

## Patient information from the BMJ Group

# Anorexia

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## Anorexia

Anorexia is a serious medical condition, not just a phase or a fad. If you have anorexia, you worry a lot about how your body looks and how much you weigh. You go to a lot of effort to avoid putting on weight, even though you weigh less than you should for your height. Doing this can damage your health and put your life in danger. It's important to get help.

Your doctor will help you find the support and treatments you need to stop anorexia taking over your life.

We've brought together the best research about anorexia and looked at 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 anorexia?

Anorexia is a condition that leads to problems with eating. Its full name is anorexia nervosa. If you have anorexia, you're very underweight and you dread being fat.

Having anorexia means you think you are fat even when you are very thin. You often go to a lot of trouble to avoid eating. You may also make yourself throw up, take [laxatives](#), or spend hours exercising.

If you have anorexia, you may not understand the way you behave. You may feel ashamed and guilty about it. Or you may tell yourself there's nothing wrong. But anorexia is harmful. You can die from starving yourself.

Getting help is very important. Admitting you have a problem is the first, yet hardest, step. If you take that step, you can find the support and treatment you need to stop anorexia taking over your life.

## Key points for people with anorexia

- Anorexia is a serious medical condition, not just a phase or a fad.
- If you have anorexia, you may not be able to admit you have a problem. And you may not want treatment.

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- You dread getting fat. And you think you are fat even when you are much too thin and weigh too little for your height.
- Having anorexia seriously damages your health. It makes you starve your body of the food it needs to work properly.
- It is possible to get better. You can put on weight and keep it on. And you can change how you think about weight and food. But it's not easy.
- Most people think of anorexia as something women and girls get. But men and boys can get it too.
- You may think that a close friend or someone in your family has anorexia. To learn more about the signs to look for, see [Worried someone close to you might have anorexia?](#)

### What's normal eating?

It's hard to say what 'normal eating' is. But usually, it means you eat when you feel hungry and stop when you feel full. These feelings are partly controlled by chemicals in your brain. Most of us eat three meals a day, with a couple of snacks in between.

Food plays a big part in most of our lives. We spend a lot of time shopping for and preparing food. When we meet friends or relatives, we often eat together. How do we decide what to eat? We make choices because of our lifestyle and attitudes towards food and health, but also because of what tastes good.



Sharing food with family and friends is part of normal, healthy eating.

Some people think about food or their body size more than others. Many people, especially women, worry about their weight and try to control how much they eat.

But whether we think about food a lot or a little, worry about it, or just enjoy it, our feelings about food don't usually stop us from living a normal life.

## What goes wrong in anorexia?

If you have anorexia, you worry about food and your weight a lot more than most people do. These kinds of thoughts and worries go round and round in your head.

- You are frightened about getting fat.
- You think you are fat, and you think other people think you are too.
- You spend most of your time thinking about how much you weigh and how you look. You become obsessed with losing weight. <sup>[1]</sup> <sup>[2]</sup>
- Fear of putting on weight is part of having anorexia. You may have other fears too. You may fear losing control. You probably worry about other people finding out that you have anorexia. You may be afraid of being told that you have a mental health problem.

Here's a list of some things you may do if you have anorexia. You may:

- Miss meals or avoid eating, even when you feel hungry
- Hide food or keep a lot of it around (hoard it)
- Cut your food up into tiny pieces and push it around your plate to look as though you've eaten some
- Avoid eating with others
- Deny that you have a problem with food
- Carefully weigh your food and only eat small quantities
- Get rid of the calories you've eaten by making yourself throw up or by taking laxatives
- Do other things to lose weight, such as exercising more than is healthy <sup>[3]</sup>
- Check your weight all the time and examine your body in the mirror (especially your tummy, thighs, and bottom)
- Worry about your weight so much that you don't have time for studying, working, or socialising. The rest of your life can start to fall apart. <sup>[4]</sup>

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A person with anorexia is terrified of being fat, even when their weight is normal.

But anorexia is not just about how you feel about food. It's also about how you feel about yourself.

If you have anorexia, you can't see that you are very underweight. You may feel deeply unhappy.

Starving yourself can seem like a way to control difficult emotions and stress. You may think that losing weight is the key to a better, happier, and more successful life.

Anorexia is a real and serious illness. It's not a diet that's gone wrong or a fad. It's one of the group of illnesses called **eating disorders**, along with bulimia and binge-eating.

[1] To learn more, see [Other eating disorders](#) .

If you think you have problems with food, there are some [questions you can ask yourself](#) . These are the questions doctors use to help them decide if you have an eating disorder.

## **Anorexia: why me?**

There's no simple reason why someone gets anorexia, and we don't know what causes eating disorders. It's probably a combination of the genes you're born with and the things that happen in your life that lead to anorexia. Here's a list of some of the things that have been linked to anorexia.

- Emotional problems
- Dieting

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- Cultural pressure to be thin, based on images in the media
- An imbalance of chemicals in the brain
- Genes and family history.

For more information, see [Possible causes of anorexia](#) .

Some people are more likely to get anorexia than others. Things that can increase your chances of getting an illness are called **risk factors**. The risk factors for anorexia include:

- Having low self-esteem (thinking you are worthless and not giving yourself any credit when things go well)
- Wanting to be perfect as a child and always doing exactly what you're told
- Having mental health problems such as depression, anxiety, or an obsessive way of thinking
- Being competitive.

For more information about this, see [Who's at risk of getting anorexia?](#)

### What are the symptoms of anorexia?

If you have anorexia, you probably know what the symptoms are. They have been a major part of your life for months or even years. And yet you may deny that you have a problem or you may think you can control it.

Here's a list of the physical signs and feelings you may have with anorexia. <sup>[1]</sup>

- You are very underweight for someone of your age and height. Your doctor might say that your body mass index (BMI) is too low. But you don't see why you need to put on weight.
- You eat very little, if at all, or only eat food that is low in calories.
- You fear putting on weight and becoming fat even though you are very thin.
- You feel fat even though people tell you how thin you are.
- You won't admit that you have a serious illness.
- If you're female, your monthly periods stop. This is because anorexia affects your hormones .

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## Things you may do if you have anorexia

Some people stop themselves from putting on weight by: <sup>[1]</sup>

- Exercising all the time
- Taking diet pills
- Starving themselves.

You may have tried one or all of these.



Even a healthy activity like exercising can be harmful if you overdo it.

You may **binge** on large amounts of food, usually in secret. You might then make yourself vomit, use laxatives, or take pills that make you lose water stored in your body to avoid putting on weight. Doctors call this **purging**. To learn more, see [What is bingeing?](#) and [What is purging?](#)

Bingeing and purging are also seen in people with other eating disorders, such as bulimia. But there are differences between people with anorexia and those with bulimia. The main one is that people with anorexia are very underweight. People with bulimia tend to be a normal weight. To learn more see [Other eating disorders](#) .

## How your body may change if you get too thin

If you've had anorexia for a long time, you may also get other symptoms. As the lack of food starts to affect your body, you may: <sup>[1] [4] [16] [17] [18] [19] [20]</sup>

- Stop having periods, if you're female
- Feel tired and weak, and your muscles ache
- Get dizzy spells, feel short of breath, and feel your heart beating hard (get palpitations )

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- Have fine, downy hair on your body and face
- Get cold easily and often have cold hands and feet
- Start to lose your hair
- Get **constipated**
- Feel full and sometimes get stomach pains after eating only a little food
- Get **dehydrated** , which makes you feel thirsty, sick, and exhausted
- Get dry, yellowish skin.

If you have severe anorexia, you may also:

- Show signs of starvation, including swollen limbs (called **oedema** ) or a slow heartbeat, which can mean your heart isn't pumping blood around your body very well. This can make you feel tired or dizzy
- Sometimes shiver and not be able to stop, or have other signs of a low body temperature.

To find out more about the harmful effects of anorexia, see [What anorexia can do to your body](#) .

### How your mood and emotions may change

Anorexia can cause all the physical symptoms listed above. But starving your body of food can also affect your mood and emotions. Here are some of the things that can happen.

- You may have **problems concentrating** and it can be hard to think straight. You may find it hard to remember things.
- You may feel **depressed and anxious**. Everyone feels like this once in a while, but not eating enough food makes these feelings worse.
- You will probably **lose interest in sex** or in having a relationship.
- You may feel suicidal or want to **hurt yourself**.
- You may **become obsessive** about certain things, like keeping clean and tidy.
- You may **have trouble talking** to other people about how you are feeling.

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## The damage vomiting can do

If you make yourself throw up after you've eaten, you may have other problems. Here are some of them.

- **Your teeth may become discoloured.** This is caused by the acid in vomit taking the enamel off your teeth. Acid also causes tooth decay. Any damage to your teeth is permanent.
- **You may get heartburn.** Vomiting all the time weakens a valve at the bottom of the tube that takes food from your mouth to your stomach (doctors call this tube your oesophagus). If the valve is weak, it allows stomach acid to splash up into the tube, causing heartburn.
- **You may get rough patches of skin on your knuckles.** You can get these if you use your fingers to make yourself sick.

For more information, see [Problems caused by purging](#) .

If you think a friend or family member may have anorexia, see [Worried someone close to you might have anorexia?](#)

## How do doctors diagnose anorexia?

There is no simple test for anorexia.

To diagnose this illness, your doctor will ask you questions about your life, eating habits, and problems. Your doctor will also need to check to see how strong and healthy your body is. <sup>[32]</sup>

Your doctor may want to ask you about your family, or about other important relationships. The doctor might also talk with people close to you.

If you think that someone you know might have anorexia, and want to know more about the signs to look for, see [Worried someone close to you might have anorexia?](#)

## What your doctor needs to find out

- Your doctor may check your height and weight, and then compare those measurements to average measurements for healthy people who are about your age. <sup>[32]</sup>
- If you are a woman, your doctor will ask you if you have stopped having periods.
- If you have anorexia, you may be **dehydrated** , so your doctor will check for this.
- Your doctor will also look for other physical signs of anorexia, such as fine hair on your face or dry, yellow skin. To read more, see [What are the symptoms of anorexia?](#)



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- Your doctor may want to do some blood tests to make sure that you're not **anaemic** . Your doctor may also use tests to be sure that you don't have any other illnesses, such as **diabetes** . Those tests will also let the doctor make sure you have the right balance of chemicals in your body. Starving yourself, vomiting, and taking **laxatives** , **diuretics** (pills that make you lose water from your body), or diet pills can upset this delicate balance. <sup>[32]</sup>
- If you've had anorexia for a long time, or if you are severely underweight and purge a lot, your doctor may want to know how solid and strong your bones are. This is done by measuring your **bone density** . Anorexia can stop your body from producing the **hormone** oestrogen, which helps new bone to grow. Without oestrogen, bones can get weak and break more easily. This is called **osteoporosis** .

