements contain healthy oils called omega-3 fatty acids. You can buy them over the counter from pharmacies, health food shops, or supermarkets. [More...](#)
- [Probiotics](#) : Probiotics products help 'friendly' bacteria to grow in your bowels. You can buy lots of different brands of probiotic yoghurts, as well as pills or powders containing probiotics. [More...](#)

Treatment Group 4

Surgery for Crohn's disease

Crohn's disease can cause problems in your bowel (complications) that need treating with surgery. There are lots of types of bowel surgery, and the operation you need will depend on how bad your illness is and the part of your bowel that's affected.

Key points about surgery

- There's not much research looking at how well surgery deals with symptoms of Crohn's, or how it affects your life. Most studies look at how safe surgery is, or compare different surgical techniques. Make sure you talk to your surgeon and get a realistic idea of what surgery will achieve.
- If a section of your small bowel has become badly damaged, your surgeon may recommend an operation to remove it. Research shows that you're likely to recover more quickly if you have keyhole surgery.
- If scar tissue has built up in your bowel and caused a narrow section, you may be able to have surgery to widen it, rather than cut it away. You may be suitable for this operation if the narrow part isn't much more than 20 centimetres long. The operation is called strictureplasty. Surgeons think it's safe and works well. Your surgeon might recommend this operation if you get a blockage in your bowel.
- If you get symptoms in your large bowel, you can have surgery to remove all or part of it. The operation you need and the impact on your life will depend on how much of your large bowel is diseased.
- You might not have any symptoms of Crohn's disease for a long time after surgery. But surgery isn't a cure for Crohn's. Most people's symptoms will come back eventually. About half of people get symptoms again within 10 years. Your doctor might recommend medicines to help stop your symptoms coming back.

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

For help in deciding which treatment is best for you, see [How to make the best decisions about treatment](#).

Surgery for Crohn's

Treatments that are likely to work

- [Keyhole surgery to remove part of your small bowel](#) : If Crohn's disease has damaged a section of your small bowel, your surgeon might recommend an operation to cut it away. Having keyhole rather than normal surgery means you'll recover faster. [More...](#)
- [Surgery on the large bowel](#) : If your large bowel is badly damaged, your surgeon might recommend an operation to remove part of it, or even the whole of the large bowel. This is called a colectomy. [More...](#)

Treatments that need further study

- [Strictureplasty](#) : If scar tissue builds up in your small bowel, it can create a narrow section that gets blocked easily. An operation to widen the narrow part is called strictureplasty. [More...](#)

What will happen to me?

Crohn's disease is a lifelong condition. However, there will be times when your symptoms get better, or even go away completely.

Here, we look at some of the statistics about how Crohn's could affect your life. You might find this information useful, but remember that you're not a statistic. The symptoms of Crohn's vary a lot from person to person. And the symptoms you get won't be the same all the time.

Even so, there's no getting away from the fact that Crohn's disease is a serious illness. It's likely that there will be times when it has a big impact on your life. It may affect the things you can and can't do. At times, it may even affect your ability to work. However, there will probably be other times when you only have mild symptoms, or even none at all.



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The symptoms of Crohn's are likely to come and go.

When you don't have symptoms, it's called being in remission. During remission, someone with Crohn's may have the same quality of life as someone who's perfectly healthy.^[13] Up to 1 in 5 people with Crohn's don't get any more symptoms for a long time after their first flare-up.^[14] Even if you get symptoms more regularly, there will be times when they go away or bother you less.

In the year after being diagnosed with Crohn's, about three-quarters of people are well enough to work normally.^[3] For a quarter, however, Crohn's does affect their ability to work. But things might get better in the long run. After five or 10 years, only 15 in 100 people are unable to work.

Exactly what you're able to do will vary over time. For many people with Crohn's disease, there's a learning process. People get better at listening to their bodies and adapting their lives. It may also take some time to find the drug treatment that works best for you. We've collected some tips about minimising the impact Crohn's has on your life. To read more, see [Living with Crohn's disease](#) .

Children and Crohn's disease

Children who have Crohn's disease may grow more slowly than usual. In studies, this problem affected between 15 in 100 and 40 in 100 children.^[15] Crohn's affects the parts of your body that digest food, so having the disease might make it harder for children to get all the nutrients they need. The inflammation that Crohn's causes might also affect how quickly children grow. The chemicals that produce inflammation in the body also seem to make an important growth hormone, called IGF-I, work less well.

In the long term, though, most children will reach their expected adult height, even if it takes them a bit longer.^[15] One small study found that all children eventually reached normal height. Another study found that most children reached normal height, although a quarter of children ended up slightly shorter than expected.

Will I need surgery?

Crohn's disease can cause several problems that need treating with surgery. For example, you might need surgery to widen a narrow section of bowel, or to repair a hole in the wall of your bowel. To read more, see [Complications of Crohn's disease](#) .

Many people go for years without needing surgery, and some people never need it. However, the majority of people with Crohn's end up needing surgery at some point.^[16]

- In the first 10 years of having Crohn's, at least 5 in 10 people need an operation.
- Over a lifetime, 7 or 8 out of 10 people end up having surgery for Crohn's.

Make sure you talk to your doctor as quickly as possible if you:

Crohn's disease

- Get a temperature
- Feel severe pain
- Have blood in your stools
- Become bloated
- Feel dizzy or dehydrated
- Can't go to the toilet
- Can't stop being sick
- Get fluid leaking from your bottom or from anywhere on your skin.

These can be warning signs of complications that might need surgery.

Is there a risk of cancer?

People with Crohn's disease have a slightly higher-than-average risk of getting bowel cancer. However, most people with Crohn's don't go on to get bowel cancer. More than 90 in 100 people with inflammatory bowel conditions like Crohn's never get cancer. ^[17]

Even so, if you've had Crohn's for a long time, your doctor might recommend regular checks to make sure you're free of bowel cancer (this is called surveillance). ^[18] If you're worried about your risk of cancer, ask your doctor about these tests.

Some drugs for Crohn's disease make your **immune system** weaker. This can increase your chances of getting some cancers, such as cancer of the lymphatic system ([lymphoma](#)). Ask your doctor if you're worried about the side effects of any treatment you're taking.

Other possible risks?

Crohn's has also been linked to a higher risk of getting a blood clot in a vein (a DVT). The risk may be highest during a flare-up of symptoms. ^[19]

Doctors recommend that people with Crohn's be aware of the symptoms of a DVT, so they can get help urgently if needed. Symptoms of a DVT include:

- Swelling or pain in your calf or thigh
- Your leg feeling hot or turning red

Blood clots in your leg can travel to your lungs and cause breathlessness or chest pain. This is a dangerous emergency, so if this happens you should call 999 straight away.

Questions to ask your doctor

If you've been diagnosed with Crohn's disease, you may want to talk to your doctor to find out more.

Here are some questions you might want to ask:

- How do you know I have Crohn's disease?
- Where can I find out more about Crohn's?
- Is there a support group in my area?
- Should I change my diet?
- Do I need to take vitamin pills or other supplements?
- Is it a good idea to use over-the-counter treatments for pain or diarrhoea?
- Is there a choice of drug treatment for a flare-up?
- What do I do if my treatment doesn't work?
- Can I change drug treatments if I'm getting side effects?
- Is it worth taking treatment regularly, to prevent flare-ups?
- How will having Crohn's affect my job?
- Will I need to change my lifestyle?
- Are there any foods I should avoid?
- Can I see a dietitian?
- Does smoking make a big difference to Crohn's symptoms?
- When is surgery used to treat Crohn's disease?
- Will I need tests to make sure I don't have bowel cancer?

Treatments:

Steroid tablets to treat a flare-up

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Crohn's disease

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[How good is the research on steroid tablets to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about steroid tablets, a treatment used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Yes. If you're having a flare-up of Crohn's disease, taking steroids can help get rid of your symptoms. However, steroids do have side effects, so you and your doctor will have to weigh up the risks and benefits of treatment.

Steroids are usually the first medicines doctors recommend if you're having a flare-up.

[10]

What are they?

Steroids are drugs that reduce **inflammation**. Their full name is **corticosteroids**. They're similar to chemicals your body makes naturally. They're not the same as the anabolic steroids that some bodybuilders use. However, they can still have side effects, especially if you take them for a long time.

Steroids come as tablets. You'll probably need to take them once or twice a day.

There are lots of different steroid drugs. Some examples that have been tested for Crohn's disease are:

- budesonide (brand names Budenofalk and Entocort)
- methylprednisolone (Medrone)
- prednisolone.

Budesonide has fewer side effects than the other steroids, but it also doesn't work quite as well. You may be offered budesonide if you can't or don't wish to take one of the other steroids. Another option are drugs called [aminosalicylates](#). [10]

How can they help?

Taking steroids for several weeks can get rid of or reduce symptoms of Crohn's disease. Steroids can help with diarrhoea, stomach pain, feeling sick and vomiting. If you've been finding it difficult to eat, steroids can help you get your appetite back. [25]

Crohn's disease

- One study followed people who took prednisolone for 17 weeks.^[26] After this time, 6 in 10 people had symptoms that had gone away or were much better. Only 3 in 10 people taking a dummy (placebo) treatment got better.
- Another study looked at a steroid called methylprednisolone.^[27] After taking it for six weeks, more than 8 in 10 people had no symptoms or were much better. Only 4 in 10 people who took a placebo were better.
- In a study looking at budesonide, half the people taking it had improved, compared with a quarter of the people taking a placebo.^[28]

There are lots of steroid drugs, and lots of different doses you might be prescribed. Methylprednisolone and prednisolone seem to work better than budesonide, although they also cause more side effects.^[28] ^[29] One study found that higher doses of budesonide worked better than lower doses.^[30]

How do they work?

Steroids affect your body in lots of ways, but one of their most important effects is to reduce inflammation. They do this by blocking the production of chemicals in your body that are responsible for causing inflammation.

The symptoms of Crohn's disease happen because you get patches of inflammation on your bowels. So, medicines that reduce inflammation should help to get rid of your symptoms.

Can they be harmful?

Minor side effects are common with steroids. Steroids can also cause more serious side effects, especially if you take them often or for a long time. Your doctor should help you weigh up the benefits and risks of steroids before you start taking them. If you get any worrying symptoms while you're taking steroids, see your doctor straight away.

To prevent side effects when you stop taking steroids, your doctor will probably suggest that you cut your dose gradually over a few weeks.^[31] This is especially important if you've been taking high doses.

In a study looking at people taking prednisolone for Crohn's disease flare-ups:^[32]

- About 13 in 100 people got high blood pressure
- About 30 in 100 people got spots
- About 47 in 100 people got a swollen face (sometimes called 'moon face')
- About 6 in 100 people got red dots on their skin caused by broken blood vessels

Crohn's disease

- About 17 in 100 people got bruises on their skin
- About 6 in 100 people got stretch marks on their skin.

These side effects usually go away when you stop taking steroids. ^[33]

Steroids stop your immune system working at full strength. This can put you at risk of infections. In one study, 27 in 100 people taking prednisolone got an infection, compared with 10 in 100 people taking a placebo. ^[32]

Other possible side effects of steroids include: ^[33]

- Diabetes
- Bones that are weak and more likely to break
- Stomach ulcers
- Eye problems, such as cataracts or glaucoma
- Problems with your adrenal glands (your adrenal glands make hormones, including adrenaline)
- Increased body hair.

If children take steroids, they may grow more slowly than normal. ^[33] However, many children with Crohn's disease grow more slowly anyway, because of their illness. ^[15] In one small study, steroids didn't have a negative effect on children's heights. ^[34] So, it's possible that the benefits of steroids will cancel out any negative effects they might have on your child's growth.

About 1 in 20 people find that steroid tablets affect their mood. ^[35] This can happen a few days or weeks after you start treatment. You may be irritable, anxious, or confused, or have trouble sleeping. Or you can get an unusually high mood (euphoria). Rarely, people get more serious side effects, such as thinking about suicide or seeing things that aren't really there. It's also possible to get these side effects when you stop taking steroids.

Budesonide causes fewer side effects than methylprednisolone and prednisolone. ^[36] In studies looking at more than 600 people:

- About 4 in 10 people taking budesonide got at least one side effect
- About 6 in 10 people taking other steroids got at least one side effect.

How good is the research on steroid tablets to treat a flare-up?

There's lots of research from good-quality studies ([randomised controlled trials](#)) showing that steroids can get rid of a flare-up of Crohn's disease. ^[26] ^[27] ^[28] ^[25]

Methylprednisolone and prednisolone seem to work better than budesonide, although they also cause more side effects. ^[28] ^[29]

Higher doses of steroids may also work better than lower doses. ^[30] However, taking higher doses of steroids, or taking them for a long time, can increase the risk of side effects.

Infliximab and adalimumab to treat a flare-up

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[Can they be harmful?](#)

[How good is the research on infliximab and adalimumab to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about infliximab and adalimumab, treatments used for a severe flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Yes, taking either infliximab or adalimumab can help with your symptoms if you're having a flare-up of Crohn's disease. However, there's a risk of serious side effects in the long term, so these drugs are only recommended for people with severe Crohn's disease, if other treatments haven't worked.

What are they?

Infliximab and adalimumab are drugs that block the action of a chemical in your body called TNF. TNF is responsible for producing [inflammation](#), so by blocking its effects, infliximab and adalimumab can help with the symptoms of Crohn's.

You may hear these drugs described as anti-TNF drugs, or TNF blockers. The brand name for Infliximab is Remicade. The brand name for adalimumab is Humira.

You take these drugs by having a drip into a vein. They are given by a specialist.

There are guidelines for doctors in the UK saying when infliximab and adalimumab should and shouldn't be used. These guidelines were written by the National Institute for Health and Care Excellence (NICE). NICE is the organisation that advises the government about which treatments should be available on the NHS. ^[37]

Crohn's disease

The NICE guidelines say that infliximab can be given to children aged 6 and older as well as adults, while adalimumab can only be given to adults. Both drugs are only recommended for people who meet these criteria.