### Questions your doctor may ask

Your doctor may ask you the following five questions to see if you have an eating disorder. <sup>[33]</sup>

- Do you make yourself sick because you're uncomfortably full?
- Do you worry that you've lost control over how much you eat?
- Have you recently lost more than 6 kilograms (about a stone) in three months?
- Do you believe you're fat when others say you're thin?
- Would you say that food dominates your life?

### Different kinds of anorexia

There are two kinds of anorexia: **restricting** and **binge-eating/purging**. It's possible to have both kinds at different stages of your illness. Your doctor will ask questions to find out which kind you have. Here's a little more information about each type.

- **Restricting type:** you limit (restrict) the amount of food you eat, and you don't regularly binge or purge.
- **Binge-eating/purging type:** you regularly binge and then purge by, for example, making yourself throw up or by using laxatives or diuretics (water pills). Some people who have anorexia purge without binge-eating first.

To read more, see [What is bingeing?](#) and [What is purging?](#)

The binge-eating/purging type of anorexia is similar in some ways to bulimia. For more information, see [Other eating disorders](#) .

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## How common is anorexia?

Anorexia usually starts in the mid-teens and is more common in girls than in boys. While eating disorders in general are fairly common, anorexia is quite rare.

This is what we know.

- About 48 in 100,000 girls aged 15 to 19 are diagnosed with anorexia each year. <sup>[26]</sup>
- About 4 in 100,000 boys aged 15 to 19 are diagnosed with anorexia each year. <sup>[26]</sup>
- About 8 in 100,000 people (male and female) aged 10 to 49 are diagnosed with anorexia each year. <sup>[26]</sup>
- Anorexia is more common in teenage girls and young women (in their early 20s) than in older women. Children can get anorexia too. <sup>[27]</sup>
- Fewer men than women get anorexia. But nowadays, more men are talking to their doctor about having anorexia.

## What treatments work for anorexia?

If you have anorexia, you worry a lot about the way your body looks and about how much you weigh. You have an intense fear of being fat, and you starve yourself to lose weight. Having anorexia can seriously damage your health, and it may kill you.

## Key points about treating anorexia

- To recover from anorexia, you'll need to do three important things: start to eat more food, put on weight, and change how you think about yourself and food.
- There's very little good research about treatments for anorexia, so we can't say for certain what will work.
- Doctors agree that the best treatment is to eat more to gain weight. But there's very little research about the best way to encourage someone with anorexia to eat normally again.
- There are no drugs that can 'cure' anorexia.
- Psychotherapy (talking treatment) may work, especially if you feel depressed. It tries to help you become well by making you feel better about yourself. But there hasn't been enough research to prove it works.
- Involving the whole family, maybe with family therapy, may help to stop anorexia becoming a long-term problem.

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- You're more likely to get better if you get treatment early.

To learn more about the kind of treatment you might get for anorexia, see [What you can expect from the NHS](#) .

### What you can expect from the NHS

If you've got anorexia, you won't probably need to go to hospital. But you'll be cared for mainly by doctors and specialists based in hospital, as well as your GP.

We can't say exactly how you'll be treated. But we can give you some idea about the way anorexia is treated in general. <sup>[35]</sup>

- You may see lots of different people who have special training in treating eating disorders. For example, you might see a specialist nurse, a [psychologist](#) , a [psychiatrist](#) , and a counsellor. If you're under 16, you might see a paediatrician (a doctor who specialises in treating children).
- You'll probably get some form of [psychotherapy](#) . This might be cognitive behaviour therapy (CBT), cognitive analytic therapy (CAT), interpersonal therapy, focal psychodynamic therapy, or family therapy.
- If you're under 18, you'll probably have some psychotherapy sessions with your family and some on your own. If you have brothers or sisters, they may be included in family therapy sessions.
- As well as psychotherapy, you should have regular checks on your weight and health.
- You might also be given some vitamins to take.
- Your psychotherapy will probably last at least 12 months.
- Drug treatments aren't used very much in anorexia, and they shouldn't usually be used on their own. Instead, they should be used alongside psychological therapies.
- You may see a dietitian as part of your treatment. But this shouldn't be the only treatment you get.
- If you're under 18, you shouldn't be treated with [oestrogen](#) , as it can stop your bones growing properly.
- If you're not getting better, you may be offered treatment in hospital. You might spend one day in hospital, or stay a few days or weeks to help you over a crisis. Or you may stay in hospital for a few weeks or months to help you get back to a healthy weight.

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- You'll only be fed against your will if your life is in severe danger and doctors can't be sure that you are going to eat. You have to be sectioned under the Mental Health Act (if you're an adult) or the Children Act (if you're under 18) to be fed against your will.
- If you're treated in hospital, doctors won't stop you having visits or making phone calls if you don't put on weight.
- You should get some form of psychological therapy in hospital. This should carry on when you go home. It should help you continue getting better and stop you needing to go to hospital again.

Which treatments work best? We've carefully weighed up the research and put the treatments into categories depending on how well they work.

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

## Treatment Group 1

### Treatments for anorexia

#### Treatments that are likely to work

- [Managing weight gain](#) : You will be given advice about how much you should be eating to get back to a normal weight. You may be given vitamin and mineral supplements to take. You will probably have psychotherapy at the same time. There hasn't been much research about the best way to manage weight gain. But doctors agree that getting advice and support from professionals can help. [More...](#)

#### Treatments that need further study

- [Psychotherapy](#) : You talk to a therapist regularly about your thoughts, feelings, and problems with food. [More...](#)
- [Antidepressants](#) : Selective serotonin reuptake inhibitors (SSRIs) are a group of antidepressants that are sometimes used to treat anorexia. They include the drugs fluoxetine (brand name Prozac) and citalopram (Cipramil). [More...](#)
- [Going into hospital](#) : Sometimes people go into hospital for treatment, even if they don't need emergency care. [More...](#)
- [Oestrogen supplements](#) : Anorexia can make your bones weak. For women with anorexia, taking oestrogen aims to stop this happening. [More...](#)

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- [Zinc supplements](#) : People who have anorexia often have a low level of zinc in their body. Some doctors think that taking zinc supplements could help people with anorexia put on weight. [More...](#)

### Treatments that are likely to be ineffective or harmful

- [Antipsychotic drugs](#) : These are usually used to treat serious mental health problems. They help with anxiety and irrational thoughts. But they have side effects. [More...](#)

### What will happen to me?

If you or someone close to you has anorexia, you are probably wondering what may happen and if it's possible to recover.

The good news is that many people get over anorexia. But it's hard work, and it can take many months or even years.

You're much more likely to recover if you **get professional help**. To read more, see [What treatments work for anorexia?](#)

It's very hard to say exactly what will happen to you as an individual. Anorexia is a personal thing. Here are some of the ways it's different for different people. <sup>[28]</sup>

- Your anorexia may only last a few months, and then you can completely recover.
- Your anorexia may come and go. You may gain weight for a while, only to lose it again later.
- You may develop anorexia gradually, and it may stay with you for many years.
- You may get worse quickly, with the illness becoming very serious. You can die from anorexia.

Here's what we know about anorexia from research studies.

- About **half of all people with anorexia recover**. <sup>[5]</sup> <sup>[29]</sup> This means they're able to stay at a healthy weight for their age and height, and, if they're female, their periods start again.
- But **it's hard to recover from the other symptoms** of anorexia. About two-thirds of people who've had anorexia never stop worrying about food and their weight. About 40 in 100 people who have had anorexia still binge on food and make themselves throw up from time to time. <sup>[5]</sup>

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- With time and treatment, you can understand and control the thoughts and feelings that go along with anorexia. This might mean you feel less guilty or feel happier with your body.
- About 20 in 100 people who have anorexia don't get better. They stay underweight and their other symptoms don't get better either. <sup>[5]</sup> <sup>[29]</sup>
- Recovery takes time. About three-quarters of people with eating disorders say they've been ill for between one and 15 years. <sup>[30]</sup>
- People with anorexia are more likely to be depressed than people who don't have anorexia. <sup>[31]</sup>
- Some people die from anorexia. Each year, about 1 in 100 people who have this illness die from it. <sup>[5]</sup>

You have more chance of getting better if: <sup>[5]</sup>

- You are not severely underweight
- You are young and have only had anorexia for a short while
- You get treated soon after the anorexia starts
- Treatment for anorexia has worked for you before
- You have a good relationship with your family
- You don't make yourself throw up.

Starving your body of food can be very harmful, especially if you've been doing it for a long time. See [What anorexia can do to your body](#) for more about this.

Making yourself sick or taking laxatives to try to control your weight can be very harmful too. For more information, see [Problems caused by purging](#) .

### Questions to ask your doctor

When you talk to your doctor about anorexia, you can find out things that will help you feel better and get better. Here are some things you might want to ask.

- Do I have anorexia?
- What causes anorexia?

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- How bad is my anorexia?
- Has it damaged my health? If it has, will the bad effects disappear if I change the way I eat and put on weight?
- My periods have stopped. Does that mean I won't be able to have children?
- Why do I need treatment?
- What is the best treatment?
- Does treatment cause any side effects?
- Will I ever eat normally again?
- Can you help me, or will I have to see a specialist?
- Will I have to take time off school/work?
- Will I be able to diet again when I'm better?
- Will I get fat if I go for treatment?
- Why do I feel so bad about myself? Am I depressed?
- Can I be fed against my will?

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## Treatments:

### Managing weight gain

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[How good is the research on managing weight gain?](#)

This information is for people who have anorexia. It tells you about managing weight gain, a treatment used for anorexia. It is based on the best and most up-to-date research.

### Does it work?

Probably. Doctors agree that getting advice and support from professionals can help you put on weight. But there hasn't been much research about the best way to do this.

Research does show that people with anorexia and the staff treating them prefer a more relaxed approach to gaining weight, rather than a strict approach.