- They have severe, active Crohn's disease. Someone with severe, active disease is likely to be in very poor general health, with symptoms such as weight loss, severe pain, and frequent diarrhoea.
- They have already tried other treatments, such as steroids, or can't take other treatments because of side effects or other medical concerns.

Infliximab is also recommended for people who meet the above requirements and also have fistulas developing. (A fistula occurs when an abnormal opening forms between your bowel and another part of your body, such as your skin.) Adalimumab can also be used if someone has taken infliximab and it has stopped working for them, or they have had a bad reaction to infliximab.^[38]

How can they help?

Studies show that taking either infliximab or adalimumab can improve symptoms for people having a flare-up of Crohn's disease.^[37]

In a study looking at 181 people, a third of people improved after just one dose of infliximab.^[39] The study looked at people with fairly severe symptoms of Crohn's. Everyone had already tried other treatments, such as steroids, without getting better.

- Four weeks after treatment with infliximab, 33 in 100 people found their symptoms had improved.
- Only 4 in 100 people taking a dummy treatment (a placebo) had improved.

Studies on adalimumab have found similar results.^[37]

One study looked 325 people who had taken infliximab before but the drug had stopped working for them or they got side effects.^[40]

- Four weeks after treatment with adalimumab, 21 in 100 people had improved.
- Only 7 in 100 people taking a dummy treatment (a placebo) had improved.

How do they work?

TNF, or tumour necrosis factor alpha, is a chemical that helps to cause inflammation in the body. One theory is that people with Crohn's disease make too much TNF. By blocking the action of TNF, infliximab and adalimumab help with the symptoms of Crohn's disease.

Can they be harmful?

Infliximab and adalimumab can cause some serious side effects, but in the short term, you might not have any problems. In one study, there was no difference in side effects between those taking infliximab and those taking a placebo. ^[39] A study looking at adalimumab had similar results. ^[40] However, these studies only lasted four to 12 weeks, so they can't tell us anything about long-term side effects.

Here's what we know from longer-term studies.

Infliximab and adalimumab can increase your risk of getting infections. This could mean you get colds or flu more often, but there's also a risk of serious infections like tuberculosis. ^[41] ^[42] A severe infection could be fatal. You'll need tests to make sure you don't have an infection, before, during and for several months after treatment. ^[38]

In one study, 32 in 100 people taking infliximab got an infection that needed treatment. And 4 in 100 people got a severe infection. ^[43]

If you're at risk of tuberculosis, you might be given treatment to prevent it. If you get symptoms of tuberculosis, such as a cough that doesn't go away, a high temperature or weight loss, see a doctor straight away.

Some people get an allergic reaction to infliximab and adalimumab. ^[38] If this happens, it tends to be in the first one or two hours after treatment. It can cause a high temperature, chest pain, changes in your blood pressure, a rash or trouble breathing. The doctors and other medical professionals treating you should keep a check on you for a couple of hours after each dose, just in case you get an allergic reaction.

If you have heart failure, your doctor will need to be very careful about prescribing these drugs. There's a chance they could make your heart problem worse. ^[38] ^[44]

Infliximab, adalimumab and other, similar drugs (called anti-TNF drugs) may slightly increase the risk of some kinds of cancer. ^[45] It's difficult to say how big the risk is. In the US, there have been 48 reports of cancer in children and teenagers taking anti-TNF drugs, and 147 cases of leukaemia in both adults and children. That's out of many thousands of people who've taken these medicines. Most people were also taking other drugs that affected their immune system, so it's not clear how much of a part anti-TNF drugs played.

Less serious side effects of infliximab and adalimumab include a reaction at the site of the injection, stomach pain, feeling sick, and having a temperature or a sore throat.

How good is the research on infliximab and adalimumab to treat a flare-up?

Several good-quality studies (randomised controlled trials) have shown that infliximab and adalimumab can improve symptoms during a flare-up of Crohn's disease. ^[37]

Aminosalicylates to treat a flare-up

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[Can they be harmful?](#)

[How good is the research on aminosalicylates to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about aminosalicylates, a treatment used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Probably. Drugs called aminosalicylates can help with a flare-up of Crohn's disease, although the benefits are likely to be fairly small.

What are they?

Aminosalicylates are a group of drugs that help with **inflammation** in the bowel. There are several different drugs in this group, and they all work slightly differently, but they're all based on a chemical called 5-aminosalicylic acid (5-ASA).

Some of the aminosalicylates that have been tested in people with Crohn's disease are:

- mesalazine (brands include Asacol, Ipocol, and Salofalk)
- olsalazine (Dipentum)
- sulfasalazine (Salazopyrin).

These drugs are often given as tablets, although you can also get them as enemas and suppositories (a suppository is a tablet that you put into your bottom).

The first treatment doctors usually recommend for a flare-up of symptoms are [steroids](#) (short for corticosteroids). But your doctor may suggest aminosalicylates instead if you can't take steroids or are worried about their side effects.^[10]

How can they help?

Aminosalicylates can help with the symptoms of Crohn's disease, although the benefits are often small and tend to vary from person to person. If these drugs have worked for you in the past, they may be worth trying again.

One study looked at 625 people who took a 4-gram dose of mesalazine every day for three months.^[46] Everyone's symptoms were given a score, from 0 (meaning no symptoms) to around 600 (scores over 450 meant someone had severe symptoms of Crohn's).

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- People taking mesalazine improved by 63 points, on average.
- People taking a dummy treatment (a placebo) improved by 45 points, on average.
- The difference between mesalazine and a placebo was fairly small, so it's hard to say whether you'll notice much of an effect on your symptoms.

Most of the studies looking at lower doses of mesalazine found that they didn't help. ^[47]
^[48]

Another study looked at a different aminosalicylate drug, called sulfasalazine. ^[26] About 38 in 100 people who took it found their symptoms improved. This compared with 26 in 100 people who took a placebo.

The aminosalicylate drug your doctor recommends may depend on where the inflammation is in your bowel. For example, doctors tend to recommend sulfasalazine if the inflammation is in your colon (your large intestine). ^[41] Some doctors think mesalazine is useful for people with inflammation in their small intestine, although others say the benefits are too small to be worth bothering with. ^[41] ^[49] However, there's not a lot of research looking at whether you get better results by matching the drug to the part of your bowel that's inflamed.

How do they work?

Doctors don't know exactly how aminosalicylates work. One theory is that they block the production of chemicals called cytokines. ^[3] Cytokines are chemical messengers in your body, a bit like hormones. They play a part in causing inflammation. So, by blocking cytokines, aminosalicylates may reduce the inflammation in your bowels and improve your symptoms.

Can they be harmful?

Aminosalicylates can have harmful effects on your blood. ^[50] For example, they can stop your body making enough red blood cells (which carry oxygen), white cells (which fight infections) or platelets (which help your blood to clot if you cut yourself). Tell your doctor straight away if you notice:

- Any unexplained bleeding
- Bruising
- A rash
- A temperature
- Pale skin

Crohn's disease

- A severe sore throat
- Unusual tiredness.

Your doctor may suggest regular tests to check for any problems with your blood.

Common side effects of aminosalicylates include diarrhoea, feeling sick or vomiting, and abdominal pain. ^[50] In one study, about 3 in 10 people taking an aminosalicylate got side effects, compared with 2 in 10 people taking a placebo. ^[51]

How good is the research on aminosalicylates to treat a flare-up?

Several studies found that aminosalicylates don't help with flare-ups of Crohn's disease. ^[47] ^[48] ^[52] However, a larger study combined the results of several smaller studies (this type of research is called a **systematic review**). ^[46] This larger study did find that aminosalicylates helped.

The benefits of aminosalicylates are fairly small. Bigger studies are more accurate, and can pick up small benefits that smaller studies miss. So aminosalicylates might help you a bit, but they're probably only slightly better than a dummy treatment (a **placebo**).

Methotrexate to treat a flare-up

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[How good is the research on methotrexate to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about methotrexate, a treatment used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

Probably. Methotrexate can help some people get rid of a flare-up of Crohn's disease. If you're also being treated with steroids, taking methotrexate may mean you can get by with a lower dose of your steroid medicine.

What is it?

Methotrexate is a drug that affects your **immune system**. It's often used to help with conditions that cause **inflammation**, including [rheumatoid arthritis](#). You may hear it called an immunosuppressive drug.

[Steroid tablets](#) are usually the first treatment people take for a flare-up of Crohn's symptoms. Your doctor may also recommend taking methotrexate if you've had two or

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more flare-ups of Crohn's disease in 12 months, or your dose of steroids can't be reduced without your symptoms coming back. However, doctors usually suggest using other immunosuppressive drugs before methotrexate. These are called [azathioprine](#) and [mercaptopurine](#).^[10]

Methotrexate is given as an injection, either into a muscle or just under your skin. You'll probably need one dose a week.^[53] Some doctors suggest switching from injections to tablets once your treatment starts working.

How can it help?

One study found that weekly methotrexate injections helped get rid of a flare-up of Crohn's.^[54] After 16 weeks of treatment:

- About 4 in 10 people taking methotrexate got partly or totally better
- Only 2 in 10 people taking a dummy treatment (a placebo) got partly or totally better.

The people in this study were also taking steroids. Some people who took methotrexate were able to switch to a lower dose of steroids.^[54]

How does it work?

Methotrexate affects the way your immune system works, possibly by reducing the number of [white blood cells](#) your body makes.^[55] Your immune system helps to fight off illnesses, but also plays a part in causing inflammation. So, by affecting your immune system, methotrexate might reduce inflammation. Methotrexate might also reduce inflammation in other ways, although doctors aren't sure exactly how.

Most of the symptoms of Crohn's disease happen because of inflammation in your bowel, so by reducing this, methotrexate should help you have fewer symptoms.

Unfortunately, because methotrexate stops your immune system acting as strongly as it usually does, your body might not fight off infections properly. So, you might get ill more often if you take methotrexate.

Can it be harmful?

Methotrexate can cause side effects. In one study, 17 in 100 people stopped taking it because of the side effects.^[54] Problems people got included feeling sick and getting a rash.

Methotrexate can make your body less able to fight off infections. See your doctor as soon as you can if you notice any signs of an infection, especially if you get a sore throat.^[56]

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Your doctor might prescribe folic acid at the same time as methotrexate.^[57] Folic acid is a vitamin that helps to reduce the side effects linked with methotrexate.

Some people get irritation at the spot where they have the injection.^[56] An injection under your skin might be more comfortable than an injection into the muscle.^[57]

It's possible for methotrexate to damage your liver. Before you start treatment, you should have tests to see how well your liver and kidneys are working.^[56] You'll then need regular checks, every week or so at first, and then every few months if you take methotrexate for longer.

Your doctor will probably ask you to avoid aspirin and ibuprofen while you're taking methotrexate.^[56] They can both change the dose of methotrexate that's absorbed by your body.

You shouldn't take methotrexate if you're trying to get pregnant.^[56] It could harm your baby. If you're a man, you shouldn't take methotrexate if you're trying to get your partner pregnant. Both men and women should wait at least three months after stopping treatment before trying for a baby.

How good is the research on methotrexate to treat a flare-up?

We only found one good-quality study (called a **randomised controlled trial**).^[54] It looked at 141 people with an average age of 35. Two-thirds of the people got a weekly injection of methotrexate. The remaining third were given a dummy treatment (a **placebo**). People were twice as likely to improve if they took methotrexate, with 4 in 10 people improving, compared with 2 in 10 people taking a placebo.

Azathioprine or mercaptopurine to treat a flare-up

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[How good is the research on azathioprine or mercaptopurine to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about azathioprine and mercaptopurine, treatments used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Taking azathioprine or mercaptopurine tablets may help get rid of symptoms of Crohn's disease and allow you to take a smaller dose of steroids. However, you may need to take them for several months for them to work, and the benefits have to be weighed against some serious side effects.

What are they?

Azathioprine and mercaptopurine are drugs that suppress your immune system . Azathioprine is often used for people who've had an organ transplant. It stops their immune system rejecting the new organ. Mercaptopurine is used as a treatment for some kinds of cancer. Both of these drugs are also used to treat Crohn's disease.

If you have a flare-up of Crohn's disease, [steroid tablets](#) will probably be the first treatment your doctor suggests. However, your doctor may recommend also taking either azathioprine or mercaptopurine if you've had two or more flare-ups of Crohn's disease in 12 months, or your dose of steroids can't be reduced without your symptoms coming back. ^[10]

The brand name for azathioprine is Imuran. The brand name for mercaptopurine is Puri-Nethol.

Your doctor will probably recommend that you take these medicines as tablets. You can also get azathioprine as an injection, but it can cause severe irritation at the spot where the needle goes in. ^[58]

How can they help?

A review of studies found that: ^[59]

- 48 in 100 people got partly or totally better when they took azathioprine or mercaptopurine.
- This compared with 36 in 100 people who improved when taking a dummy treatment (a placebo).

The difference between the groups was small enough that it could have been down to chance. However, the review also found that many more people taking azathioprine or mercaptopurine were able to lower their dose of steroids, compared with those taking a placebo. Taking a lower dose can reduce the risk of side effects from steroids.

Some research suggests that azathioprine and mercaptopurine work best when people take them for 17 weeks or longer. ^[60]

How do they work?

Azathioprine and mercaptopurine affect your immune system, stopping it acting as strongly as it usually does. Drugs that do this are called **immunosuppressants**.

Your immune system plays an important part in causing inflammation in your body. So, treatments that stop your immune system working so hard can reduce the inflammation in your bowel and help get rid of Crohn's disease symptoms.

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However, if these drugs suppress your immune system too much, it can mean your body isn't able to fight off infections very well.

Can they be harmful?

Azathioprine and mercaptopurine have side effects. In one study, 3 in 10 people got at least one side effect.^[61] In another study, 1 in 10 people got a side effect bad enough for them to stop taking their treatment.^[60]

Azathioprine and mercaptopurine can stop your body making as many **white blood cells**.^[62] White blood cells are part of your immune system, and help to fight off bacteria and viruses. So, this side effect puts you at a higher risk of getting infections. If you take azathioprine or mercaptopurine for a long time, you'll need regular blood tests to make sure you have enough white blood cells. And if you notice an infection, make sure you see a doctor as soon as you can.

Taking azathioprine or mercaptopurine also means your body might make fewer **platelets**.^[58] These are the sticky cells in your blood that help it to clot when you cut yourself. If you get any unexplained bleeding or bruising, talk to your doctor straight away.

Drugs that affect your immune system can increase the risk of some kinds of cancer, such as **lymphoma**.^[63] In particular, azathioprine and mercaptopurine have been linked to a cancer called hepatosplenic T-cell lymphoma (HSTCL) in children and young people.^[64] Researchers aren't yet certain whether taking these drugs led to the cancers, or whether other factors were involved. However, it's important to weigh up the risk of HSTCL and other cancers with your doctor before starting treatment.

Some people get an allergic reaction to azathioprine or mercaptopurine.^{[60] [65]} This could mean you feel generally unwell, have aches and pains, feel dizzy, feel sick or vomit, get diarrhoea, have a high temperature, or get a rash.

Other side effects include an inflamed pancreas, **low blood pressure**, or problems with your liver or kidneys.^{[60] [65]}

How good is the research on azathioprine or mercaptopurine to treat a flare-up?

A review of 13 good-quality studies (randomised controlled trials) found that azathioprine and mercaptopurine worked slightly better than a dummy treatment (a **placebo**) to improve symptoms during a flare-up of Crohn's.^[59] About half the people who took one of these drugs improved, compared with a third of the people who took the placebo. The difference between the groups was small enough that it could have been down to chance. However, many people taking these drugs were able to lower the amount of steroids that they needed to improve their symptoms. Taking a lower dose of steroids can reduce the risk of side effects.

Research also shows that you need to take azathioprine and mercaptopurine for several months to get the most benefit.^[60] People got the best results after taking their medicine for at least 17 weeks.

Antibiotics to treat a flare-up

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[How good is the research on antibiotics to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about antibiotics, a treatment used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Not exactly. Antibiotics don't seem to help with flare-ups of Crohn's disease symptoms. However, there will probably be times when your doctor does recommend antibiotics. For example, your doctor may recommend antibiotics if you get a complication from Crohn's disease, if you get an infection, or if you need surgery.

What are they?

Antibiotics are drugs that kill **bacteria**. Although Crohn's disease isn't directly caused by an infection with bacteria, one theory says that the natural bacteria in your bowel might play a part in causing the symptoms. So, antibiotics have been tested as a possible treatment for Crohn's.

There are lots of different types of antibiotics. The ones that have been tested to see whether they help people with Crohn's disease include:

- ciprofloxacin (brand name Ciproxin)
- metronidazole (Flagyl)
- rifaximin (Xifaxanta).

How can they help?

Antibiotics have been tried as a treatment for Crohn's disease symptoms, but most of the research shows that they don't help.

One study compared the antibiotic rifaximin with a dummy treatment (a **placebo**). There was no difference between the two treatments in the number of people who got better.

^[66]

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In another study, people took antibiotics as well as a steroid drug.^[67] People who also took the antibiotic didn't do any better than people who took a steroid on its own.

Two fairly small studies did find that antibiotics worked about as well as a [steroid](#) or an [aminosalicylate](#) drug.^[66] ^[68] And another study suggested that taking three antibiotics plus a steroid might work better than taking a steroid alone. However, the improvements didn't last.^[69] Looking at all the research together, it doesn't look like antibiotics are very helpful for people with Crohn's.

Still, there are times when doctors do recommend antibiotics for people with Crohn's disease.^[41]

- Crohn's can sometimes damage your bowel and lead to an infection or an abscess (a pocket of pus inside your body). If this happens, you might get a temperature or have a tender spot on your abdomen. Your doctor might recommend antibiotics to treat the infection.
- Crohn's sometimes causes damage to the skin around the anus. You could get a tear in the skin (an [anal fissure](#)) or a problem where the anus tightens and makes it difficult to pass stools (this is called anal canal stenosis). A severe complication is when a new tunnel forms in your body, connecting your bowel and the skin around your anus (a fistula). If you get one of these problems, your doctor might suggest antibiotics to prevent infections in the damaged skin and help it to heal.
- Although it's normal to have bacteria in your bowel, sometimes they can multiply too quickly. Overgrowth of bacteria in your bowels can sometimes be a cause of diarrhoea, wind, bloating or pain. If your doctor thinks your symptoms are caused by too many bacteria, he or she might suggest antibiotics to kill them.

Most of the drugs used for Crohn's disease affect your immune system and stop it working as strongly as usual. This can mean you're more likely than usual to get infections. Antibiotics are also useful for treating these infections. Talk to your doctor if you think you've picked up an infection.

How do they work?

It's normal to have bacteria living in your bowels. These bacteria are usually harmless, and may even improve your digestion and help to keep your immune system healthy. They're sometimes described as 'friendly' bacteria.

One theory is that if you have Crohn's disease, your immune system overreacts to 'friendly' bacteria in your bowels, causing inflammation. If this is true, taking antibiotics to kill the bacteria should reduce your body's reaction to them. However, so far this is just a theory. Medical studies have found that antibiotics don't help with the symptoms of Crohn's.

Can they be harmful?

Antibiotics can have side effects, although any problems you get will depend on the particular drug your doctor prescribes.

One study looked at people taking two antibiotics, ciprofloxacin and metronidazole. The side effects people got were: ^[66]

- Feeling sick (3 in 10 people had this problem)
- Getting a metallic taste in their mouth (3 in 10 people)
- Heartburn (2 in 10 people).

In another study, side effects of ciprofloxacin and metronidazole included dizziness (2 in 10 people) and diarrhoea (2 in 10 people). ^[67]

A study looking at taking three antibiotics together also reported several side effects, including [vaginal thrush](#) (4 in 100 women), urine that was discoloured (3 in 100 people), and muscle pain (2 in 100 people). ^[69]

It's possible to get more serious side effects from ciprofloxacin and metronidazole, such as liver damage. ^[70] ^[71] However, these problems are rare.

If you take metronidazole, your doctor will probably warn you to avoid alcohol. ^[71] There have been reports of people having severe reactions when metronidazole and alcohol are combined. However, some researchers say that there isn't much evidence to support this warning. ^[72]

Taking ciprofloxacin can mean you perform less well at skilled tasks, like driving. ^[70]

How good is the research on antibiotics to treat a flare-up?

Overall, the research on antibiotics is negative. One study compared the antibiotic rifaximin with a dummy treatment (a [placebo](#)). There was no difference in the number of people who got better. ^[66] Combining antibiotics with [steroids](#) doesn't seem to work any better than steroids on their own. ^[67]

There have been some positive studies. Two small studies found that antibiotics worked about as well as a [steroid](#) or an [aminosalicylate](#) drug. ^[66] ^[68] However, in general, small studies are less reliable. One larger study (213 people) suggested that taking three antibiotics plus a steroid might work better than taking a steroid alone. However, the improvements didn't last. ^[69] Overall, it doesn't look like antibiotics are very helpful for treating symptoms of Crohn's. Your doctor will only suggest them if you've got another problem too, such as an infection.

Ciclosporin to treat a flare-up

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[How good is the research on ciclosporin to treat a flare-up?](#)

This information is for people who have Crohn's disease. It tells you about ciclosporin, a treatment used for a flare-up of Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

No. Most of the research shows that taking ciclosporin doesn't help to get rid of symptoms of Crohn's. This drug can also have some serious side effects.

What is it?

Ciclosporin is a drug that suppresses your **immune system**. It's often used for people who've had an organ transplant. It stops their immune system rejecting the new organ. It has also been tested as a treatment for Crohn's disease.

Ciclosporin used to be spelled cyclosporin in the UK. You might also come across its US name, cyclosporine. One brand name is Neoral. Most of the research has looked at people who've taken ciclosporin as tablets.

How can it help?

It probably can't help. In most medical trials, ciclosporin didn't help people with Crohn's.

Two studies looked at whether ciclosporin could help people's symptoms drop below a certain level.^[73] When people have few or no symptoms, it's called being in remission.

About 3 in 10 people went into remission after treatment with ciclosporin, compared with 2 in 10 people who took a dummy treatment.^[73] This difference is small enough for the researchers to think it just happened by chance.

In another study, people took ciclosporin together with a **steroid** called prednisolone.

^[74] About 4 in 10 people found their symptoms improved. It didn't make any difference whether they were taking ciclosporin and a steroid or the steroid drug on its own.

One study did have some slightly positive results.^[75] In this trial, 6 in 10 people got some improvement in their symptoms with ciclosporin, even if it was only small. This compared with 3 in 10 people taking a placebo. However, the overall level of symptoms people were getting didn't improve much.

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Most of the research has looked at ciclosporin tablets. You can also have this drug as a drip into a vein (an **intravenous infusion** or IV). However, there haven't been any good-quality studies looking at whether a drip is any better than tablets. ^[41]

How does it work?

Ciclosporin affects your immune system, stopping it acting as strongly as it usually does. Drugs that do this are called **immunosuppressants**.

Your immune system plays an important part in causing **inflammation** in your body. So, treatments that stop your immune system working so hard can reduce the inflammation in your bowel and help get rid of Crohn's disease symptoms.

However, if these drugs suppress your immune system too much, it can mean your body isn't able to fight off infections very well.

Lots of the treatments that improve the symptoms of Crohn's disease work by suppressing your immune system, so it made sense for researchers to look at ciclosporin. However, the studies so far suggest that ciclosporin isn't helpful for people with Crohn's.

Can it be harmful?

Yes, ciclosporin can cause unpleasant side effects, which are sometimes serious.

In one study, more than 6 in 10 people stopped taking ciclosporin because the side effects were so bad. ^[73] In the same study, less than 1 in 10 people stopped taking a placebo.

The study doesn't say how common certain side effects are, but it did list all the problems people got. They were: ^[73]

- Pins and needles
- Extra hair growth
- Indigestion
- High blood pressure
- A rash
- Dizziness
- Diarrhoea
- Headaches
- Mouth ulcers

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- Extra sensitivity to light
- Feeling sick or vomiting
- Stomach pain
- Shaking
- Back pain
- Putting on weight
- Overgrowth of your gums (called gingival hyperplasia)
- Kidney problems.

If you take ciclosporin, your doctor will probably recommend regular blood tests to make sure you're not getting side effects such as kidney or liver damage. ^[76]

Because ciclosporin stops your immune system working at full strength, there's a risk it could increase your chance of becoming ill with an infection. ^[76]

How good is the research on ciclosporin to treat a flare-up?

There's quite good research showing that ciclosporin doesn't help get rid of flare-ups of Crohn's. Researchers have done a review of all the studies (this is called a [systematic review](#)). ^[73] Most of the studies found no benefits from ciclosporin, and there were some unpleasant side effects. One study found a tiny benefit, but overall it's clear that ciclosporin doesn't help, and is probably harmful.

Infliximab and adalimumab to prevent symptoms of Crohn's disease

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[How good is the research on infliximab and adalimumab to prevent symptoms of Crohn's disease?](#)

This information is for people who have Crohn's disease. It tells you about infliximab and adalimumab, treatments used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Probably. If you've taken [infliximab](#) or [adalimumab](#) and it got rid of your symptoms, carrying on taking them can help stop your symptoms coming back. If you've been taking steroid drugs, you might not need them any more. And if infliximab or adalimumab helps you get symptoms less often, you may enjoy life more.

However, these are expensive drugs. They are only recommended for short-term use in the UK, and only for people with severe Crohn's disease.

What are they?

Infliximab and adalimumab are drugs that block the action of a chemical in your body called TNF. TNF is responsible for producing [inflammation](#), so by blocking its effects, these drugs can help with the symptoms of Crohn's.

You may hear these drugs described as anti-TNF drugs, or TNF blockers. The brand name for infliximab is Remicade. The brand name for adalimumab is Humira.

You take infliximab and adalimumab by having a drip into a vein. You'll need to be given these drugs by a specialist. In studies where people took infliximab to prevent symptoms of Crohn's, they usually had one dose every eight weeks.^[77] In studies looking at adalimumab to prevent symptoms, people usually had a dose every week, or every other week.^[78]

There are guidelines for doctors in the UK saying when infliximab and adalimumab should and shouldn't be used. These guidelines were written by the National Institute for Health and Care Excellence (NICE). NICE is the organisation that advises the government about which treatments should be available on the NHS.^[37]

In the UK, infliximab and adalimumab are recommended for people having a severe flare-up of Crohn's symptoms if other treatments haven't helped or aren't suitable. To read more, see [Infliximab and adalimumab to treat a flare-up](#). But they aren't recommended as regular treatments to prevent symptoms.

How can they help?

If you had a flare-up of symptoms and infliximab or adalimumab got rid of it, continuing to take it regularly may stop your symptoms coming back.^[78]

One study looked at 73 people who'd already taken infliximab to treat a flare-up of Crohn's.^[79] Some of them carried on taking infliximab every eight weeks. After 44 weeks:

- About 5 in 10 people taking infliximab were still free of symptoms
- Only 2 in 10 people who took a dummy treatment (a [placebo](#)) were free of symptoms.

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A second study had similar results.^[43] It also found that some people who'd also been taking steroids could cut back on their steroid treatment.

- About 3 in 10 people taking infliximab had stopped their steroid treatment.
- Only 1 in 10 people taking a placebo had been able to stop steroid treatment.

The people in this study also filled in questionnaires about how much their symptoms of Crohn's bothered them, and how much they were able to get on with and enjoy their lives. Over the course of the study, people taking infliximab got more improvement in their scores than people taking a placebo.

Studies of adalimumab have had similar findings. One looked at more than 800 people who'd taken adalimumab to treat a Crohn's flare-up. Some of them continued taking adalimumab every week or every other week.^[80] After 26 weeks:

- 4 in 10 people taking adalimumab every other week were free of symptoms
- Nearly 5 in 10 people taking adalimumab every week were free of symptoms
- Less than 2 in 10 people taking a placebo were free of symptoms.