## What is it?

Getting advice about eating to gain weight is an important part of treating anorexia.<sup>[36]</sup> You will probably be seen by someone who has training in treating people with eating disorders. This might be a nurse with specialist training, your GP, a [psychiatrist](#), a dietitian, or a [psychologist](#). What treatment you get depends on the clinic or hospital where you're treated. All doctors and other staff may have their own programmes for treating people with anorexia. But your treatment might include some of the following.<sup>[36]</sup>

- You will probably be asked about what you have been eating and whether you have been making yourself sick (vomiting) and using laxatives. This helps dietitians work out if you are likely to have low levels of vitamins, minerals, and other essential nutrients.
- You will probably be weighed and your body mass index (BMI) will be calculated.
- The aim is for you gain 0.5 to 1.0 kg (1 to 2 pounds) a week.
- To gain this amount of weight, you'll need to eat between 2,200 and 2,500 calories every day. That's not a lot of food. It's about what a healthy adult eats every day, on average. But you may start eating much less than this, and slowly work up to this amount as you get used to eating again.
- You'll be probably given advice about what you should be eating to gain the weight you need to. You might be given a meal plan with options for what you can have at each mealtime, plus what snacks you should have.
- You will be given vitamin and mineral supplements if you need them. For example, taking calcium supplements may help keep your bones strong.<sup>[37]</sup>
- You will probably be monitored closely at first to check your body is handling the extra calories and that you are putting on weight.

It can be hard for someone who has been starving themselves to just start eating again. That's why most people with anorexia will also have talking therapy at the same time. To learn more see [Psychotherapy](#).

In the UK, the National Institute for Health and Care Excellence (NICE), the government body that advises about what treatments should be available in the NHS, says that advice on diet should not be used on its own to treat people with anorexia.<sup>[38]</sup> They should also have psychological therapy to talk about their eating behaviour and their attitude to weight and shape. To learn more about the kind of treatment you might get for anorexia, see [What you can expect from the NHS](#).



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If you're dangerously underweight, your doctor might suggest that you take some food through a tube. The tube is usually passed through the nose and into the stomach. Being fed through a tube isn't a usual treatment. Most people don't like it, but some people say it lets them take in some food without worrying about eating.

Your doctor will get your permission before giving you food through a tube. Doctors aren't usually allowed to feed people against their will. They can only do it if someone's life is in danger.

If you are very underweight you might be treated in hospital or a specialist clinic where you stay until you reach a safe weight. But if your health is not seriously affected by your anorexia you might be treated as a day patient, which means you go home every night. Or you might be able to stay at home and just go to hospital to be assessed and to talk about your treatment.

### How can it help?

The research on how best to manage the weight of people with anorexia is not very good. Here's what we know.

An easy-going approach to managing weight works just as well as a strict approach. Also patients and staff say they are happier with a more relaxed approach. <sup>[39]</sup> <sup>[40]</sup> In these studies an easy-going approach meant that patients were not denied the things they liked (such as going out with family and friends or going shopping) while being cared for in hospital. When a strict approach was used patients were given these kind of privileges only when they put on the weight they were supposed to.

One study found that people who ate more during the day and who were also fed through a tube in their nose at night put on weight more quickly than those who just ate more during the day. <sup>[41]</sup>

### How does it work?

Getting people with anorexia to eat more is key to helping them get better. Putting on weight reduces the symptoms of anorexia, improves your health, and helps you think clearly. <sup>[41]</sup>

### Can it be harmful?

If you're dangerously underweight and you start to take in lots of food, it can make you ill. The risk is especially big if you're fed through a tube. Your body becomes very short of important minerals. This can be serious and even damage your heart. But it's easy to treat with injections of the minerals you need.

One study found that about 6 in 100 teenagers who were treated in hospital got this problem. To prevent it, your doctor will probably recommend that you increase the amount of food you eat slowly, over time. <sup>[42]</sup>

## How good is the research on managing weight gain?

There isn't a lot of evidence about the best way to manage the weight of someone with anorexia. But doctors agree that it is vital to get people with anorexia to eat more.

We found two studies that looked at ways of managing weight. <sup>[43] [44] [45]</sup> The first found that more relaxed attitude to managing weight was more acceptable to people with anorexia and the staff looking after them. Patients did just as well in terms of gaining weight whether they were managed using a relaxed approach or a strict plan. <sup>[43] [44]</sup>

The second study looked at 100 girls with an average age of 15 and a half. It found that combining increased food intake with night-time tube feeding led to quicker weight gain than increased food intake on its own. <sup>[45]</sup>

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## Psychotherapy

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

This information is for people who have anorexia. It tells you about psychotherapy, a treatment used for anorexia. It is based on the best and most up-to-date research.

### Does it work?

Many different kinds of psychotherapy are used to treat anorexia, and they often seem to help. Family therapy may help when a child or teenager has anorexia. But much more research is needed to say for certain whether psychotherapy really works.

### What is it?

Psychotherapy helps you change the way you think and the things you do. It can also help you learn ways to cope. Some therapies, like cognitive behaviour therapy, do all three. Other therapies focus on one specific area. Interpersonal psychotherapy is one example. You learn how to get on better with people.

You can learn to understand your thoughts and feelings by talking about them with a trained therapist. Your therapist could be a psychologist, a psychiatrist, a psychiatric nurse, a psychotherapist, or even your usual doctor. You'll usually see your therapist once or twice a week. You'll probably need to have psychotherapy for at least a year, if not longer. <sup>[28]</sup>

There are several kinds of psychotherapy. The ones listed below have been tested in at least one study with people who have anorexia.

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- [Cognitive therapy](#) helps you replace your negative thoughts with positive ones. It helps you change some of the things you do, and understand your feelings and get more control over them. One kind of cognitive therapy is [cognitive behaviour therapy](#). Another kind is cognitive analytical therapy, which aims to help you think more logically and to get on better with other people.
- [Interpersonal psychotherapy](#) helps you to look at how you get on with other people.
- [Family therapy](#) helps children and teenagers with anorexia by enlisting the support of their family. Together, the family members focus on the eating disorder and how it affects their relationships. The parents take an active role in helping their child's efforts to eat.
- [Body awareness therapy](#) helps you see your body the way it really is.
- [Nutritional counselling and stress management](#) are often given together. You focus on food and how the body uses it, so you can learn the facts and stop believing old myths. You also learn good ways to handle your feelings when you're under stress.

If your body is starving and your weight is very low, your feelings and your thoughts can be affected. Your moods may be dark and change a lot, and it might be hard to think straight. Because of this, it's usually best to wait until you've reached a healthy weight and stayed there for a while before you start psychotherapy.

You can usually get psychotherapy on the NHS. Otherwise, it can cost you a lot of money.

To find out more, see [What you can expect from the NHS](#).

### How can it help?

Some people who try psychotherapy do get better and can eat normally again.<sup>[55]</sup> <sup>[56]</sup> But there hasn't been enough research to say for certain if the therapy helped these people, or if they would have got better anyway.

Several talking treatments, including cognitive behaviour therapy and family treatment, have had positive results in studies. But we don't know which of these treatments works best.

One good-quality study found that teenagers who had family therapy were twice as likely to be at a healthy weight a year after their treatment had ended, compared with those who had individual treatment.<sup>[57]</sup> But it's unclear whether family therapy might work better for some young people than others.

If you're depressed, psychotherapy may help treat the symptoms of your depression.

## How does it work?

If you have anorexia, you may feel hopeless, fat, or unattractive. You may believe things that aren't really true (for example, that being thin will make you happy). You starve yourself because you are desperate to be thin. This leads to a cycle of skipping meals, getting really hungry and feeling even more unhappy. You probably feel quite negative about yourself.

Psychotherapy can help you learn to fight back against 'bad' thoughts and to have more positive thoughts instead. When you do, you may be able to break the eating habits that are part of anorexia. You may be able to stop starving your body. And, when worries about food and weight take up less of your time, you can lead a more balanced, healthy life. <sup>[48]</sup> <sup>[58]</sup> Psychotherapy sets out to help you:

- Understand that the way you eat and your feelings about food aren't healthy
- Understand why you need to eat more
- Have good relationships with other people and feel better about yourself
- Get over any other emotional problems that are making your anorexia worse.

## Can it be harmful?

We found no reports of harmful side effects from psychotherapy.

But some people with anorexia may not like this kind of treatment. You may not like talking about your life, and it may change how you think about yourself and your relationships. You might not like all of these changes.

If you and your therapist don't get along, or if he or she isn't good at dealing with anorexia, it can be upsetting. It's good to remember that you can always change to a different therapist.

## How good is the research on psychotherapy?

There isn't much clear or strong research to show that psychotherapy is a good treatment for anorexia.

Most of the types of psychotherapy we talk about here have been tested with just a few dozen people or less. We can't combine the results of different studies because they're all different treatments. And there isn't much information on what happens to people in the months or years after treatment. <sup>[59]</sup>

We found one summary of the research (a **systematic review**), which looked at several small studies (called **randomised controlled trials**). <sup>[59]</sup> We also found seven other studies. <sup>[60]</sup> <sup>[61]</sup> <sup>[62]</sup> <sup>[63]</sup> <sup>[64]</sup> <sup>[57]</sup>

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Most of the studies compared one type of therapy with another. Two studies in the review found that psychotherapy can help people with anorexia. <sup>[65]</sup> <sup>[66]</sup> Women who had [family therapy](#) , [cognitive therapy](#) , or another type of psychotherapy were more likely to put on weight and get better than those who had informal counselling about anorexia and nutrition. But these studies were small (one included 84 people, the other 23) and not big enough to prove for certain that psychotherapy helps anorexia.

A more recent study included 121 young people with anorexia, aged 12 to 18, who were randomly assigned to have either family therapy or individual treatment for one year. The researchers found that those who had family therapy were twice as likely to be at a healthy weight a year after treatment had ended. <sup>[57]</sup> However, the researchers don't know whether the advantages of family therapy last longer than 12 months post treatment, and whether this type of therapy might work better for some young people than others.

One study found that women who'd regained weight were more likely to keep this weight on if they had cognitive therapy than if they just had counselling on nutrition. <sup>[67]</sup> But this study was very small (only 33 people).

None of the other studies found that psychotherapy was helpful.

It's difficult to do research on treatments for anorexia because people who have it usually don't want to take part in studies. And people who do take part often drop out. When that happens, the results of the study aren't very useful.

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## Antidepressants

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[How do they work?](#)

[Can they be harmful?](#)

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

This information is for people who have anorexia. It tells you about antidepressants, a treatment used for anorexia. It is based on the best and most up-to-date research.

### Do they work?

We don't know whether antidepressants can help people who have anorexia. More studies are needed to find out. We do know that these drugs can cause side effects, especially in young people.

### What are they?

Antidepressants are usually used to treat people who are depressed or anxious. If you have anorexia, your doctor will probably try other treatments first. If these don't help, he or she may consider treating you with antidepressants.

## Anorexia

There are several different kinds of antidepressants. The antidepressants that have been looked at for people with anorexia are **selective serotonin reuptake inhibitors** (SSRIs) and **tricyclic antidepressants** (TCAs). However, TCAs may cause heart problems in people with anorexia, so they aren't usually used.