Also, among those taking steroids, after 56 weeks:

- More than 2 in 10 people taking adalimumab every other week had stopped their steroid treatment
- Nearly 3 in 10 people taking adalimumab every week had stopped their steroid treatment
- Less than 2 in 10 people taking a placebo had stopped their steroid treatment .

Another study looked at people with severe Crohn's disease who had one or more fistulas. (A fistula occurs when an abnormal opening forms between your bowel and another part of your body, such as your skin.) The participants were given infliximab to help their fistulas begin healing at the start of the study, and some continued treatment. Those given infliximab long term were less likely to have a fistula after 54 weeks.^[81]

How do they work?

TNF, or tumour necrosis factor alpha, is a chemical that helps to cause inflammation in the body. One theory is that people with Crohn's disease make too much TNF. By blocking the action of TNF, infliximab and adalimumab help with the symptoms of Crohn's disease. And continuing to take these drugs can help stop symptoms coming back.

Can they be harmful?

Infliximab and adalimumab can increase your risk of getting infections. This could mean you get colds or flu more often, but there's also a risk of serious infections like tuberculosis. ^[41] ^[42] A severe infection could be fatal. You'll need tests to make sure you don't have an infection, before, during and for several months after treatment. ^[38]

In one study, 32 in 100 people taking infliximab got an infection that needed treatment. And 4 in 100 people got a severe infection. ^[43]

If you're at risk of tuberculosis, you might be given treatment to prevent it. If you get symptoms of tuberculosis, such as a cough that doesn't go away, a high temperature or weight loss, see a doctor straight away.

Some people get an allergic reaction to infliximab and adalimumab. ^[38] If this happens, it tends to be in the first one or two hours after treatment. It can cause a high temperature, chest pain, changes in your blood pressure, a rash or trouble breathing. The doctors and other medical professionals treating you should keep a check on you for a couple of hours after each dose, just in case you get an allergic reaction.

If you have heart failure, your doctor will need to be very careful about prescribing these drugs. There's a chance they could make your heart problem worse. ^[38] ^[44]

Infliximab, adalimumab and other, similar drugs (called anti-TNF drugs) may slightly increase the risk of some kinds of cancer. ^[45] It's difficult to say how big the risk is. In the US, there have been 48 reports of cancer in children and teenagers taking anti-TNF drugs, and 147 cases of leukaemia in both adults and children. That's out of many thousands of people who've taken these medicines. Most people were also taking other drugs that affected their immune system, so it's not clear how much of a part anti-TNF drugs played.

Less serious side effects of infliximab and adalimumab include a reaction at the site of the injection, stomach pain, feeling sick, and having a temperature or a sore throat.

Several large studies have also explored whether it's safe to use infliximab or adalimumab over the long term. ^[82] ^[83] ^[84] ^[85] ^[86] Most found that people taking these drugs didn't have a significantly higher risk of cancer, serious infections, and death after several years.

How good is the research on infliximab and adalimumab to prevent symptoms of Crohn's disease?

There's some research showing that infliximab and adalimumab can prevent symptoms of Crohn's disease. ^[79] ^[43] ^[81] ^[80] ^[78] However, the studies looked at a very specific group of people. Everyone had taken one of these drugs to get rid of a flare-up of symptoms, and then carried on taking it. It's hard to say whether they would help other people.

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Infliximab and adalimumab are expensive, so they are used by the NHS only to treat people with severe flare-ups of Crohn's. They are not usually used in the long term.

Methotrexate to prevent symptoms of Crohn's disease

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[How good is the research on methotrexate to prevent symptoms of Crohn's disease?](#)

This information is for people who have Crohn's disease. It tells you about methotrexate, a treatment used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

Probably. Taking methotrexate once a week can make it less likely that you'll get a flare-up of Crohn's symptoms.

What is it?

Methotrexate is a drug that affects your **immune system**. It's often used to help with conditions that cause **inflammation**, including [rheumatoid arthritis](#).

Your doctor may recommend long-term treatment with methotrexate to help stop your symptoms of Crohn's coming back. However, two other drugs are usually the first choice for long-term treatment: [azathioprine and mercaptopurine](#). But you may be offered methotrexate if it has helped you before during a flare-up, or you can't take one of the other drugs because of side effects or medical concerns.^[10]

Methotrexate is given as an injection, either into a muscle or just under your skin. You'll probably need one dose a week.^[53] Some doctors suggest switching from injections to tablets once your treatment starts working.

How can it help?

Methotrexate does seem to help prevent symptoms of Crohn's disease. A review of three studies found that after 40 weeks of treatment:^[87]

- 70 in 100 people having injections of methotrexate were still free of symptoms
- 46 in 100 people having injections of a dummy treatment (a **placebo**) were free of symptoms.

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How does it work?

Methotrexate affects the way your immune system works, possibly by reducing the number of **white blood cells** your body makes.^[55] Your immune system helps to fight off illnesses, but also plays a part in causing inflammation. So, by affecting your immune system, methotrexate might reduce inflammation. Methotrexate might also reduce inflammation in other ways, although doctors aren't sure exactly how.

Most of the symptoms of Crohn's disease happen because of inflammation in your bowel. So by reducing inflammation, methotrexate should help you have fewer symptoms.

Unfortunately, because methotrexate stops your immune system acting as strongly as it usually does, your body might not fight off infections properly. So, you might get ill more often if you take methotrexate.

Can it be harmful?

Yes, methotrexate can cause side effects. In studies, roughly half the people taking methotrexate got some kind of side effect.^[88]

- Up to 4 in 10 people felt sick or vomited.
- Up to 2 in 10 people got headaches.
- About 1 in 10 people got pain.
- About 1 in 10 people got inflammation in their lungs.
- Nearly 3 in 10 people got cold or flu symptoms.
- Up to 5 in 10 people had test results that suggested they could be at risk of liver problems.

Methotrexate can make your body less able to fight off infections. See your doctor as soon as you can if you notice any signs of an infection, especially if you get a sore throat.^[56]

Your doctor might prescribe folic acid at the same time as methotrexate.^[57] Folic acid is a vitamin that helps to reduce the side effects linked with methotrexate.

Some people get irritation at the spot where they have the injection.^[56] An injection under your skin might be more comfortable than an injection into the muscle.^[56]

It's possible for methotrexate to damage your liver. Before you start treatment, you should have tests to see how well your liver and kidneys are working.^[56] You'll then need regular

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checks, every week or so at first, and then every few months if you take methotrexate for longer.

Your doctor will probably ask you to avoid aspirin and ibuprofen while you're taking methotrexate.^[56] They can both change the dose of methotrexate that's absorbed by your body.

You shouldn't take methotrexate if you're trying to get pregnant.^[56] It could harm your baby. If you're a man, you shouldn't take methotrexate if you're trying to get your partner pregnant. Both men and women should wait at least three months after stopping treatment before trying for a baby.

How good is the research on methotrexate to prevent symptoms of Crohn's disease?

We found one summary of the research (a [systematic review](#)) looking at whether methotrexate can prevent symptoms of Crohn's disease.^[87] It included three good-quality studies ([randomised controlled trials](#)) with a total of 125 people.

Methotrexate did seem to work. After 40 weeks, 70 in 100 people taking methotrexate were still free of symptoms. This compared with 46 in 100 people who took a dummy treatment (a [placebo](#)).

However, there's a problem with the research. In medical trials, to take into account the [placebo effect](#), people aren't supposed to know whether they're taking the real treatment or a placebo. In the largest study in the review (76 people), about two-thirds of the people knew which treatment they were getting. This makes the results less reliable.

Azathioprine or mercaptopurine to prevent symptoms of Crohn's disease

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[How good is the research on azathioprine or mercaptopurine to prevent symptoms of Crohn's disease?](#)

This information is for people who have Crohn's disease. It tells you about azathioprine and mercaptopurine, treatments used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Yes. Azathioprine and mercaptopurine help to prevent symptoms of Crohn's disease. If you take them regularly for several months or even a year, it's less likely that you'll have a flare-up.

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Azathioprine and mercaptopurine can cause side effects. The side effects are not all that common, but if you do get them, they could be serious. So, you and your doctor will have to weigh the benefits of treatment against the risks.

What are they?

Azathioprine and mercaptopurine are drugs that suppress your immune system. Azathioprine is often used for people who've had an organ transplant. It stops their immune system rejecting the new organ. Mercaptopurine is used as a treatment for some kinds of cancer. Both of these drugs are also used to treat Crohn's disease. ^[10]

The brand name for azathioprine is Imuran. The brand name for mercaptopurine is Puri-Nethol.

Your doctor will probably recommend that you take these medicines as tablets. You can also get azathioprine as an injection, but it can cause severe irritation at the spot where the needle goes in. ^[58]

How can they help?

Both azathioprine and mercaptopurine can help prevent symptoms of Crohn's disease. Most of the research has looked at azathioprine.

In several studies, taking azathioprine regularly for a long time (say, between six months and two years) helped stop people getting flare-ups of Crohn's disease. ^[63] At the start of the studies, no one was getting symptoms of Crohn's disease. As time went on:

- About 71 in 100 people taking azathioprine stayed free of symptoms
- About 55 in 100 people taking a dummy treatment (a placebo) stayed free of symptoms.

A few people in the studies had also been taking steroid treatment. Taking azathioprine helped people to either stop needing steroids or switch to a lower dose.

One study of mercaptopurine found it didn't seem to work as well as azathioprine, but that might be because people were taking a low dose. ^[63]

Researchers have also looked at people with Crohn's who take these drugs after an operation to remove an inflamed section of their small bowel. One review of studies found that: ^[89]

- About 23 in 100 people taking azathioprine got symptoms again after 12 months.
- About 37 in 100 people taking a placebo got symptoms again.

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There hasn't been much long-term research on azathioprine or mercaptopurine.^[63] So, it's difficult to say how long you should take these drugs for, or whether the side effects could outweigh the benefits if you take them for a long time. And we don't know whether your symptoms are likely to come back when you stop treatment.

How do they work?

Azathioprine and mercaptopurine affect your immune system, stopping it acting as strongly as it usually does. Drugs that do this are called **immunosuppressants**.

Your immune system plays an important part in causing **inflammation** in your body. So, treatments that stop your immune system working so hard can reduce the inflammation in your bowel and help get rid of Crohn's disease symptoms.

However, if these drugs suppress your immune system too much, it can mean your body isn't able to fight off infections very well.

Can they be harmful?

Azathioprine and mercaptopurine have side effects. Problems don't seem to be common, but they can sometimes be serious. In medical trials, about 6 in 100 people taking azathioprine got a side effect that was bad enough to stop them taking their treatment.

^[63] About 19 in 100 people taking mercaptopurine stopped treatment because of side effects.

Azathioprine and mercaptopurine can stop your body making as many **white blood cells**.^[63] White blood cells are part of your immune system, and help to fight off bacteria and viruses. So, this side effect puts you at a higher risk of getting infections. If you're taking azathioprine or mercaptopurine, you'll need regular blood tests to make sure you have enough white blood cells. And if you notice an infection, make sure you see a doctor as soon as you can.

Taking azathioprine or mercaptopurine also means your body might make fewer **platelets**.^[58] These are the sticky cells in your blood that help it to clot when you cut yourself. If you get any unexplained bleeding or bruising, talk to your doctor straight away.

Drugs that affect your immune system can increase the risk of some kinds of cancer, such as **lymphoma**.^[63] In particular, azathioprine and mercaptopurine have been linked to a cancer called hepatosplenic T-cell lymphoma (HSTCL) in children and young people.

^[64] Researchers aren't yet certain whether taking these drugs led to the cancers, or whether other factors were involved. However, it's important to weigh up the risk of HSTCL and other cancers with your doctor before starting treatment.

Some people get an allergic reaction to azathioprine or mercaptopurine.^[62] ^[65] This could mean you feel generally unwell, have aches and pains, feel dizzy, feel sick or vomit, get diarrhoea, have a high temperature, or get a rash.

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Other side effects include an inflamed pancreas, **low blood pressure**, or problems with your liver or kidneys. ^[58] ^[62]

How good is the research on azathioprine or mercaptopurine to prevent symptoms of Crohn's disease?

There are several studies looking at whether azathioprine can prevent flare-ups of Crohn's disease. Mercaptopurine has been studied as well, although not as widely. ^[63]

Overall, the research is positive. If you're not getting symptoms of Crohn's at the moment, taking azathioprine or mercaptopurine regularly could stop your symptoms coming back. ^[63]

However, the research hasn't looked at very many people, especially for mercaptopurine. And there haven't been any studies lasting longer than a few years. So it's hard to say how well these treatments work in the very long term.

Aminosalicylates to prevent symptoms of Crohn's

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[How good is the research on aminosalicylates to prevent symptoms of Crohn's?](#)

This information is for people who have Crohn's disease. It tells you about aminosalicylates, a treatment used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

Taking an aminosalicylate called mesalazine regularly may make it less likely that you'll get a flare-up of symptoms. However, we don't know how well the other aminosalicylates work for preventing symptoms.

Some doctors think these drugs could also play a part in preventing bowel cancer. ^[90]

This would be an important benefit, because people with Crohn's disease tend to have a higher-than-average risk of bowel cancer. Unfortunately, the research so far hasn't given a clear answer about whether or not aminosalicylates prevent cancer.

What are they?

Aminosalicylates are a group of drugs that help with **inflammation** in the bowel. There are several different drugs in this group, and they all work slightly differently, but they're all based on a chemical called 5-aminosalicylic acid (5-ASA).

Some of the aminosalicylates that have been tested in people with Crohn's disease are:

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- mesalazine (brands include Asacol, Ipocol, and Salofalk)
- olsalazine (Dipentum)
- sulfasalazine (Salazopyrin).

In the UK, these drugs are recommended as an option to prevent a flare-up of symptoms after [surgery](#) for Crohn's disease. However, other treatments are usually prescribed to prevent symptoms among people who haven't had surgery. These drugs are [azathioprine](#) , [mercaptopurine](#) , and [methotrexate](#) .^[10]

Aminosalicylates are often given as tablets, although you can also get them as enemas and suppositories (a suppository is a tablet that you put into your bottom).

How can they help?

Taking the aminosalicylates mesalazine and sulfalazine regularly can reduce the chance of your Crohn's symptoms flaring up.

A [review](#) of the research with 2,034 people found that those who took mesalazine were 30 percent less likely to have a relapse of symptoms than those taking a dummy treatment (a placebo).^[91]

A second review of research found that 4 out of 10 people who took sulfalazine were less likely to have a relapse of symptoms, compared with 3 out of 10 people taking a dummy treatment (a placebo).^[92]

However, we don't know how well other aminosalicylates work. An earlier review of the research suggested that these drugs don't work any better than a placebo.^[93] But we need more research to find out.

Research also suggests that aminosalicylates might help people with Crohn's disease who've had an operation to remove an inflamed section of their bowel.^[94] ^[95] One review of the research on mesalazine found:^[89]

- About 29 in 100 people taking mesalazine got symptoms again
- About 38 in 100 people taking a placebo got symptoms again.

Other studies found that sulfasalazine might also prevent flare-ups after surgery.^[95] ^[96]

How do they work?

Doctors don't know exactly how aminosalicylates work. One theory is that they block the production of chemicals called cytokines.^[3] Cytokines are chemical messengers in your body, a bit like [hormones](#) . They play a part in causing inflammation. So, by blocking

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cytokines, aminosaliclates may reduce the inflammation in your bowels and improve your symptoms.

Can they be harmful?

Aminosaliclates can have harmful effects on your blood.^[50] For example, they can stop your body making enough red blood cells (which carry oxygen), white cells (which fight infections) or platelets (which help your blood to clot if you cut yourself). Tell your doctor straight away if you notice:

- Any unexplained bleeding
- Bruising
- A rash
- A temperature
- Pale skin
- A severe sore throat
- Unusual tiredness.

Your doctor may suggest regular tests to check for any problems with your blood.

Common side effects of aminosaliclates include diarrhoea, feeling sick or vomiting, and abdominal pain.^[50]

How good is the research on aminosaliclates to prevent symptoms of Crohn's?

There's research suggesting that an aminosaliclate called mesalazine can help prevent symptoms of Crohn's disease. A review of the research (a **systematic review**) with 2,034 people found that those who took mesalazine were 30 percent less likely to have a relapse of symptoms than those taking a dummy treatment (a **placebo**).^[91] A second review of research found that 4 out of 10 people who took sulfalazine were less likely to have a relapse of symptoms, compared with 3 out of 10 people taking a dummy treatment (a placebo).^[92] However, it's unclear whether other aminosaliclates can help prevent symptoms.

However, aminosaliclates might be useful for people who've had surgery for Crohn's disease. Several studies have looked at people who've had an operation to remove an inflamed section of their bowel.^[89] ^[96] People were less likely to get symptoms again after surgery if they took an aminosaliclate drug.

Ciclosporin to prevent symptoms of Crohn's disease

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[How good is the research on ciclosporin to prevent symptoms of Crohn's disease?](#)

This information is for people who have Crohn's disease. It tells you about ciclosporin, a treatment used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

No. Taking ciclosporin regularly doesn't prevent symptoms of Crohn's disease. And it can cause serious side effects.

In the UK, ciclosporin is not recommended as a treatment to prevent symptoms of Crohn's disease. ^[10]

What is it?

Ciclosporin is a drug that suppresses your **immune system**. It's often used for people who've had an organ transplant. It stops their immune system rejecting the new organ. It has also been tested as a treatment for Crohn's disease.

Ciclosporin used to be spelled cyclosporin in the UK. You might also come across its US name, cyclosporine. One brand name is Neoral. Most of the research has looked at people who've taken ciclosporin as tablets.

How can it help?

It can't help. Two studies have found that ciclosporin doesn't help to prevent flare-ups of Crohn's disease. In one study, it seemed to actually make people worse. ^[97] There were 305 people in the study. After 18 months:

- About 60 in 100 people taking ciclosporin got worse
- But only 51 in 100 people taking a dummy treatment (a **placebo**) got worse.

A second study found that ciclosporin didn't work any better than a placebo. ^[98]

How does it work?

Ciclosporin affects your immune system, stopping it acting as strongly as it usually does. Drugs that do this are called **immunosuppressants**.

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Your immune system plays an important part in causing inflammation in your body. So, treatments that stop your immune system working so hard can reduce the inflammation in your bowel and help get rid of Crohn's disease symptoms.

However, if these drugs suppress your immune system too much, it can mean your body isn't able to fight off infections very well.

Lots of the treatments that treat or prevent symptoms of Crohn's disease work by suppressing your immune system. So it made sense for researchers to look at ciclosporin. However, the studies so far suggest that ciclosporin isn't helpful for people with Crohn's.

Can it be harmful?

Yes, ciclosporin can cause unpleasant side effects, which are sometimes serious.

In one study, around 15 in 100 people stopped taking ciclosporin because the side effects were so bad. ^[97]

Here are some of the side effects that people got in studies. ^[97] ^[98] One of the studies listed side effects but didn't say how often they happened, so we can't say how common all of these problems are. We've included numbers from the other study. The side effects were:

- Pins and needles (in one study, 3 in 10 people got this problem)
- Extra hair growth (just over 2 in 10 people)
- High blood pressure
- Headaches
- Shaking (just under 1 in 10 people)
- Back pain (1 in 10 people)
- Putting on weight (1 in 10 people)
- Kidney problems (just under 1 in 10 people)
- Overgrowth of your gums, called gingival hyperplasia (just under 1 in 10 people).

Other possible side effects include indigestion, diarrhoea, feeling sick or vomiting, stomach pain, sensitivity to light, and a rash. ^[76]

If you take ciclosporin, your doctor will probably recommend regular blood tests to make sure you're not getting side effects such as kidney or liver damage. ^[76]

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Because ciclosporin stops your immune system working at full strength, there's a risk it could increase your chance of becoming ill with an infection. ^[76]

How good is the research on ciclosporin to prevent symptoms of Crohn's disease?

Two good-quality studies (randomised controlled trials) have looked at whether ciclosporin can prevent symptoms of Crohn's if you take it regularly. Neither study found that ciclosporin was helpful. ^[98] ^[97] If anything, one of the studies found that it made people worse. ^[97]

Steroid tablets to prevent symptoms of Crohn's disease

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[How good is the research on steroid tablets to prevent symptoms of Crohn's disease?](#)

This information is for people who have Crohn's disease. It tells you about steroid tablets, a treatment used to prevent symptoms of Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

No. [Steroids](#) are useful for treating a flare-up of Crohn's. However, carrying on taking them doesn't seem to stop your symptoms coming back, so there's probably no point using them as a long-term treatment. Steroids can also have serious side effects if you take them for a long time.

In the UK, steroids are not recommended as a treatment to prevent symptoms of Crohn's disease. ^[10]

What are they?

Steroids are drugs that reduce inflammation . Their full name is **corticosteroids**. They're similar to chemicals your body makes naturally. They're not the same as the anabolic steroids that some bodybuilders use. However, they can still have side effects, especially if you take them for a long time.

Steroids come as tablets. There are lots of different steroid drugs. Some examples that have been tested for Crohn's disease are:

- budesonide (brand names Budenofalk and Entocort)
- methylprednisolone (Medrone)
- prednisolone.

How can they help?

They don't help. Although steroids can treat a flare-up of Crohn's, taking them for longer won't stop your symptoms coming back.

Several studies followed people for up to two years.^[99] People took either methylprednisolone or prednisolone. Steroids didn't work any better than a dummy treatment (a placebo).

- After six months, 16 in 100 people taking steroids got symptoms again, compared with 20 in 100 people taking a placebo.
- After a year, 28 in 100 people taking steroids had symptoms, compared with 31 in 100 people taking a placebo.
- After two years, 38 in 100 people taking steroids had symptoms, compared with 45 in 100 people taking a placebo.
- Although slightly fewer people taking steroids found that their symptoms came back, the difference was small enough to have happened by chance. It's also important to take the side effects of steroids into account.

There have also been studies looking at a different steroid, called budesonide.^[100] It didn't work either. After a year, about 5 in 10 people got symptoms again. It didn't matter whether they'd taken budesonide or a placebo. It also didn't matter whether they'd taken a higher or lower dose of budesonide.

How do they work?

Steroids affect your body in lots of ways, but one of their most important actions is to reduce inflammation. They do this by blocking the production of chemicals in your body that are responsible for causing inflammation.

The symptoms of Crohn's disease happen because you get patches of inflammation on your bowels. So, medicines that reduce inflammation should help your symptoms.

Can they be harmful?

Minor side effects are common with steroids. Steroids can also cause more serious side effects, especially if you take them often or for a long time. If you get any worrying symptoms while you're taking steroids, see your doctor straight away.

To prevent side effects when you stop taking steroids, your doctor will probably suggest that you cut your dose gradually over a few weeks.^[31] This is especially important if you've been taking high doses.

The long-term studies on steroids for people with Crohn's don't give much information about side effects. We do know that, in general, steroids cause more side effects if you

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take them for longer. ^[2] In a short-term study of prednisolone, which lasted six weeks: ^[32]

- About 13 in 100 people got high blood pressure
- About 30 in 100 people got spots
- About 47 in 100 people got a swollen face (sometimes called 'moon face')
- About 6 in 100 people got red dots on their skin caused by broken blood vessels
- About 17 in 100 people got bruises on their skin
- About 6 in 100 people got stretch marks on their skin.

These side effects usually go away when you stop taking steroids. ^[33]

Steroids stop your immune system working at full strength. This can put you at risk of infections. In the six-week-long study, 27 in 100 people taking prednisolone got an infection, compared with 10 in 100 people taking a placebo. ^[32]

Other possible side effects of steroids include: ^[33]

- Diabetes
- Weak bones that are more likely to break
- Stomach ulcers
- Eye problems, such as cataracts or glaucoma
- Problems with your adrenal glands (your adrenal glands make hormones, including adrenaline)
- Increased body hair.

If children take steroids, they may grow more slowly than normal. ^[33] However, many children with Crohn's disease grow more slowly anyway, because of their illness. ^[15] In one small study, steroids didn't have a negative effect on children's heights. ^[34]

About 1 in 20 people find that steroid tablets affect their mood. ^[35] This can happen a few days or weeks after you start treatment. You may be irritable, anxious, or confused, or have trouble sleeping. Or you can get an unusually high mood (euphoria). Rarely, people get more serious side effects, such as thinking about suicide or seeing things

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that aren't really there. It's also possible to get these side effects when you stop taking steroids.

In short-term studies, budesonide causes fewer side effects than methylprednisolone and prednisolone. ^[36]

How good is the research on steroid tablets to prevent symptoms of Crohn's disease?

Although steroids can be a useful treatment for Crohn's disease, there's no point taking them in the long term. Several studies have found that the benefits don't last. ^[99] ^[100] Steroids can also cause some serious side effects when you take them for a long time, such as making your bones weaker.

Giving up smoking

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[How good is the research on giving up smoking?](#)

This information is for people who have Crohn's disease. It tells you about giving up smoking, a treatment used for Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

Probably. If you have Crohn's disease and you smoke, giving up is likely to mean you get fewer flare-ups of symptoms. You're also less likely to need surgery, and you may not need to take as many medicines.

What is it?

If you smoke, you've probably been told thousands of times that it's bad for your health. You're probably fed up of hearing it. But over and above all the usual problems, there is research to show that smoking makes Crohn's disease worse. If you're a smoker and manage to give up, your symptoms are likely to improve. Lots of people find it hard to stop smoking, but there are things that can make it easier.

- Getting help from a doctor, nurse or counsellor makes it easier to give up. ^[101]
- Nicotine patches and gum can make it easier to stop smoking. ^[102] You can also get other nicotine replacement products, such as lozenges, inhalers and a nasal spray. You can buy them from a pharmacist or supermarket, or get them on prescription from your doctor.

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- There are two drugs available in the UK that make it easier to give up smoking. They're called bupropion (brand name Zyban) and varenicline (Champix). Taking one of these drugs means it's easier to stop smoking, but they both have side effects, and they're not suitable for everyone. ^[103] ^[104]
- The NHS offers a smoking helpline that smokers and their families can call for free, expert advice. The number is 0800 022 4 332. You can also get help from the NHS website (<http://smokefree.nhs.uk>).

To find out more about the best ways to give up, see our information on [Smoking](#) .

How can it help?

Almost all the research shows that people with Crohn's disease improve once they give up smoking. ^[105] ^[106] In one study, people who stopped smoking for more than a year had fewer flare-ups than people who carried on smoking. Also, they didn't need as much medication. ^[107]

Another study followed 182 people who'd had bowel surgery for Crohn's disease. ^[108]
After six years:

- About 40 in 100 people who'd never smoked had symptoms of Crohn's disease again
- About 59 in 100 people who'd given up smoking had symptoms again
- About 73 in 100 people who still smoked had symptoms again.

After an operation for Crohn's disease, you're less likely to need more surgery in the future if you manage to give up smoking. ^[105] ^[106] ^[109]

How does it work?

Doctors don't know exactly why smoking makes Crohn's disease worse. One theory is that Crohn's disease restricts the flow of blood to your bowels. ^[105] Smoking damages your blood vessels, making it harder for them to widen and let blood through. So, if you smoke as well as having Crohn's, your bowel may be getting a poor supply of blood. This could make your symptoms worse.

Can it be harmful?

None of the studies talked about side effects of giving up smoking. Giving up can be quite hard, but as far as your health is concerned, stopping smoking is one of the best things you can do.

How good is the research on giving up smoking?

Lots of studies have followed people with Crohn's and found that people who give up smoking do better than people who don't. ^[105] ^[106] There's also plenty of research showing that it's easier to give up smoking if you get help from a doctor or other health professional. ^[101]

Liquid food

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[How good is the research on liquid food?](#)

This information is for people who have Crohn's disease. It tells you about liquid food, a treatment used for Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

Probably. If you have Crohn's disease, replacing some meals with liquid food substitutes may help to prevent flare-ups of symptoms.