You take antidepressants as tablets. It takes several weeks for an antidepressant to start working.

### SSRIs

People with depression often have low levels of a chemical called **serotonin** in their body. Serotonin helps signals travel between nerves in your brain and affects your mood. SSRIs help increase the amount of serotonin in your brain.

People with anorexia are usually given smaller doses than people being treated for depression. Because their weight is so low, they are likely to have side effects if they take larger amounts of this medicine.

Some commonly used SSRIs (with their brand names) include:

- citalopram (Cipramil)
- fluoxetine (Prozac)
- paroxetine (Seroxat)
- sertraline (Lustral).

The only studies we found of SSRIs in people with anorexia looked at the drugs fluoxetine and citalopram. <sup>[68]</sup> <sup>[69]</sup> <sup>[70]</sup>

Your doctor will help you choose the antidepressant that suits you best. Even if you have side effects, **don't stop taking your medicine suddenly** unless your doctor tells you to. If you stop taking one of these drugs suddenly, you may get **withdrawal symptoms**, including nausea and dizziness.

### TCAs

Tricyclic antidepressants are an older type of antidepressant. If you have anorexia, taking a tricyclic antidepressant is unlikely to help you put on weight or feel less depressed and anxious. TCAs can also cause heart problems in people with anorexia, so they aren't usually used.

Here are the most common TCAs:

- amitriptyline
- imipramine.

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To learn more about the use of drugs to treat anorexia, see [What you can expect from the NHS](#) .

## How can they help?

We don't know. There isn't enough good research to say whether taking SSRIs helps people with anorexia put on weight and feel better about themselves.

Tricyclic antidepressants don't seem to help people with anorexia gain weight and they can cause heart problems. They don't seem to make people with anorexia feel less depressed or worry less about how their body looks and how much they weigh. <sup>[71]</sup> <sup>[72]</sup>

## How do they work?

Antidepressants change the balance of chemicals in your brain. These chemicals affect your mood, emotions, and appetite. Anorexia is one of several mental health problems where the amount of these chemicals seems to be out of balance. We don't know if the chemical imbalance causes the anorexia or whether the symptoms of anorexia cause the changes in the brain.

Antidepressants help to bring these chemicals back to normal levels, so doctors think they might help people with anorexia. In particular, SSRI antidepressants (like fluoxetine and citalopram) increase the level of serotonin in the brain. To find out more, see [Your brain's chemical messengers](#) .

If you have anorexia, you may cry easily, not sleep well, and be worried about your weight. Your doctor may prescribe antidepressants to help with these symptoms and lift your mood. Feeling calmer and happier may make it easier to eat.

SSRIs are used to treat people who can't stop thinking about upsetting things. They're also used to help people who worry and feel fearful all the time. People who have anorexia have obsessive thoughts and are also often worried and fearful, so researchers hope that SSRIs can help treat anorexia.

## Can they be harmful?

All antidepressants have side effects. If you are very underweight you may be more at more risk of side effects.

The following information comes from studies where antidepressants have been used to treat other conditions (such as depression and anxiety). If you have anorexia, you may not get the same side effects as these. Some side effects wear off after you've taken the drug for a few days or weeks.

## Side effects of SSRIs

The studies of SSRIs as a treatment for people with anorexia don't tell us about these drugs' side effects. The things we know about the side effects of these drugs come from studies where antidepressants have been used to treat other conditions (such as depression and anxiety).

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- People taking fluoxetine sometimes feel sick and vomit, feel tired, feel dizzy, and get headaches. <sup>[73]</sup>
- About 4 in 10 people who took paroxetine said it made them feel sick. And more than two-thirds of the people taking paroxetine said they lost interest in sex. <sup>[74]</sup> <sup>[75]</sup>

### Side effects of TCAs

Tricyclic antidepressants can upset the electrical signals that help control your heartbeat. <sup>[76]</sup> This is especially risky for people who have anorexia, because starving yourself can also affect the heart's electrical activity. This is a serious problem. You could collapse, and in rare cases, your heart can stop beating. Without treatment straight away, this can kill you.

### Self-harm and suicide

Research has found that children, teenagers, and young adults taking antidepressants of all kinds are more likely to think about suicide or try to harm themselves. <sup>[77]</sup>

The risk of suicidal thoughts is highest if you're under 18. <sup>[77]</sup> Among people under 18 taking an antidepressant, an extra 14 in 1,000 thought about suicide.

The researchers also found that there's a risk for young adults up to the age of 24. <sup>[77]</sup> But their risk wasn't as big as the risk for people under 18. An extra 5 in 1,000 people between the ages of 18 and 24 thought about suicide.

The research doesn't seem to show an increased risk of suicidal thoughts or self-harm for people over the age of 24. <sup>[77]</sup> But doctors and caregivers are advised to keep a careful check on anyone taking antidepressants for signs of suicidal thoughts. You are more likely to get these thoughts in the early stages of your treatment, or if the dose of the antidepressant you're taking is changed. You may also be at risk if you have had thoughts about harming or killing yourself before. <sup>[78]</sup>

If you're taking an antidepressant and are worried about any thoughts or feelings you have, **see your doctor or go to a hospital straight away**. You might also find it helpful to tell a relative or close friend about your condition. You could ask them to tell you if they think your depression is getting worse or if they are worried about changes in your behaviour. <sup>[78]</sup>

### Antidepressants and pregnancy

Antidepressants should be used with special care in women who are pregnant. Doctors are advised to prescribe them only if the benefits of taking an antidepressant are likely to outweigh the risks. This is because of concerns that drugs taken during pregnancy might harm the baby leading to birth defects.



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A recent study found that women who took paroxetine (Seroxat) during the first three months of pregnancy were twice as likely to have a baby with birth defects as those who took other antidepressants.<sup>[79]</sup> The problems were mainly heart defects.

Speak to your doctor if you're pregnant, or planning to get pregnant and are taking an antidepressant.

### How good is the research on antidepressants?

There hasn't been much research on antidepressants as a treatment for anorexia. In fact, it's not possible to say for sure if antidepressants are worth taking for anorexia.

#### Selective serotonin reuptake inhibitors (SSRIs)

We found two studies ( randomised controlled trials ) of fluoxetine and one study of citalopram.<sup>[80] [81] [82]</sup> The studies were all very small, including just 30 to 50 people. None of the studies found that taking fluoxetine or citalopram helped. Also, a lot of women dropped out of the studies, making the results unreliable.

Another study looked at 93 women with anorexia who'd gained weight after being treated in hospital.<sup>[83]</sup> All the women then had [cognitive behavioural therapy](#) and some took fluoxetine. Women taking the antidepressant weren't any more likely to maintain their weight gain.

#### Tricyclic antidepressants (TCAs)

We found two good-quality studies (randomised controlled trials) that looked at how well tricyclic antidepressants work for people with anorexia.<sup>[84] [85]</sup> Both studies were quite small and looked at the tricyclic antidepressant called amitriptyline. One study included 43 people with anorexia. The other included 72 people. People taking amitriptyline were no more likely to put on weight, feel any better about themselves, or change their eating habits than people who took a dummy treatment (a placebo).<sup>[84] [85]</sup>

The larger study also looked at how many days it took for people to reach a healthy weight.<sup>[84] [85]</sup> People taking amitriptyline put on weight slightly faster than people taking a placebo. So it's possible that the antidepressant might help people with anorexia gain weight faster. But the study didn't include enough people or last long enough for us to be sure about this.

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## Going into hospital

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[How good is the research on going into hospital?](#)

# Anorexia

This information is for people who have anorexia. It looks at whether inpatient treatment in hospital is useful for people with anorexia. It is based on the best and most up-to-date research.

## Does it work?

We don't know for certain. Of course, going into hospital is crucial for people with anorexia who are so dangerously underweight that they could die. But if you're not badly ill, it's not clear whether going into hospital is any better than staying at home and visiting an outpatient clinic.

## What is it?

If you have anorexia you may be admitted to hospital to help you get better. By 'getting better', we mean gaining weight and thinking in a more healthy way about your body and food. If you have anorexia but you're not dangerously weak, then you may do just as well by staying at home and visiting an outpatient clinic for treatment. <sup>[86]</sup> <sup>[87]</sup>

This is how treatment in a hospital usually works: <sup>[86]</sup>

- You have to eat a certain amount of food each day. Usually you start off with small meals and snacks
- There are rules about how long you can take to eat a meal
- Your choice of food is limited
- The nurses may watch how you eat your food and talk to you about this (especially if you cut your food into tiny pieces or chew it for a very long time)
- You may not be allowed to weigh yourself straight after you eat
- To stop you making yourself vomit, you probably won't be allowed to go to the toilet straight after a meal
- You may also see a therapist often to talk about your thoughts and feelings
- You might not be allowed to exercise some of the time. This is to make sure you don't overdo it.

To find out more about how anorexia is treated, see [What you can expect from the NHS](#)

## How can it help?

There's no good evidence that people with anorexia are more likely to gain weight and recover if they are treated in hospital. Research shows that people do just as well if they

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live at home and visit a clinic. However, not many studies have looked at this. <sup>[88]</sup> <sup>[89]</sup>  
<sup>[90]</sup> <sup>[91]</sup>

Of course, if you are very frail or in immediate danger, you need to go to hospital.

## How does it work?

A lot of people who have anorexia don't want treatment. If you're one of them, you'll have worked out ways to avoid eating. You may hide your food. Or you might drag out mealtimes until you're allowed to give up.

If you're in hospital, you're more likely to stick to treatment because there are skilled people supporting you and controlling the situation for you. And it's harder to avoid eating. Also, in hospital you get attention and support when you feel upset or confused.

## Can it be harmful?

Being in hospital can have downsides. Here are some of them. <sup>[86]</sup>

- You may lose touch with your friends.
- Some people try to eat too much too fast, thinking they can get out of hospital sooner if they do. This can cause bloating and stomach pain.
- Other people in your family may have to change things in their lives while you're in hospital.
- People with anorexia sometimes compete with each other in hospital to avoid eating and stop themselves putting on weight.

## How good is the research on going into hospital?

There is no good evidence to show that you're more likely to recover from anorexia if you get treatment in a hospital or at an outpatient clinic. Of course, if you are very frail or in immediate danger, you need to go to hospital.