If you're having a flare-up of Crohn's symptoms, it's not clear whether liquid food will help you recover. [Steroids](#) probably work better, although they do have side effects.

If you have Crohn's and you're thinking of making changes to your diet, it's a good idea to talk to your doctor or a qualified dietitian. It's important to make sure you're getting all the nutrients your body needs.

What is it?

Liquid food substitutes contain the nutrients your body needs in a very simple form. For example, they contain energy as sugar, rather than as complex carbohydrates. This makes them very easy to digest. Some food substitutes come in cans or bottles, and others you get as a powder that you mix with water or milk. Liquid foods often come in fruit, chocolate or vanilla flavours, like milkshakes, although you can get savoury kinds too.

You may hear this treatment called an **elemental diet**. There are lots of different brands, including Clinutren, Complan, Ensure, and Fortisip.

Liquid food is often used for children with Crohn's disease. That's partly to make sure they're properly nourished, and also because steroid tablets, one of the main treatments for Crohn's, could potentially slow children's growth as a side effect. ^[110]

Doctors sometimes recommend a low-fibre diet for people who have problems with their bowel getting blocked. Foods like nuts, dried fruit and beans have lots of fibre. Soft or

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liquid foods tend to be low in fibre. So, if you've been asked to eat a low-fibre diet, you might find liquid foods helpful.

How can it help?

One study looked at people who drank liquid food half the time and ate solid food the rest of the time.^[111] The researchers called this a **half-elemental diet**. People either drank the food substitutes or were given them through a feeding tube. Feeding tubes are usually passed up your nose and down into your stomach.

People were less likely to get symptoms of Crohn's or need to take medicine if they were drinking liquid food. After two years:^[111]

- About 35 in 100 people who drank food substitutes for half their meals got symptoms of Crohn's again
- About 64 in 100 people who ate whatever they wanted got symptoms.

The researchers also found that people drinking liquid food rated their quality of life as highly as those eating whatever they wanted.^[112]

There have also been some studies looking at whether liquid food can help get rid of an attack of Crohn's symptoms. It's not clear whether liquid food can help when it's used like this. There's not a lot of research, although some studies suggest steroid tablets are a better way to treat an attack of symptoms.^[110]

How does it work?

Doctors don't know exactly why liquid food substitutes help people with Crohn's disease. One idea is that the nutrients in food substitutes come in simple forms that are very easy to digest. This gives your bowel a rest.^[111]

Another theory is that some foods contain substances that stimulate your immune system.^[110] ^[111] Your immune system's reaction could make the **inflammation** in your bowel worse, so replacing these foods should help your symptoms.

It's also possible that a liquid diet leads to changes in the natural bacteria in your bowels. Liquid food substitutes also tend to be low in fat, so this may play a part too.

Some people with Crohn's avoid eating, because digesting food can be painful. So, another benefit of liquid foods is that you're properly nourished.^[111]

Can it be harmful?

The research didn't find any side effects of liquid food substitutes.^[111] However, the study didn't look at how well-nourished people were. So, we don't know whether the people who drank liquid food were getting all the vitamins and minerals they needed.

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In some studies, people chose not to carry on drinking food substitutes because they didn't like the taste. ^[110]

Being given food substitutes through a feeding tube can be uncomfortable. In studies that used feeding tubes, as many as 3 or 4 out of 10 people dropped out. ^[110]

How good is the research on liquid food?

One good-quality study found that people who got half their calories from liquid food substitutes were less likely to get symptoms of Crohn's disease. ^[111] They also rated their quality of life as highly as those eating whatever they wanted. ^[112] However, it was a fairly small study, with only 51 people. ^[113]

Although liquid food seems to prevent flare-ups of Crohn's, the research isn't clear about whether they work to treat a flare-up. [Steroids](#) probably work better. ^[110]

Fish oil supplements

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[How good is the research on fish oil capsules?](#)

This information is for people who have Crohn's disease. It tells you about fish oil supplements, a treatment used for Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

We're not sure. Different studies give different answers. One study found that fish oil capsules helped to prevent flare-ups of Crohn's disease symptoms. But in other studies, fish oil didn't help.

What are they?

Fish such as trout, mackerel, sardines, and salmon have a lot of oil in them. You can get oil from these fish as capsules. Fish oil contains substances called **omega-3 fatty acids**.

You can buy fish oil capsules over the counter from pharmacies, health food shops, or supermarkets.

How can they help?

We don't know whether fish oil supplements can help. There has been one positive study, but other research has found that supplements don't prevent flare-ups of Crohn's disease.

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The positive study found that fish oil capsules helped people to go longer without getting symptoms of Crohn's disease. After a year: ^[114]

- About 59 in 100 people taking fish oil had no symptoms
- Only 26 in 100 people taking a dummy treatment (a **placebo**) had no symptoms.

One review of the research (**systematic review**) found there wasn't enough evidence that fish oil capsules helped people to go longer without getting symptoms of Crohn's disease. ^[115] Another study also found that fish oil capsules didn't help. ^[116] About 3 in 10 people had no symptoms of Crohn's a year after the start of the study. It didn't matter whether they'd taken fish oil or a placebo. Two more recent studies have also had negative results. ^[117]

How do they work?

Some studies have found that people with Crohn's disease have lower amounts of omega-3 fatty acids in their bodies. ^[118] So, it's possible that taking supplements to boost your levels could have benefits.

It may also be that omega-3 fatty acids have an effect on your immune system, which could help to reduce the **inflammation** in your bowel. ^[118]

However, at the moment these ideas are just theories. There's no evidence to prove that fish oil can help people with Crohn's disease.

Can they be harmful?

In one study, 1 in 10 people taking fish oil capsules got diarrhoea. ^[114]

In another study, 14 in 100 people got fishy-smelling burps or heartburn. ^[116] Some fish oil capsules have a coating that only breaks down in your bowels, not in your stomach. These capsules, called **enteric-coated capsules**, might be less likely to cause fishy burps.

How good is the research on fish oil capsules?

A few studies have looked at whether fish oil supplements help people with Crohn's disease. There's been one positive study. ^[114] However, several other studies have had negative results. ^[115] ^[116] ^[117] So, it's hard to say yet whether or not fish oil capsules are worth taking.

Probiotics

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[How good is the research on probiotics?](#)

This information is for people who have Crohn's disease. It tells you about probiotics, a treatment used for Crohn's disease. It is based on the best and most up-to-date research.

Do they work?

We don't know. There's not much research. One review of studies found that probiotics didn't help people with Crohn's disease, but it only looked at a few types of probiotics, all from a group of bacteria called lactobacilli. There are lots of different kinds of probiotics, so it's possible that others might be helpful.

What are they?

Probiotics are 'friendly' bacteria. Eating products containing these bacteria helps to keep your bowels healthy.

We all have bacteria living in our bowels. Some of these bacteria are helpful, and help you to digest food. They also stop other, harmful bacteria 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. ^[119]

There are lots of probiotic products around, often sold as yoghurts. You can also get them as pills or capsules. Researchers have also looked at probiotics that come as sachets of powder that you dissolve in water.

How can they help?

We found a review of six good-quality studies looking at few types of probiotics from a group of bacteria called lactobacilli. ^[120] The review found that people given probiotics were just as likely to get Crohn's symptoms as those given a dummy treatment (a placebo).

One study looked at a type of bacteria called *Lactobacillus johnsonii*. ^[121] The study followed people for six months after they'd had [bowel surgery](#). People took probiotic supplements twice a day. At the end of the six months, the researchers used a tube with a tiny camera on the end to look for [inflammation](#) in people's bowels. Here's what the study found:

- About 5 in 10 people taking probiotics showed signs of inflammation on their bowel again.
- About 6 in 10 people taking a dummy treatment (a placebo) showed signs of inflammation on their bowel.

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Although there was a slight difference between the probiotics and a placebo, it was small enough for the researchers to think it was down to chance.

How do they work?

Bacteria living in your bowels may play a part in causing the inflammation you get with Crohn's disease. ^[122] Eating supplements containing 'friendly' bacteria means these will grow in your bowels, leaving less space for unhelpful bacteria to grow.

Another theory is that probiotics can help your immune system to work better. ^[122]

Can they be harmful?

The research says that probiotics don't seem to cause side effects for people with Crohn's. ^[120]

How good is the research on probiotics?

There's not enough research to know whether probiotics help people with Crohn's disease. ^[120] There are several studies, but most of them didn't look at many people, which makes them less useful. ^[122]

In one of the larger studies, a probiotic called *Lactobacillus johnsonii* didn't help people with Crohn's. ^[121] However, there are lots of other types of probiotic. Just because one doesn't seem to work, it doesn't necessarily mean that the others don't.

Keyhole surgery to remove part of your small bowel

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[How good is the research on keyhole surgery to remove part of your small bowel?](#)

This information is for people who have Crohn's disease. It tells you about keyhole surgery to remove part of your small bowel, a treatment used for severe Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

Surgeons think that removing a badly damaged section of your small bowel can help with symptoms of Crohn's disease. It's hard to say exactly what the benefits are, as research tends to look at how safe surgery is, not at how much it helps. Talk to your surgeon about the risks and benefits of the operation. It's also important to remember that surgery isn't a cure. Your symptoms could always come back.

What is it?

During an operation, a surgeon cuts away a badly damaged section of your small bowel. The diseased part of your bowel is removed and the healthy parts joined back together. This operation works best if as much healthy bowel is left behind as possible. ^[123]

You'll have a **general anaesthetic** so you sleep during the operation. You'll probably need to recover in hospital for about a week afterwards. ^[124] Having keyhole surgery means you'll have several small scars instead of one large scar.

The medical name for this operation is a **laparoscopic ileocaecal resection**. You might hear slightly different terms used depending on how the operation is done.

- Laparoscopic means the operation is done as keyhole surgery. An instrument called a laparoscope, which is a bit like a telescope, lets the surgeon see inside your body.
- Ileocaecal describes the part of your small bowel where you'll have the operation. It refers to the ileum and the caecum, which are both found towards the end of your small bowel as it connects to your large bowel.
- A resection is the technical term for any operation that involves cutting away part of your body.

You can also have this operation done through a larger cut on your body. This is called **open surgery**. Keyhole and open surgery both seem to work about as well as each other, but you're likely to recover faster after keyhole surgery.

How can it help?

The research doesn't tell us very much about how likely surgery is to help you if you have Crohn's disease. Most studies look at how safe surgery is, and not at whether it helps to get rid of people's symptoms. ^[125] ^[126] So, it's not clear exactly who is likely to benefit from surgery. Doctors tend to recommend it for people with severe Crohn's disease when other treatments haven't worked. It's best to talk to a surgeon and a specialist bowel doctor (a gastroenterologist) before making any decisions about surgery. ^[3]

The research does show that you're likely to recover more quickly after keyhole surgery than you would after open surgery. ^[125] ^[126] In studies, people left hospital two or three days sooner if they'd had keyhole surgery.

Surgery isn't a cure for Crohn's. It's likely that your symptoms will come back eventually. Around half of people need another operation in the next 10 years. ^[127] Your doctor might recommend drug treatment after surgery to help you stay free of symptoms for longer. ^[3] [Giving up smoking](#) also means you're likely to go longer without symptoms after surgery. ^[105] ^[106]

How does it work?

If part of your small bowel has become badly damaged, cutting it away during surgery might improve your symptoms. However, Crohn's disease can affect any part of your bowel. ^[3] There's no guarantee that your symptoms won't come back later in another section of bowel.

Can it be harmful?

Any operation puts a strain on your body. You'll have some pain, and you'll need to spend a few weeks recovering. However, you're likely to get better more quickly after keyhole surgery than after normal (or open) surgery.

One study found that 1 in 10 people got some kind of problem after keyhole surgery. ^[126] About 3 in 10 people got a problem after open surgery.

Problems that can happen after surgery include an infection, a pocket of pus inside your body (an abscess), a chest infection or fluid leaking from the join in your bowel. ^[125]

How good is the research on keyhole surgery to remove part of your small bowel?

There's research showing that people tend to recover faster after keyhole surgery compared with normal surgery done through a large cut (called open surgery). People also are less likely to get infections in the cut made with keyhole surgery compared with open surgery. ^[128]

However, we didn't find any good research on how much benefit people got from either type of surgery.

Surgery on the large bowel

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[How good is the research on surgery to remove some or all of your large bowel?](#)

This information is for people who have Crohn's disease. It tells you about surgery to remove some or all of your large bowel, a treatment used for severe Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

If part of your large bowel has been badly damaged by Crohn's disease, your surgeon might recommend surgery to remove it. There are several types of surgery. Some remove most of your large bowel, and others remove only a section of it. Research tends to compare surgical techniques, rather than look at what effect surgery has on your

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symptoms and your life. This makes it hard to say exactly how this operation will help you. Surgery that removes a smaller section of your bowel is likely to cause fewer problems afterwards, compared with surgery to remove more of your bowel.

Talk to your surgeon about the risks and benefits of the operation. It's also important to remember that surgery isn't a cure for Crohn's. Your symptoms could always come back.

What is it?

An operation to remove part of your large bowel is called a **colectomy**. There are several ways of doing it. You can have all, most, or only a short section of your bowel removed.

Before surgery, you'll have a **general anaesthetic** to make you sleep. The operation is done through a cut on your abdomen.

You can lose quite a big chunk of your large bowel without it having much effect on your life. However, surgery that involves your rectum will have more impact. Your rectum (back passage) is the last section of your bowel. It stores stools until you go to the toilet. If your rectum is removed during surgery, waste from your bowel will have to be collected in a bag outside your abdomen. This is called a **colostomy** or **ileostomy**. To read more, see [Living with a colostomy or ileostomy](#) .

There might be an alternative to having a colostomy or ileostomy. Some people have an operation to connect the small bowel directly to the anus. Your surgeon cuts away your large bowel and the diseased lining of your rectum. Your small bowel is joined to the anus, and a small pouch is created to hold stools. You'll be able to pass stools more or less the way you did before. This operation is called an **ileoanal anastomosis**.

The type of operation you have will depend on what parts of your bowel are affected by Crohn's. Talk to your surgeon about exactly what kind of operation he or she is recommending. You don't necessarily need to know the medical term for the type of operation you're having, but we've included them below in case you're interested.

- Surgery to remove the whole of the large bowel is called a **total colectomy**.
- Surgery that doesn't remove the whole bowel is called a **subtotal colectomy**.
- Surgery to remove a shorter section of bowel is called a **segmental colectomy**.
- Surgery to remove your colon and rectum is called a **proctocolectomy**.

Whatever type of operation you have, you'll need to spend several days in hospital afterwards. You'll also need to spend a few weeks recovering at home.

How can it help?

We found one study that compared people who had different amounts of bowel tissue removed.^[129] Some people had most of their large bowel removed, and others just had

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a section removed. Overall, about half of people got symptoms again in the next five to 15 years. It didn't make any difference which operation they'd had. However, people who'd had less of their bowel removed tended to get symptoms sooner, by about four years. ^[129]

After surgery, your doctor might recommend drug treatment to help you stay free of symptoms for longer. ^[3] [Giving up smoking](#) also means you're likely to go longer without symptoms after surgery. ^{[105] [106]}

How does it work?

If part of your large bowel has become badly damaged, cutting it away during surgery might improve your symptoms. However, Crohn's disease can affect any part of your bowel. ^[3] There's no guarantee that your symptoms won't come back later in another section of bowel.

Can it be harmful?

The research looking at large bowel surgery for Crohn's didn't say how common side effects or complications were. ^[129] It only said that there were no differences overall between surgery to remove more or less of your bowel. However, some surgeons think people do better if less of the bowel is removed.

Any operation puts a strain on your body. You'll have some pain, and you'll need to spend a few weeks recovering. Problems after bowel surgery can include:

- An infection in the cut
- Bleeding
- Fluid leaking from the join in your bowel
- An infection or pocket of pus (an abscess) inside the abdomen.

How good is the research on surgery to remove some or all of your large bowel?

A [review](#) of the research didn't find much difference between surgery to remove most of your bowel and surgery to remove a segment of your bowel. ^[129] Some surgeons think that removing a smaller section of bowel creates fewer problems after surgery, but it might also mean that your symptoms of Crohn's come back sooner.

Whatever kind of surgery you have, there's about a fifty-fifty chance of your symptoms coming back in the next 10 to 15 years. ^[129]

Strictureplasty

Crohn's disease

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[How good is the research on strictureplasty?](#)

This information is for people who have Crohn's disease. It tells you about surgery to widen a scarred section of bowel, a treatment used for severe Crohn's disease. It is based on the best and most up-to-date research.

Does it work?

If you have a narrow, scarred section in your small bowel, surgeons think that surgery to widen it (strictureplasty) works well. The studies we found compared types of surgeries, so it's hard to say how well strictureplasty works compared with not having surgery. Talk to your surgeon about the risks and benefits of the operation. It's also important to remember that surgery isn't a cure. Your symptoms could always come back.

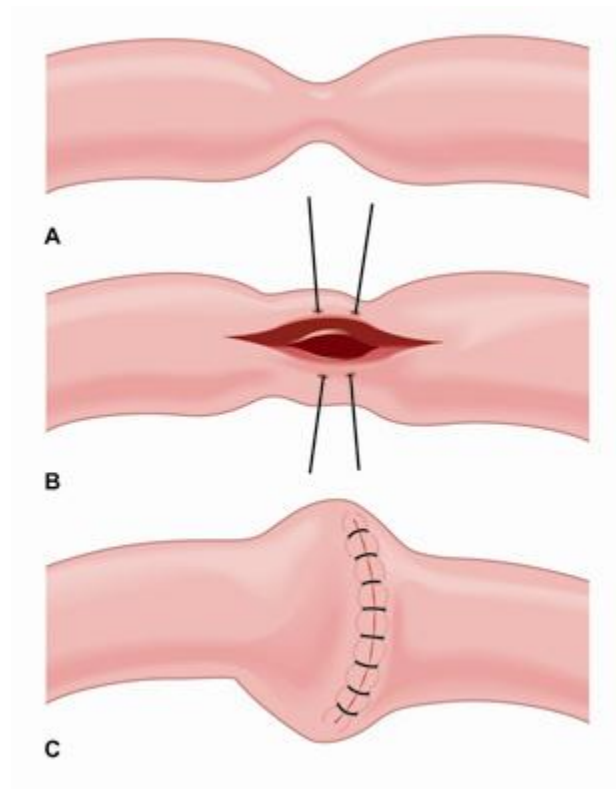
What is it?

Over time, Crohn's disease can cause scarring in your bowel. When scar tissue builds up, it can create a narrow section in your bowels. This is called a stricture. An operation to widen a narrow section in your small bowel is called a **strictureplasty**.

The advantage of strictureplasty is that it widens a narrow section without cutting away any bowel tissue. There are several techniques. One of them works like this:^[130]

- Imagine a horizontal tube with a narrow section. A cut is made horizontally, running along the length of the narrow part.
- Then, the edges of the cut are pulled apart and stitched together vertically. This makes the narrow section wider and slightly shorter. The stitches dissolve inside your body over time.

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The operation is done through a cut on your abdomen. You'll have a **general anaesthetic** to make you sleep. Afterwards, you'll need to spend some time recovering in hospital. In one study, the average hospital stay was around nine or 10 days. ^[131]

How can it help?

It's hard to say exactly how much this operation helps. Surgeons think it's helpful and safe. It also has the advantage of not removing any bowel tissue. If you have surgery that removes a lot of your bowel, it stops your body absorbing nutrients from food as well as it should.

One review of studies found that people who'd had strictureplasty were slightly more likely to need another operation three to seven years later, compared with people who'd had part of their bowel removed (with or without strictureplasty as well). But the difference between the groups was small enough that it could have been down to chance. ^[132]

Surgery isn't a cure for Crohn's. It's likely that your symptoms will come back eventually. About a quarter of people in these studies ended up needing a second operation within two-and-a-half years. ^[130]

Longer term studies have found that around half of people need another operation in the next 10 years. ^[127] Your doctor might recommend drug treatment after surgery to help you stay free of symptoms for longer. ^[3] [Giving up smoking](#) also means you're likely to go longer without symptoms after surgery. ^{[105] [106]}

How does it work?

A narrow, scarred section of your bowel can get blocked easily. Widening it with surgery should prevent this problem. Strictureplasty widens the narrow section rather than cutting it out, so you should have fewer problems after the operation, compared with surgery that removes part of your bowel.

Can it be harmful?

Any operation puts a strain on your body. You'll have some pain, and you'll need to spend a few weeks recovering.

In studies on strictureplasty, 13 in 100 people got some kind of problem after surgery.

^[130] The most common problems people got were:

- An infection in the cut (this affected 1 in 100 people)
- Bleeding in the bowel (2 in 100 people)
- A blocked bowel (less than 1 in 100 people)
- Fluid leaking from the join in your bowel (less than 1 in 100 people)
- An infection or pocket of pus (an abscess) inside the abdomen (2 in 100 people)
- Bowel contents leaking out onto the skin (3 in 100 people).

How good is the research on strictureplasty?

The research on strictureplasty for Crohn's disease isn't very good.

One **review** of the research compared people who'd had strictureplasty with those who'd had some of their bowel removed (with or with strictureplasty as well).^[132] Three to seven years after surgery, people who'd had strictureplasty were slightly more likely to have needed another operation. But the difference was so small that it could have been down to chance. Also, the studies in the review weren't very high quality, so this makes the findings less certain.

Another **review** of the research followed people for two-and-a-half years after having different types of strictureplasty.^[130] Fewer people who had Finney strictureplasty got symptoms again, compared with people who had Heineke-Mikulicz strictureplasty.

However, Finney strictureplasty isn't necessarily better. People having the Heineke-Mikulicz procedure might just have had worse scarring on their bowel in the first place.^[130] In the best type of research, people have their treatment chosen at random, so those with the worst symptoms would be split evenly between the two groups. This

is called a **randomised controlled trial**. But the studies on strictureplasty weren't randomised.

Further informations:

Complications of Crohn's disease

Common symptoms of Crohn's are diarrhoea and stomach pain, but it's also possible to get more serious problems.

If you get severe symptoms of Crohn's disease, you'll probably need to go to hospital. ^[2] Some complications end up needing treatment with surgery.

You should talk to your doctor whenever your symptoms get worse. Particular warning signs are a temperature, severe pain, blood in your stools, bloating, or feeling dizzy or dehydrated. See your doctor straight away if any of these happen. It's also important to get help quickly if you can't go to the toilet, can't stop being sick, or get fluid leaking from your bottom or from anywhere on your skin.

Here are some of the complications that can happen with Crohn's disease. ^[4] They may sounds alarming. But remember that not everyone gets these complications.

- An infection. Crohn's can sometimes damage your bowel and lead to an **infection** or an abscess (a pocket of pus inside your body). If this happens, you might get a temperature or have a tender spot on your abdomen. Your doctor might recommend **antibiotics** to treat the infection.
- A blockage. If Crohn's causes a narrow section in your bowel, it can get blocked. A blocked bowel can cause pain, will make you bloated and constipated, and you may vomit. It needs urgent treatment. You might be given **steroids** to reduce **inflammation** and widen the blocked section of bowel. Or doctors might put a tube into your nose, down your throat and into your bowel to suck out anything causing the blockage. If these things don't work, you may need surgery.
- A hole in your bowel. This is called a perforation. It can be very painful. It needs emergency treatment, because the contents of your bowel can leak out, causing a dangerous infection. You'll feel generally ill and get a temperature. You'll need surgery to repair the hole and antibiotics (given as a drip) for the infection.
- Scar tissue. Over time, damage to your bowel can cause scar tissue to build up. This creates a narrow section of bowel called a stricture. A narrow section of bowel can keep getting blocked. If this happens, your doctor might advise you to eat less fibre (found in foods like nuts, dried fruit and beans). If eating less fibre doesn't help, you might need surgery to remove a stricture.

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- Damage to the skin around the anus. You could get a tear in the skin (an anal fissure) or a problem where the anus tightens and makes it difficult to pass stools (this is called anal canal stenosis). If you get one of these problems, your doctor might suggest antibiotics to prevent infections in the damaged skin and help it to heal. Anal canal stenosis is sometimes treated with surgery.
- An abnormal tunnel. A severe complication is when a tunnel forms, creating an abnormal connection between your bowel and another part of your body. This is called a **fistula**. For example, you can get a tunnel between your bowel and your bladder, or even between your bowel and your skin. Antibiotics and immunosuppressant drugs can help a fistula to heal, but if drugs don't work, you may need surgery.
- An extremely enlarged bowel. This is a rare but serious problem. Warning signs include stomach pain and a bloated abdomen. Your bowel quickly gets wider (becomes dilated). At the same time, bacteria release poisonous chemicals, which build up inside your bowel. The medical term is toxic megacolon. It's extremely dangerous unless it's treated urgently, and there's a good chance of needing surgery.
- Arthritis. Crohn's mainly causes inflammation in your bowel, but for some people, it can also affect other parts of their bodies. This probably happens for about 3 in 10 people with more severe Crohn's disease. One problem that can happen is swollen or painful joints (arthritis). Your usual medicine for Crohn's disease might also help with arthritis. Your doctor might also suggest painkillers like aspirin or ibuprofen. Physiotherapy may help too.
- Eye problems. Some people with Crohn's disease get red, itchy or swollen eyes. If this happens, you might need to see a specialist eye doctor (an ophthalmologist).
- Weak bones. Between 2 in 10 and 5 in 10 people with Crohn's eventually get weaker bones ([osteoporosis](#)). This is more likely to happen as you get older, especially if you haven't been able to stay active. One cause is not getting enough nutrients from food to keep your bones strong. [Steroids](#), a common treatment for Crohn's flare-ups, can also make your bones weaker. So if you've taken steroids for a long time, you're more likely to get this problem. If your doctor prescribes steroids, he or she might suggest regular check-ups to make sure your bones haven't become too weak.

What else might it be?

One of the frustrating things for lots of people with Crohn's disease is the time it takes to find out what's causing their symptoms. Other bowel conditions can have similar symptoms to Crohn's. Added to the fact that Crohn's disease symptoms tend to come and go, this can make it a difficult condition to diagnose. Here we look at some of the other conditions that can look similar to Crohn's.

Crohn's disease

- **Ulcerative colitis** is very similar to Crohn's.^[2] It also causes inflammation in your bowel, so both ulcerative colitis and Crohn's are sometimes described as inflammatory bowel disease (IBD). However, they tend to affect different parts of your bowel.^[3] Ulcerative colitis only affects your large bowel (your colon). Crohn's can affect any part of your bowels, including your small bowel. Sometimes, doctors can't tell whether you have ulcerative colitis or Crohn's disease. In this case, they might say you have **indeterminate colitis**.
- **Appendicitis** causes pain in your abdomen, often focused on the lower right side. Similar pain can happen with Crohn's disease. However, appendicitis only causes inflammation around your appendix, while Crohn's can affect any part of your bowel. If you have appendicitis, you're likely to need surgery to remove your appendix. To read more, see our information on [Appendicitis](#) .
- **Colitis** is the general term for inflammation in your colon. It can happen because of infection with bacteria (infectious colitis) or because of damage to your colon's blood supply (ischaemic colitis). Both of these look a lot like the inflammation you get with Crohn's disease.
- **Diverticular disease** is a condition that causes small pouches to form along your bowel. These can become painful and inflamed. To read more, see our information on [Colonic diverticular disease](#) .
- **Irritable bowel syndrome (IBS)** is another condition that can cause diarrhoea and stomach pain.^[2] However, IBS seems to happen because the muscles in your bowels aren't working properly, not because of inflammation. You can read more in our section on [Irritable bowel syndrome](#) .

Living with Crohn's disease

Crohn's can be a frustrating illness. Some of the time you might feel fine, and other times you might feel you can't do much at all. You'll probably get better at listening to your body and working out what you can and can't do on a particular day.