We found two good studies (called **randomised controlled trials**). <sup>[88]</sup> <sup>[89]</sup> <sup>[90]</sup> <sup>[91]</sup>

The first involved 167 young people aged 12 to 18 years. <sup>[88]</sup> Some were treated in hospital, some went to a specialist anorexia outpatient clinic, and some had treatment from a mental health service that treats children and adolescents. After two years, the young people who were treated in anorexia clinics as outpatients had made as much progress as those who had stayed in hospital.

The second study involved 90 women. <sup>[89]</sup> <sup>[90]</sup> <sup>[91]</sup> Some were treated in hospital, some went to an outpatient clinic, some had group therapy, and some didn't have any treatment.

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After five years, the women who were treated in clinics as outpatients had done as well as those who had stayed in hospital.

But we can't draw any firm conclusions from these studies because they didn't involve many people. Also the treatment varied a lot from place to place. So it's hard to say anything for sure about whether inpatient or outpatient treatment is best.

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## Oestrogen supplements

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

This information is for people who have anorexia. It tells you about oestrogen supplements, a treatment that's sometimes used to try to strengthen women's bones if they have anorexia. It is based on the best and most up-to-date research.

### Do they work?

We don't know if taking oestrogen supplements strengthens bones in women whose bones have been weakened by anorexia. So far, research suggests it doesn't help.

Doctors won't prescribe oestrogen if you are under 18 because it can stop bones growing properly.

### What are they?

Oestrogen is an important **hormone**. It's a chemical that your body makes. One of the many things oestrogen does is to help keep your bones solid and strong.

If you're a woman and you have anorexia, your **ovaries** may stop making oestrogen. One sign that this is happening is your periods may stop.

Another thing that goes wrong when you don't have enough oestrogen is that your bones can get weak and brittle. This is called **osteoporosis**. If you have this, your bones can break very easily if you have a minor fall or bump. <sup>[22]</sup>

Your doctor might prescribe oestrogen to try to strengthen your bones if you have anorexia. However, many doctors don't recommend this treatment.

To protect your womb, you need to take oestrogen together with a synthetic hormone called **progestogen**. This is because oestrogen alone increases the chance of you getting cancer of the lining of the womb (endometrial cancer). Taking oestrogen with progestogen lowers this risk. <sup>[92]</sup>

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Your doctor may prescribe oestrogen in the form of the combined contraceptive pill, or as hormone replacement therapy (HRT). HRT is normally used by women with the symptoms of the menopause .

To find out more about how anorexia is treated, see [What you can expect from the NHS](#)

### How can they help?

There is no good evidence that taking oestrogen will strengthen your bones if you have anorexia. In fact, studies of women and teenage girls with anorexia show that those taking oestrogen don't have stronger bones than those taking a dummy treatment (a placebo ) or no treatment. <sup>[93]</sup> <sup>[94]</sup> <sup>[95]</sup>

However, we do know that if you recover from anorexia (put on weight and start having periods again), your bones will get stronger. <sup>[28]</sup>

### How do they work?

When we're healthy, our bones stay strong because the old bone material breaks down about as fast as new bone grows to replace it. The body needs oestrogen to make this happen. Without it, the old bone breaks down, but not enough new bone grows to replace what's lost. This is called **osteoporosis**. If you have this, your bones will gradually become weaker.

Women with anorexia often have lower oestrogen levels than normal. Women who have gone through the menopause also have low oestrogen levels. Both of these groups of women are more likely than usual to have bones that break easily. Taking extra oestrogen raises the amount of it in the blood. Having more oestrogen in your system should help strengthen your bones. But so far, there is no research to show if this actually happens for women with anorexia.

For more about oestrogen, see [Oestrogen: its special role](#) .

### Can they be harmful?

There haven't been enough studies to say whether oestrogen supplements are harmful when used to treat women with anorexia. But we know from studies of women who don't have anorexia that both the contraceptive pill and HRT can have side effects. <sup>[92]</sup> <sup>[103]</sup>

In the short term, the side effects can be unpleasant, but many aren't serious and often wear off after a short time. However, both forms of oestrogen can cause serious side effects.

### The pill

The pill can make you feel sick and dizzy, and may also make your breasts feel tender. The pill can also cause a small risk of getting a blood clot in the veins in your leg, especially in the first year of taking it. Doctors call this type of blood clot **deep vein**

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**thrombosis.** Although the clot itself isn't dangerous, it can become dangerous if it travels through the blood and gets stuck in an important blood vessel. If a clot stops blood getting to the lungs, then it can lead to a condition called **pulmonary embolism** which can kill you.

But the pill only causes a very small increase in the risk of getting a blood clot. For every 100,000 women taking the pill, about 15 will get a blood clot (although this figure varies depending on the type of pill). About 5 out of 100,000 healthy women who aren't pregnant and aren't taking the pill will get a blood clot. <sup>[103]</sup>

### HRT

If it's used for five years or more, HRT also increases the risk of getting a deep vein thrombosis that travels to your lung. For every 1,000 women who take combined HRT for five years, only one or two will get a blood clot in their lungs that was caused by the HRT. <sup>[101]</sup>

HRT may also slightly increase the risk of a **stroke**. If it's used for longer than five years, HRT can slightly increase the risk of breast cancer too.

### How good is the research on oestrogen supplements?

There hasn't been any research that shows that taking oestrogen will keep your bones strong if you are low on oestrogen because of your anorexia.

We found two good-quality studies (called **randomised controlled trials**). <sup>[94]</sup> <sup>[104]</sup>

The first involved 48 women with anorexia whose periods had stopped. <sup>[94]</sup>

The second study involved 60 women who, due to anorexia, had **osteopenia**. <sup>[104]</sup> (If you have this condition, your bones contain less calcium than normal. You're at risk of getting **osteoporosis**, which is where your bones become brittle and can break more easily.) Both studies found that women taking oestrogen didn't have stronger bones.

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## Zinc supplements

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

This information is for people who have anorexia. It tells you about zinc supplements, a treatment used for anorexia. It is based on the best and most up-to-date research.

### Do they work?

We don't know whether zinc supplements help to treat anorexia. More studies are needed to find out.

## What are they?

Zinc is a mineral. Your body needs it, but in tiny amounts. Zinc can: <sup>[105]</sup>

- Help your body fight infection
- Help new cells to grow
- Improve the way the body uses starchy foods for energy.

Some doctors have found that many people with anorexia have low zinc levels. Increasing the amount of zinc in your body may help to treat anorexia.

You can buy zinc tablets (or vitamin and mineral pills that include zinc) at health food shops, chemists, and supermarkets.

The government recommends a daily intake of 7.0 milligrams (mg) of zinc for women and 9.5 mg for men. Zinc supplements usually contain between 15 mg and 25 mg.

## How can they help?

We don't know for certain if taking zinc supplements will lift your mood or help you to put on weight, even if you have a low level of zinc in your body. There hasn't been enough research on this. <sup>[106]</sup>

## How do they work?

Doctors sometimes prescribe zinc tablets for people with anorexia. This is because people who have low zinc levels have similar symptoms to people with anorexia, such as weight loss, not feeling hungry, tiredness, and feeling sad and hopeless. The idea is that boosting zinc levels might help relieve these symptoms. <sup>[106]</sup> And, about half the people who have anorexia have low levels of zinc.

Young women are especially likely to have low zinc levels because the hormone oestrogen can speed up the way zinc is flushed out of the body. Stress lowers levels of zinc, too. If you have a lot of stress in your life and you don't get enough protein, you're likely to have too little zinc.

## Can they be harmful?

In the study we looked at, no-one got side effects from taking zinc. <sup>[106]</sup> But it's possible to get an upset stomach or stomach pain if you take zinc supplements. <sup>[107]</sup>

## How good is the research on zinc supplements?

There's very little evidence that taking zinc supplements can help people with anorexia, even if their zinc levels are low.

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We found one small study (called a [randomised controlled trial](#)) with 35 women who had anorexia. All the women were in hospital for treatment.<sup>[106]</sup> Half the group took 100 milligrams of zinc every day and half the group took a dummy treatment (a [placebo](#)). Of the 35 women, only three had low zinc levels to start with. At the end of the study, there was no real difference in the amount of weight gained by the women in the two groups.

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## Antipsychotic drugs

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

This information is for people who have anorexia. It tells you about antipsychotic drugs, a treatment that's sometimes used for anorexia. It is based on the best and most up-to-date research.

### Do they work?

We don't know. There hasn't been any good research on antipsychotic drugs as a treatment for people with anorexia. But we do know that they cause side effects, including heart problems. These can be very dangerous for people with anorexia.

### What are they?

Antipsychotic drugs are usually used to treat mental health problems such as schizophrenia. People with schizophrenia have periods of time when they are out of contact with reality. They may hear things, often voices, that aren't really there, and they may have strange beliefs and feel very tense and jumpy. Doctors call this kind of illness **psychosis**. Medicines used to treat it help people feel much calmer.

Having anorexia is not the same as having psychosis. It's a very different kind of illness.

When these drugs have been used to treat anorexia, it's because they can have a calming effect. They are also used because one of their side effects is that people taking them tend to put on weight. And sometimes these drugs are given to people with anorexia who also have other serious mental health problems.<sup>[108]</sup>

Common antipsychotic drugs (with their brand names) include:

- chlorpromazine (Largactil)
- haloperidol (Haldol, Dozic, Serenace)
- pimozide (Orap).



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There are also newer antipsychotic drugs, called **atypical** antipsychotics. They may have fewer side effects than the older kind:

- olanzapine (Zyprexa)
- quetiapine (Seroquel)
- risperidone (Risperdal).

To find out more about how anorexia is treated, see [What you can expect from the NHS](#)

### How can they help?

There hasn't been much research looking at whether antipsychotic drugs can help people with anorexia feel less anxious about eating or putting on weight. A few studies hint that newer antipsychotics, such as olanzapine, might help. <sup>[109]</sup> <sup>[110]</sup> <sup>[111]</sup>

But most of the studies are small or not very good-quality.

### How do they work?

Antipsychotic drugs reduce the effects of a chemical in your brain called dopamine. Dopamine affects your thoughts and your emotions, and it helps control how your muscles move. Researchers don't really know why changing the level of dopamine might help ease feelings of fear, worry, and agitation. <sup>[112]</sup> <sup>[113]</sup>

### Can they be harmful?

We don't know exactly what side effects you might get if you take an antipsychotic drug for anorexia. But studies of people taking this drug for other mental health problems show some serious side effects. They include: <sup>[114]</sup>

- Sleepiness
- Dizziness
- A dry mouth
- Skin that is sensitive to the sun
- A twitching head and twitching neck and face muscles. The newer antipsychotic drugs, such as olanzapine, are less likely to cause this side effect
- Problems with the electrical signals that help control your heart rate.

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One study has found that haloperidol increases the risk of dangerous heart problems.

<sup>[115]</sup> Haloperidol interferes with the electrical activity in the heart, making it beat too quickly. If this isn't treated, it can make the heart suddenly stop working (called sudden cardiac arrest). And if someone's heart stops working they may die.

In the study, the risk of heart problems was highest in women, elderly people, and people who'd recently started taking haloperidol (they'd started taking it in the last 90 days). <sup>[115]</sup>

But it's not clear exactly how big the risk is. <sup>[116]</sup>

In the US, an organisation called the Food and Drug Administration (FDA) checks the safety of medicines. The FDA says at least 28 people taking unusually high doses of haloperidol, or having haloperidol injections into a vein instead of a muscle, have had problems with a fast heartbeat. Some people have died. The FDA advises doctors to take account of this risk when deciding on treatments. <sup>[116]</sup>

If your body is starving because of anorexia and your weight is low for your height, you may be at increased risk of these drugs affecting your heart. <sup>[117]</sup> <sup>[32]</sup> <sup>[118]</sup> <sup>[119]</sup> <sup>[76]</sup>

### How good is the research on antipsychotic drugs?

We didn't find any good evidence to show that antipsychotic drugs can help people with anorexia put on weight or feel less anxious and fearful. Some small studies suggest that newer drugs such as olanzapine might help. <sup>[109]</sup> <sup>[110]</sup> <sup>[111]</sup> But the research has not been very good-quality.

There is evidence that haloperidol can increase the risk of life-threatening heart problems. It can interfere with the electrical activity in the heart, making it beat too quickly. This can lead to sudden cardiac death (cardiac arrest) if it's not treated immediately.

It's not clear exactly how big the risk is. <sup>[116]</sup> One study found that, on average, over a year, about 1 in 1,000 people die suddenly of a cardiac arrest. <sup>[115]</sup> Among people taking haloperidol, this risk increases to roughly 5 in 1,000 deaths each year.

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### Further informations:

#### Other eating disorders

There are two other eating disorders that are rather like anorexia. One is bulimia and the other is binge-eating disorder. Sometimes people get the three illnesses confused.

#### Bulimia

People with bulimia binge on food regularly. (A doctor will say that someone who binges at least twice a week for at least three months has bulimia.) To binge on food means to eat a lot more than most people would in a short period of time.

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If you have bulimia, you feel you don't have control over what or how much you eat during the binge. You may then vomit or take laxatives (called purging) to stop gaining weight. Some people do other things to stop putting on weight, like not eating at all (called fasting) or exercising more than is usual or healthy. <sup>[5]</sup>

Like people with anorexia, people with bulimia worry too much about their weight. This affects the way they feel about themselves. One big difference is that people with bulimia don't think they're fat when they're actually thin. People with anorexia do.

There's another big difference between anorexia and bulimia. People with bulimia **are often normal weight**. People with anorexia are very underweight because they eat so little. To learn more, see [Bulimia](#) .

### Binge-eating disorder

If you regularly binge on large amounts of food, you may have binge-eating disorder. You binge, and then put weight on. You don't try to get rid of the calories by vomiting, taking laxatives or pills that make you lose water from your body, or exercising.

Having a binge-eating disorder can make you hate yourself. Treatment is similar to the treatment for bulimia. About a third of people with binge-eating disorder are boys or men.

### Questions to ask yourself about the way you eat

Have you ever wondered whether your feelings about food are healthy? Here are five questions about eating habits that might be helpful. If you answer yes to two or more questions, you may be more concerned about food and eating than is healthy, and you may have an eating disorder. <sup>[6]</sup>

- Do you make yourself sick because you feel uncomfortably full?
- Do you worry you've lost control over how much you eat?
- Have you recently lost more than six kilograms (about one stone) in three months?
- Do you think you are fat even when others say you are too thin?
- Would you say that food dominates your life?

This questionnaire was developed by St. George's Hospital Medical School in London.

## Possible causes of anorexia

Researchers don't know what causes anorexia and other eating disorders.

It's probably a combination of the genes you're born with and the things that happen in your life. We've listed some of the things that have been linked to anorexia.

## Images in the media that create pressure to be thin

Very often people blame society for eating disorders. Television programmes and magazines are full of super-slim models and actors. But eating disorders are nothing new. They've been around for hundreds of years.<sup>[7]</sup> These images may play a part in someone getting an eating disorder, but they're probably not the only reason.

## Emotional problems

Starving yourself may be connected to painful, difficult emotions.<sup>[2]</sup> It might be a way of keeping bad feelings away. It can give you a sense of control when other parts of your life are going wrong or seem too difficult to manage. Here are some of the feelings that have been linked to anorexia.

- You feel bad about yourself. You hate the way you look, don't give yourself credit for the good things you've done and feel worthless. This is called **low self-esteem**.<sup>[2] [8]</sup>
- You may feel shame, guilt, and disgust. You might be a perfectionist. If you are, you criticise yourself for minor things, like not getting the top grade in an exam or for homework, or putting on a little bit of weight.<sup>[2]</sup>
- You may feel you have no control over other things in your life. Anorexia might give you a sense of control when everything else seems too hard to manage. It may make you feel special or safe.<sup>[8] [9]</sup>

If you think you might be depressed, see [Depression in adults](#) .

## Dieting

Doctors think that anorexia sometimes starts when someone goes on a diet.<sup>[2]</sup> Some people diet to try to stay healthy. But people also diet because they are unhappy about themselves or their life. We don't know why dieting is harmless for some people and the start of anorexia for others.

## An imbalance of chemicals in the brain

Serotonin is a chemical in the brain that helps control your emotions and how hungry you feel. Some studies suggest that people with anorexia don't have the right amount of

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serotonin. If this chemical isn't working well in the brain, it may cause symptoms of anorexia, or make them worse. <sup>[10]</sup>

## Your genes

Anorexia can run in families. This may be because you and the other people in your family have some of the same **genes** .

If either of your parents had an eating disorder, you'll have more chance of getting anorexia than other people your age. <sup>[2]</sup>

## Your birth

Some research shows that baby girls who are born premature will have a higher risk of getting anorexia later in life than baby girls born after spending 40 weeks in the womb.

<sup>[11]</sup> This is especially true in babies who are very small when they are born.

## Who's at risk of getting anorexia?

Things that can increase your chances of getting anorexia are called **risk factors**. Here's a list of some of them.

- Being female. Ten women get anorexia for every one man who gets it. <sup>[12]</sup>
- Having mental health problems that affect your mood, such as depression and anxiety (intense worry) or **obsessive-compulsive disorder**. <sup>[12] [5] [13] [14]</sup>
- Having a job or hobby that makes you feel you have to be thin. Ballet dancers, gymnasts, and models are under a lot of pressure to be thin. <sup>[12] [5] [13] [14]</sup> For men, sports like bodybuilding and wrestling increase their risk of getting anorexia. <sup>[5]</sup>
- Having low self-esteem. Thinking you're no good at anything or won't amount to anything increases your chances of getting anorexia. <sup>[12]</sup>
- Wanting to be perfect and accepting nothing less. <sup>[13] [14] [15]</sup>
- Being unhappy with your weight and shape. <sup>[12]</sup>
- Getting teased by others about your body. <sup>[5] [15]</sup>
- Being white and financially well off. <sup>[5]</sup>

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- Feeling grief or deep sadness that you can't get over, about something bad that happened. <sup>[12]</sup>
- Being sexually abused as a child. <sup>[12]</sup>
- Having had problems digesting food and eating as a child. <sup>[12]</sup>
- Inheriting certain genes. <sup>[12]</sup> <sup>[5]</sup> Having a female relative with anorexia in your immediate family, especially an identical twin, increases your chance of getting anorexia. <sup>[5]</sup>

### What is bingeing?

Bingeing is eating a lot of food at once, usually very quickly and in secret. Some people spend all day planning their binges. They decide what they will eat, where to get it, and how to eat it without being found out.

A person who binges usually decides to do it after a troubling experience. That kind of event is called a **trigger**. Once the person gets the idea of bingeing, the urge to do it is too powerful to stop.

Bingeing can be triggered by things like stress at home, or a bad day at school or work, or by feeling starved at the end of a day without much food. These are all things that make you feel out of control. Here are some of the ways people who binge say they feel:

- A little excited or rebellious while they're planning and preparing to binge
- Afraid (of being caught, of putting on weight, that they might be going mad, or that they are out of control)
- Guilty
- Ashamed
- Hate for themselves
- Disgusted
- Emotionally numb.

## What is purging?

Purging is what you do to try to get rid of the calories you have eaten. Usually, you do it after bingeing. You do it because you don't want to gain weight. Here are some of the things we know about purging.

- People with anorexia purge by making themselves vomit, by taking laxatives or diuretics, or by giving themselves enemas.
- People who make themselves vomit do it by gagging on their fingers or on something like a toothbrush handle. If you've had anorexia for a long time, you may be able to vomit without trying very hard. But vomiting only gets rid of between a third and half of the calories you've just eaten.
- Vomiting and bingeing are things people do in secret.
- Laxatives make food move through your gut faster. If you take a lot of them, you get bad diarrhoea. Taking laxatives can make you dehydrated and thirsty. Laxatives don't get rid of calories. This is because they don't work until the food you've eaten gets into your intestines. By then, most of the calories you've eaten are in your blood, from where they're either used to keep your body going or stored as fat.
- Some people take diuretics (also called water pills) to purge. They make you pass urine a lot. This just makes your body lose water, not fat.
- Some people think they can get rid of calories if they have enemas (washing out the bowel). This doesn't get rid of calories.

Some people get rid of calories from their binges in other ways. One way is to burn them off by exercising. But when someone does this to purge calories, it's different from healthy exercise. They may:

- Exercise so much that it interferes with work or school
- Exercise late into the night
- Exercise very early in the morning
- Insist on running or going to the gym even when they're injured.

Another way some people try to make up for binges is by not eating anything (also called fasting) for a day or more.

## What anorexia can do to your body

Anorexia can be very harmful. It's more dangerous than bulimia. Starving your body of food and losing weight stops your body's organs working properly. It can damage your heart, kidneys, digestion, bones, muscles, and, if you're a woman, your ovaries. If one of these problems goes on for too long, you could die.

Some of the ways anorexia can hurt your body are listed below. You can see that anorexia really is serious. But some of these problems will get better if you start to gain weight.