We've talked to doctors and to people who have Crohn's. Here, we look at some of the ideas they had about living with the condition.

It's worth taking some time to find out about Crohn's disease. In studies, people who got more information tended to feel less anxious.^[4] Knowing more about Crohn's can help you recognise the times when you need to see a doctor. Being aware of the different drugs you can take is also useful. For example, you can ask your doctor about switching medicines if you're getting side effects from your treatment.

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Your doctor is a good place to start if you want information about Crohn's. The internet is another useful source of information, although it's worth looking at who's written the information on a particular web site, to make sure it's reliable. Other people with Crohn's can help by offering information and support. You might want to find a support group in your area, or look for forums or chat rooms online.

Some people with Crohn's find that the food they eat doesn't affect their symptoms much. For others, particular foods can cause problems. For example, if you have a narrow section in your bowel, foods that have lots of fibre might lead to a blockage. Ask your doctor to refer you to a dietitian. A dietitian can help you adjust your diet while still getting all the nutrients you need to stay healthy.

You're probably fed up of people telling you that smoking is bad for you. However, there's been research looking particularly at how smoking affects Crohn's disease. Smoking means you're likely to get symptoms more often. And surgery for Crohn's is less successful in people who smoke. If you want to give up, there are proven treatments that make it easier. Talk to your GP or pharmacist, call the NHS helpline on 0800 022 4 332, or visit the NHS website (<http://smokefree.nhs.uk>).

It's important to pay attention to how you're feeling. Crohn's disease doesn't happen because of stress, and there's mixed research on whether feeling stressed can make symptoms worse. ^[4] However, people who are especially depressed or anxious seem to get worse symptoms. And if you're feeling stressed, it may make it harder to cope with being ill.

Talk to your doctor about day-to-day medicines for treating symptoms like stomach pain or cramps. For example, antispasmodic drugs like dicycloverine (Merbentyl) may help with cramps. If you get pain, many doctors recommend paracetamol. You can get stronger painkillers on prescription. It may be a good idea to avoid painkillers called NSAIDs (ibuprofen is one of the most common). They can irritate your stomach, which might make the symptoms of Crohn's worse. ^[20]

Blood tests

Your blood can be checked in several ways to look for signs of Crohn's disease.

- A **full blood count** (FBC) can show how many red and white cells you have in your blood. If you have too few red cells, it can be a sign that you've been bleeding inside your bowel. A high number of white cells can be a sign of inflammation in your body.
- A **urea and electrolytes** (U&E) test checks how well your kidneys are working.
- A **liver function test** (LFT) looks at whether your liver is healthy.

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- A **test for C-reactive protein (CRP)** looks for signs of inflammation. CRP is a protein that appears in your blood if there's inflammation in your body.
- A blood test to find your **erythrocyte sedimentation rate (ESR)** is another way of checking for inflammation.

X-rays

If your doctor thinks you might have Crohn's disease, you're likely to need several **x-rays** of your bowel. You might be given a **barium meal** or a **barium enema**. These involve either swallowing a thick, white liquid or having it passed through a tube into your back passage. The barium shows up in x-rays, so it helps make the images of your bowel clearer. A series of x-ray pictures will be taken as the barium liquid passes through your bowels.

Your stools may be white for a few days after a barium meal or barium enema. This is the barium liquid leaving your body. It's nothing to worry about.

This test is very safe.^[21] But some people get cramps in their abdomen, and there's a very small risk that part of the wall of your bowels could tear.

If ordinary x-rays don't help, you may need to have a highly detailed type of x-ray, called a **CT scan**.

Sigmoidoscopy

Sigmoidoscopy allows your doctor to see inside the last section of your large bowel. A tube called a **sigmoidoscope** is put into your **rectum**. The tube has a light that shines inside your bowel. There's a camera on the end of the sigmoidoscope, so the doctor can look at the inside of your bowel using a screen.

The doctor may use a flexible sigmoidoscope, which allows him or her to look around bends in your colon and to go further up. It's also more comfortable for you.

There is a risk that your colon could bleed or be punctured when you have a sigmoidoscopy.^[22] But this is rare.

Before you have a sigmoidoscopy, you'll need to clear your bowels. Many people do this by taking **laxatives**. You'll probably also be asked not to have any solid food for several hours before the test.

Colonoscopy

The symptoms of Crohn's disease happen because of patches of inflammation on your bowel. One way to tell for certain you have this inflammation is to have a colonoscopy. Unlike a sigmoidoscopy, this test can look at the whole of your large bowel. It can also look at part of your small bowel. Patches of healthy and inflamed bowel in a sort of 'cobblestone' pattern are a key sign of Crohn's.

For this test, the doctor puts a thin bendy tube called a **colonoscope** into your back passage. The tube has a tiny camera, which lets the doctor see inside your bowel.

The test is usually carried out in a hospital outpatient department. It takes about an hour. ^[23]

Your whole bowel needs to be empty before this test. You will be given a list of things to do to empty your bowel. You may need to eat only liquid food for two days before the test, drink plenty of clear fluids or take laxatives (drugs that make you empty your bowels).

Just before the test, you will probably be given painkillers and a medicine to make you sleepy (a sedative). This is to make the test less uncomfortable. If you don't want to take a sedative, talk to the doctor beforehand.

You lie on your side while the doctor slides the tube through your back passage and up into your bowel. The light inside the tube helps the doctor to see any problem areas or swelling. ^[23]

During the test, the doctor can take small samples of tissue that can be examined later under a microscope. This is called a **biopsy**.

You should be able to go home a couple of hours after the test. You shouldn't drive for a few hours after taking a sedative, so you may need someone to drive you home.

Things don't often go wrong during a colonoscopy. But there's a small chance the colonoscope could poke a hole in the wall of your bowels. This is called a **perforation**. The chances of it happening are about 1 in 1,000. ^[24]

Living with a colostomy or ileostomy

If you've had surgery for Crohn's disease, you may have had the final section of your large bowel (your rectum) removed. This means your muscles can't control your bowel movements. Your surgeon will create a new opening for your bowel (usually on your abdomen) so that your faeces can be collected in a bag.

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You've probably heard the term **colostomy**. It means that your large bowel (colon) is connected to an opening on your skin. An **ileostomy** is similar. It means that part of your small bowel (your ileum) is connected to an opening on your skin.

Learning to live with a colostomy or ileostomy can be daunting. But you're not alone. There are thousands of people in the UK who've had these procedures.

Having a colostomy or ileostomy shouldn't stop you doing anything you used to do. But you will have to change your routine and get used to changing the bag that collects your bowel movements.

You'll get plenty of help adjusting. While in hospital, you'll probably be seen by a nurse who deals just with caring for people who've had a colostomy or ileostomy. He or she will advise you about what to expect after your operation, show you how to look after the opening in your abdomen and teach you about all the equipment you'll need. And when you get home, a nurse will check on your progress to make sure you feel confident about what you need to do.

You may be able to decide with your surgeon where on your abdomen to have the opening. It should be in a spot that you can see and reach easily. Your doctor or nurse will offer advice on the best place for it. After that, you'll need to get used to the bag and how to empty and change it. Bags are much lighter and smaller than they used to be. They shouldn't show through your clothes. The bag will lie flat against your body, and you can choose between disposable and reusable varieties. Most are also fitted with a charcoal filter so they don't smell.

The worst thing for many people with a colostomy is the sight of the **stoma**. This is the spot where your colon opens onto your abdomen. It will look wet and glossy, rather like the inside of your mouth. It is delicate and can bleed and give off white stringy mucus.

Another thing you'll notice is that your stools are runny. This is because when your bowel movements used to pass through your colon, most of the water was removed. When your bowel movements no longer pass through your colon, your body doesn't absorb the liquid, so your stools are much more watery.

Because of this, you need to beware of leakage around the stoma. This can irritate your skin and lead to infection. You can avoid leaks by making sure your bag fits closely. Check your bag size regularly as your stoma may shrink, especially in the first few weeks after your operation.

Here are some tips on managing your colostomy from day to day.

- Always wash your hands before emptying or changing your bag.
- Clean the skin around your stoma whenever you change your bag. Use only water and a little soap, unless your doctor or nurse advises otherwise.
- Empty the pouch when it's one-third full, and before you go to bed.

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- Keep all your supplies within easy reach when you go to the toilet.
- When you remove your bag, cover the stoma with a piece of tissue to stop any leakage.
- Contact your doctor or nurse if your stoma bleeds heavily, turns black, becomes swollen or smells strongly.
- If you have problems with wind and rumbling noises, try to avoid foods that give you wind, such as broccoli, cheese, beans and beer.
- Get plenty of exercise as this can help reduce wind.
- If you're having problems with your bag smelling, try eating foods that have a natural deodorant, such as apple sauce, cranberry juice and yoghurt.
- Join your local colostomy group. You can get useful tips and advice from other people who have a colostomy. And these people can be a valuable source of moral support too.

Glossary:

inflammation

Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

immune system

Your immune system is made up of the parts of your body that fight infection. When bacteria or viruses get into your body, it's your immune system that kills them. Antibodies and white blood cells are part of your immune system. They travel in your blood and attack bacteria, viruses and other things that could damage your body.

infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

antibiotics

These medicines are used to help your immune system fight infection. There are a number of different types of antibiotics that work in different ways to get rid of bacteria, parasites, and other infectious agents. Antibiotics do not work against viruses.

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.

arthritis

Arthritis is when your joints become inflamed, making them stiff and painful. There are different kinds of arthritis. Osteoarthritis is the most common type. It happens when the cartilage at the end of your bones becomes damaged and then starts to grow abnormally. Rheumatoid arthritis happens because your immune system attacks the lining of your joints.

genes

Your genes are the parts of your cells that contain instructions for how your body works. Genes are found on chromosomes, structures that sit in the nucleus at the middle of each of your cells. You have 23 pairs of chromosomes in your normal cells, each of which has thousands of genes. You get one set of chromosomes, and all of the genes that are on them, from each of your parents.

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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.

anaemia

Anaemia is when you have too few red blood cells. Anaemia can make you get tired and breathless easily. It can also make you look pale. Anaemia can be caused by a number of different things, including problems with your diet, blood loss and some diseases.

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.

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.

parasite

Parasites are germs or creatures that can only survive by living on or in another living thing.

red blood cells

Red blood cells are the part of your blood that makes it red. Their main job is to carry oxygen from your heart and lungs to the tissues of your body. Once these cells unload oxygen, they pick up carbon dioxide. They take carbon dioxide back to your lungs so it can be breathed out of your body.

white blood cells

White blood cells are the cells in your blood that help your body fight infections. They are part of your immune system. The other cells in your blood, red blood cells, carry oxygen around your body.

kidney

Your kidneys are organs that filter your blood to make urine. You have two kidneys, on either side of your body. They are underneath your ribcage, near your back.

liver

Your liver is on the right side of your body, just below your ribcage. Your liver does several things in your body, including processing and storing nutrients from food, and breaking down chemicals, such as alcohol.

CT scan

A CT scan is a type of X-ray. It takes several detailed pictures of the inside of your body from different angles. CT stands for computed tomography. It is also called a CAT scan (computed axial tomography).

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).

laxative

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

colonoscopy

A colonoscopy is a way for your doctor see the inside of your colon and rectum. A tube called a colonoscope is put into your bowel through your anus. A camera at the end of the tube shows your colon and rectum on a screen. If your doctor finds any small polyps or cancers, he or she may be able to remove them using a wire attached to the end of the colonoscope. However, large polyps and cancers may need surgery.

steroids

Steroids are a type of chemical. Your body naturally produces steroids, which play a part in many of its processes. For example, steroids are involved in how your immune system, reproductive system and metabolism work. Steroids can also be given as medicines and are used for a number of different conditions: including asthma, rheumatoid arthritis and eczema. Corticosteroids are not the same as the steroids used by some body builders and athletes. Those steroids are called 'anabolic steroids'.

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.

high blood pressure

Crohn's disease

Your blood pressure is considered to be high when it is above the accepted normal range. The usual limit for normal blood pressure is 140/90. If either the first (systolic) number is above 140 or the lower (diastolic) number is above 90, a person is considered to have high blood pressure. Doctors sometimes call high blood pressure 'hypertension'.

cataract

A cataract is when your eye's lens, which is normally clear, gets cloudy. This makes your vision blurred or fuzzy, like trying to see through a fogged-up window.

glaucoma

Glaucoma is a condition that affects the eyes. If you have glaucoma, your vision slowly gets worse. It happens when certain nerves in your head get damaged. These nerves carry images of what you see to your brain. Glaucoma is often caused by high pressure inside your eye.

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.

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.

tuberculosis

Tuberculosis (also known as TB) is an infection caused by certain bacteria. The most common type of tuberculosis affects your lungs. This can give cause chest pain, tiredness and a severe cough.

allergic reaction

You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

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.

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.

platelets

Platelets are small disc-shaped particles found in your blood (along with red blood cells and white blood cells). Platelets form the clots that stop the bleeding when you've been cut. People who don't have enough platelets have problems with bleeding too much.

low blood pressure

If your blood pressure is about 100/60 or less, your doctor may say that you have low blood pressure. Low blood pressure is usually not a problem unless it becomes too low to push blood to your brain and the rest of the body. If you have low blood pressure, you may sometimes feel dizzy when you stand up.

bacteria

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

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.

intravenous infusion

When a medicine or a fluid, such as blood, is fed directly into a vein, it's called an intravenous infusion (or IV). To give you an intravenous infusion, a nurse, technician or a doctor places a narrow plastic tube into a vein (usually in your arm) using a needle. The needle is then removed and the fluid is infused (or dripped) through the tube into the vein.

Placebo effect

People who are ill sometimes improve even though they've been given an inactive treatment. This is called the placebo effect. We don't know exactly why it happens. It might be that expectations about treatment help you feel better, or even lead to physical changes in the body. It's also possible that seeing a doctor or other kind of therapist is reassuring, even if the treatment itself is inactive.

Crohn's disease

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.

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