### Effects on your heart and blood vessels

- Having anorexia can affect your heartbeat and blood flow:<sup>[13] [19] [21]</sup> If you are too thin for your height (underweight), you can get low blood pressure and your heart might beat too slowly to get enough blood to the organs that need it.
- If you don't eat and drink enough, your body will have too little water in it (get dehydrated). This can mean less blood flows around your body. You may feel dizzy and faint when you stand up.
- Your heartbeat may become irregular. (Your doctor may say you have an **arrhythmia**.) Some types of severe arrhythmias can kill you if you don't get treatment straight away.
- When you get treatment and start to recover from anorexia, you need to start eating again slowly. If you eat too much too fast, it can put a lot of strain on your body. There is even a risk that you can harm your heart.<sup>[19]</sup>

### Effects on your bones, skin, and teeth

- Anorexia makes your body produce less of the hormone called oestrogen. Oestrogen helps bones stay solid and strong. If you have anorexia for a long time, your bones may weaken (you'll have low bone density). This causes the body to lose more bone than it can replace (called osteoporosis). If this happens, there's a risk that your bones will break easily and you may have fractures, especially when you're older.<sup>[19] [22] [23]</sup>
- Making yourself vomit regularly can wear away the enamel on the surface of your teeth. You'll be more likely to get bad cavities.
- You may lose your hair.
- Your skin may dry out and turn yellowish.
- Your fingernails and toenails may get brittle.



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- About a third of people with serious weight loss get fine, soft hair on their face and body.

### Effects on oestrogen and your fertility

- If you are a woman with anorexia, your ovaries may stop producing a hormone called oestrogen. Your periods will become less regular or stop. This happens to 9 in 10 women with anorexia. <sup>[21]</sup> Your periods should start again when you put on weight.
- If you are too thin for your height, you may have problems getting pregnant. <sup>[19]</sup> <sup>[24]</sup>
- If you have anorexia and you do get pregnant, you're more likely to have problems than someone who is a healthy weight. For example, if you don't eat enough, you have a greater risk of miscarriage (having your pregnancy go wrong and losing your baby). And if your baby doesn't get enough food while you're pregnant, it is more likely to be born too early (be premature) and to be small. <sup>[25]</sup> Small, premature babies are usually less healthy than larger babies who are born after the full nine months. <sup>[19]</sup> <sup>[22]</sup>

### Other problems

- If you've had anorexia for a long time, you're likely to have low levels of sugar in your blood. If this happens, you can feel weak, nervous, and irritable. And you can have bad headaches and trouble with your vision.
- Anorexia can upset the delicate chemical balance in your body, especially if you make yourself sick or keep taking laxatives . If your body chemistry is upset too much, you can have problems (including heart failure) that could kill you.
- Anorexia may mean you have less of a hormone called **leptin**. This hormone is made in fat cells. If you don't have enough of it, things can go wrong with the way your body keeps your weight stable, how your brain tells you to eat or stop eating, and how your body burns fat.
- If you vomit or take laxatives regularly, you may have trouble digesting food. You might have stomach pains, diarrhoea , or constipation . For more information, see [Problems caused by purging](#) .

## Problems caused by purging

Vomiting or taking laxatives regularly to try to stay thin is called purging. Purging can cause serious problems. After a while, things can go wrong with many different parts of your body.

Some people with anorexia and some people with [bulimia](#) have the same kinds of problems because of purging. Here are some of the things that can happen.

### Vomiting

- Vomit contains acid that can damage your teeth. Your teeth might turn kind of grey and they can look spotted. The acid also causes cavities (called dental caries). Any damage to your teeth is permanent.
- Losing all that acid can upset the balance of acids and alkalis in your body. (An alkali is the opposite of an acid.) If this imbalance gets serious enough, your muscles, heart, and other organs can't work properly.
- If you don't replace the fluids you lose when you vomit, you'll get [dehydrated](#) . Very bad dehydration can cause [kidney failure](#) .
- If you vomit often, you'll weaken a valve at the bottom of the tube (oesophagus) that takes food from your mouth to your stomach. The weak valve allows acid in your stomach to splash up into your oesophagus and damage the lining. This is called [heartburn](#) and it hurts.
- If you use your fingers to make yourself sick, you may get rough patches of skin on your knuckles.
- Violent vomiting can tear the lining of your oesophagus and make you vomit blood. This doesn't happen often, but if it does, you can lose a lot of blood. That is very scary and it can be dangerous.

### Taking laxatives

- If you take a lot of [laxatives](#) regularly, you may not be able to digest food without them. You may get severely constipated.
- Laxatives cause [diarrhoea](#) . Diarrhoea is alkaline. Constant diarrhoea eventually upsets the balance of acids and alkalis in your body. A very serious upset in the balance can mean your heart may not work properly.
- Diarrhoea is mostly water, so laxatives can make you dehydrated. Bad dehydration can cause kidney failure. This type of kidney failure often gets better, but some

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people will have permanent kidney failure. If this happens, you'll need **dialysis** (a machine is used to clean your blood) or a kidney transplant.

### Worried someone close to you might have anorexia?

People who have an eating disorder often try hard to keep it a secret. Here are some things that might suggest someone you know has anorexia or another eating disorder:

[4] [17] [34]

- Eating small portions of food and skipping meals, even if they haven't eaten for a while
- Avoiding certain foods, such as meat and sweet foods. Instead they pile up their plates with low-calorie foods, like tomatoes and vegetables. Some people insist on eating these foods in set quantities (for example, 10 green beans or one tablespoon of ketchup)
- Behaving strangely around food. They might cut their food into little pieces or crumble it and move it around their plate so it looks like they're eating. They may hoard food or recipes
- Not wanting to eat with others
- Constantly talking about food
- Saying they feel very fat but being very thin
- Saying they are fatter than someone when they are clearly not
- Constantly checking their weight and how they look in the mirror. Complaining they are heavy or hate parts of their body
- Preparing big meals for family and friends but not eating the food, or eating just a little or only a few low-calorie foods
- Being irritable and distressed, especially around mealtimes
- Feeling full after eating only a small amount of food
- Leaving the table during or immediately after a meal, often to go to the toilet
- Lying about food and being very secretive. For example, saying, "I ate earlier" to avoid a meal

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- Exercising nearly all the time
- Being so thin that they're bony, with bones showing through their clothes
- Having fine downy hair on their face
- Always feeling cold and wearing lots of clothes to help stay warm (and to hide thinness)
- Drinking lots of water or fizzy, low-calorie drinks, which take away hunger pangs
- Missing school or work.

If you think someone has anorexia, try talking to them about it, but don't be surprised if they get angry. People who have anorexia may think others are just trying to fatten them up. They may deny they have a problem. The best thing you can do is encourage a person who has anorexia to get professional help. The first step is to help them see their doctor.

You may also find it useful to talk to someone about your worries. Your doctor may be able to put you in touch with a local support group for people with anorexia and their families. The people there may be able to give you some advice about how to cope with someone who has an eating disorder.

## Cognitive therapy

### What is it?

One type of cognitive therapy used to treat people with anorexia is cognitive behaviour therapy (CBT). The idea of CBT is that having extreme or unhelpful thoughts about yourself causes problems. Unhelpful thoughts make you behave in negative ways.

Here's how cognitive therapy tries to stop that cycle of thought and action.

- At the start of each session, you and your therapist decide what you want to get out of it.
- Each session with your therapist lasts about 50 minutes.
- You talk about your feelings and how you feel about your weight and eating.
- You and your therapist talk about why you are desperate to stay thin.
- At the end of each session, your therapist asks you to do some homework. This might be to practice relaxation or write your thoughts in a diary.

## What can it do for me?

The aims of this therapy are to help you:

- Learn the facts about anorexia and treatment, and about how they affect your body
- Understand what might have caused your illness and what keeps it going
- Understand that you can't be healthy unless you are a healthy weight
- Express your emotions (how you really feel)
- Understand how what you believe is linked to the way you behave
- Change the things you believe about food and the way you view yourself and your body shape
- Eat a healthy diet to keep your weight in the normal, healthy range for your height and build
- Find ways to handle problems in your life.

## What happens in cognitive therapy?

There are lots of ways of doing cognitive therapy. But in all of them, you and your therapist try to change the way you think. You do this together by working out if you have hidden beliefs and ideas.

Here's a list of some of the things you might do.

- Find out what thoughts are making you worried and ill. For example, you might think, "I'm too fat" every time you look in the mirror. Or, every time you have to try something new, you might think, "I have to be the best. Being second is no good". You feel that you can't control these thoughts. They just pop into your head. Thoughts that come up all the time like that are sometimes called 'automatic thoughts'.
- Find out what your rules for living are. These are the general beliefs that you have about life. You develop them when you are young, and you may not even know you have them. One rule might be, "Unless I'm thin, nobody will like me". Beliefs like these control how you see what's going on around you. Often these thoughts are not true.
- Get rid of bad rules and bad thoughts and replace them with better ones. The first step is to make a list of your automatic thoughts and your rules for living. Then you and your therapist will test them to see if they are really true. For example, you'll use questions like, "How will being thin make me happy?" Doing this can help you stand back, question these ideas, and find out how you think about yourself.

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- Learn and practice ways to be more positive. For example, you may learn how eating healthy meals makes you feel better and stronger. You may learn that putting on weight doesn't make people look down on you, and that you can feel good about the things you do well. Your therapist can help you as you try out new ideas and practice being more flexible. [\[46\]](#) [\[47\]](#)

You and your therapist will also work on how you can change the way you behave. There are many different ways to change behaviour. Here are a few. Your therapist will help you learn the ones you need.

- You may need to learn to eat again. For example, if you never eat breakfast or lunch, you might agree to eat a small breakfast every day (maybe yoghurt and an apple) as part of your treatment. You might keep a diary of how often you eat and how often you exercise. You might also write your thoughts about food in your diary.
- Your therapist may encourage you to eat with other people.
- You'll probably cut back on the number of times you weigh yourself, especially after you eat.
- Slowly, you'll be able to start doing things you've avoided in the past. This could be eating with other people, eating 'forbidden' foods, or eating in a cafe. This only works if you start small and take it one little step at a time.
- You may set a goal of trying something new every once in a while. You and your therapist will work together to plan how to make changes in small steps. Doing this helps you become more self-confident over time.

Psychotherapy is a treatment that never really ends. Even after you stop going to a therapist, you'll be able to use what you've learnt. You'll know how to help yourself. You'll be able to be your own therapist if you feel anorexia taking over again.

### Interpersonal psychotherapy

This therapy explores how you get along with other people. It's based on the idea that having trouble in relationships (maybe with your parents, spouse, or friends at school) can cause you problems.

You and your therapist discuss these problems and try to make them better. You don't talk about food, dieting, or being thin. [\[48\]](#) [\[49\]](#) [\[50\]](#)

## Family therapy

If you have anorexia, it's very important to remember that your family is not to blame.

If you are the parent or relative of someone who has anorexia, you haven't caused this illness.

But there may be things about family life that allow anorexia to keep going. Some family problems develop over such a long time that family members can't see them. When a child or teenager has anorexia, the whole family may be affected. Here are some of the things that go wrong.

- The way a child feels and behaves can take over family life.
- Mealtimes, when families are most often together, can be tense and stressful.
- As a parent, you may feel guilty and blame yourself for your child's eating problems.
- The other children in the family may feel left out and resentful.

A family therapist can sometimes help. A family therapist often meets the whole family together. But the parents and individual children may also see the therapist alone. Here are some things the therapist can do to help the family tackle problems together. <sup>[51]</sup> <sup>[52]</sup>  
<sup>[53]</sup> <sup>[54]</sup>

- Help the whole family learn about anorexia and how it's treated. It's especially important for parents to realise that a child with anorexia can't control his or her thoughts and behaviour.
- Help everyone in the family to understand that the family is not the cause of the illness, but the family can help overcome it.
- Find ways to help parents take control of their child's eating until he or she has put on weight. For example, the therapist might suggest that parents monitor meals and limit exercise for a child who has anorexia. In return, parents might give the child choices over things like whether or not to tidy their room.
- Look at how the family gets along together to see if anything is making it hard for parents to deal with eating problems. For example, the family might want to consider the rules they've made, how decisions are made and how limits are set.
- Look at the relationships between family members to see if anybody needs extra support.

## Body awareness therapy

If you have anorexia you may feel fat and think you look fat. But really you are very thin. You are probably unhappy with your shape, and you may spend a lot of time in front of the mirror examining your body, especially your thighs, bottom, breasts, and stomach. You think people who say you are thin are lying. But that's because **your view of yourself isn't realistic**.

Body awareness therapy aims to help change this way of thinking. It isn't a trick to fatten you up. It helps you understand your body and how it works.

Your therapist might help you learn to do activities and exercises that help you get a clear image of your body size. For example, massage is a hands-on way to get a sense of what your body feels like (whether it's soft or firm or bony). Drawing an outline around your body on a big piece of paper shows you your shape in a new way.

## Nutritional counselling and stress management

Another name for this kind of therapy is diet counselling. You work with a dietitian (someone who's an expert on food and nutrition). You learn about healthy eating habits. <sup>[55]</sup>

Often people with anorexia have unusual ideas about food. They tend to label foods as either 'safe' or 'forbidden'. The dietitian will ask you about your thoughts and feelings about food. He or she will encourage you to think and talk about the foods you like.

You'll also learn about why your body needs different kinds of foods, and about the nutrients in foods. For example, you might learn how much fat, protein, and minerals are in foods like milk and meat, and how your body uses these foods.

To find out more about what to eat to stay healthy, see our information on healthy eating.

## Oestrogen: its special role

You've probably heard of oestrogen. It's one of the female sex hormones. These chemicals are made by your body. They're important for your normal sexual development. They also control your reproductive system (the parts of your body that allow you to get pregnant and give birth).

Oestrogen is made mainly by your ovaries, but small amounts are also made by your two adrenal glands. When you are pregnant, oestrogen is also made by the placenta, the organ in the womb that feeds the growing baby. <sup>[96]</sup>



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Oestrogen **isn't one hormone**. It's actually the name given to a group of hormones. These hormones are oestradiol, oestrone, and oestriol. Oestradiol is the main oestrogen made by your ovaries, and it is also the strongest oestrogen. Before the **menopause** you have more oestradiol than any other oestrogen. After the menopause, your oestradiol levels drop, and oestrone becomes the main form of oestrogen in your body.

In puberty, oestrogen makes your breasts grow and causes your periods to start. It helps keep your **menstrual cycle** and periods going. Without oestrogen, you wouldn't be able to get pregnant.

Oestrogen also has other effects on your body.

### Oestrogen receptors

Oestrogen is carried around your body in your blood. It affects your cells by attaching to them. The parts of cells that it sticks to are called binding sites or receptors. <sup>[97]</sup>

There are oestrogen receptors in your bones, brain, blood vessels, and central nervous system (the network of cells in the brain and spinal cord that carry information around your body). Oestrogen seems to affect lots of different parts of your body. <sup>[98]</sup>

### Why is oestrogen important?

- Your brain is affected by oestrogen. <sup>[99]</sup> Your oestrogen levels may affect how you feel emotionally. <sup>[100]</sup>
- Doctors think oestrogen helps keep your bones healthy and strong.
- Oestrogen also affects the balance of **cholesterol** in your blood. It raises levels of 'good' cholesterol (called **HDL cholesterol**) and reduces levels of 'bad' cholesterol (called **LDL cholesterol**). High levels of LDL cholesterol may increase your risk of heart disease. <sup>[97]</sup>
- Because of its effect on cholesterol, researchers had thought that taking oestrogen might help prevent heart disease. But recent studies have found that hormone replacement therapy (HRT) containing oestrogen doesn't protect women against heart disease or **strokes**. <sup>[101]</sup> In fact HRT slightly increases your risk of getting these diseases. <sup>[102]</sup>
- There are oestrogen receptors in your skin too. This may mean that oestrogen helps stop your skin getting thinner and drying out.

## But it's not that simple

Oestrogen can also have harmful effects on your breasts and the lining of your womb. If you have a lot of oestrogen in your blood, it may make your breast and womb cells grow abnormally. This can increase your risk of getting cancer.

Women who start puberty early or go through the menopause late are exposed to natural oestrogen for longer than other women. This may explain why they are at a slightly higher risk of getting breast cancer.

There's a lot of interest in oestrogen, both as the natural hormone that your body makes and in the replacement hormones used in treatments. And there is a lot of debate about what women should do once their body starts making less oestrogen at the menopause.

### Glossary:

#### **laxative**

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

#### **serotonin**

Serotonin is a neurotransmitter, which is a chemical that helps to send information from a nerve cell to other cells. It is thought to play a role in learning, sleep and control of mood.

#### **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.

#### **obsessive-compulsive disorder**

Obsessive-compulsive disorder is a psychological illness. People who have it can't keep certain thoughts out of their minds. Or they feel they have to do certain things all the time, such as washing their hands. This makes it hard for them to live a normal life.

#### **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.

#### **palpitations**

A palpitation is when you feel like your heart is beating very fast.

#### **constipated**

When you're constipated, you have difficulty passing stools (faeces). Your bowel movements may be dry and hard. You may have fewer bowel movements than usual, and it may be a strain when you try to go.

#### **dehydrated**

When you're dehydrated, you don't have enough fluid in your blood. This could be because you're not drinking enough or because you're losing water by sweating or having diarrhoea.

#### **oedema**

Oedema is the build-up of fluid in parts of your body. If people get oedema, they often get it in their feet, ankles or legs.

#### **diuretics**

Diuretics are a type of medicine that reduce the amount of fluid in your body. The extra fluid is removed in your urine.

#### **enema**

An enema is liquid that is poured into the rectum to clean it out. Many people find it uncomfortable and embarrassing, but it helps a doctor to see the inside of the bowels.

#### **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.

# Anorexia

## **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.

## **ovaries**

Women have two ovaries, one on each side of their womb. They are small glands that store eggs. Inside the ovaries are hundreds of thousands of pre-eggs, called follicles. Some of these grow into eggs.

## **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.

## **bone density**

Bone density is a measure of how strong your bones are. Bones that are less dense are brittle and easy to break.

## **osteoporosis**

Osteoporosis is when your bones get too brittle. It happens if not enough new bone tissue is growing to keep bones strong. If you have osteoporosis, the bones in your body may break easily.

## **kidney failure**

Kidney failure is when your kidneys can't make urine properly. Kidney failure happens because of kidney disease. People with kidney failure need to have dialysis, which is a way to get rid of the substances in your blood that normally go in your urine.

## **heartburn**

Heartburn is a painful, burning sensation in the chest. It happens, often after meals, when the contents of the stomach pass back up into the oesophagus. The oesophagus is the tube that runs from the mouth to the stomach.

## **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.

## **diabetes**

Diabetes is a condition that causes too much sugar (glucose) to circulate in the blood. It happens when the body stops making a hormone called insulin (type 1 diabetes) or when insulin stops working (type 2 diabetes).

## **psychologist**

A psychologist is trained to study the human mind and human behaviour. A clinical psychologist provides mental health care in hospitals, clinics, schools or to private patients.

## **psychiatrist**

A psychiatrist is a doctor who specialises in psychiatry. Psychiatry is the branch of medicine that covers mental, emotional or behavioural problems.

## **psychotherapy**

Psychotherapy is a talking treatment. It is given by trained therapists (such as a psychiatrists, psychologists or social workers). Psychotherapy usually consists of regular sessions (often weekly) between the therapist and the patient. There are many types of psychotherapy, including cognitive behavioural therapy and interpersonal therapy.

## **cognitive behaviour therapy**

Cognitive behaviour therapy (CBT) is a type of talking treatment (psychotherapy). It is based on the idea that the negative thoughts and beliefs people have play an important role in how they feel and how they act. CBT helps people identify, look at and change unwanted thoughts, feelings and behaviours.

## **psychotherapist**

A psychotherapist is a health professional who treats mental disorders by talking with their patients, rather than by prescribing medicines. There are many types of psychotherapy, including cognitive behavioural therapy and interpersonal therapy.

## **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.

## **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.

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## **withdrawal symptoms**

Withdrawal symptoms are when you get unpleasant physical or mental symptoms because you stopped taking a drug you were physically dependent on. You can become physically dependent on a drug if it alters the level of certain chemicals in your body. This makes your body produce less of those chemicals or change how it responds to them. Also, some drugs work in a similar way to chemicals that naturally occur in your body. This may mean your body stops making its natural versions. If either of those things happens, your body will need the drug to function normally and you will feel or become ill if you suddenly stop taking the drug. You can get withdrawal symptoms from some prescription medicines, as well as some illegal drugs.

## **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.

## **hormone replacement therapy**

Hormone replacement therapy (also called HRT) is given to women after the menopause to replace the oestrogen (the main female hormone) that is no longer made by their ovaries. It can be given either as oestrogen alone or as a combination of oestrogen and progesterone (another female hormone). It is useful to treat menopausal symptoms such as hot flushes, and to prevent brittle bone disease (osteoporosis). But there are concerns that it may increase the risk of breast cancer, heart attacks and strokes.

## **menopause**

When a woman stops having periods, it is called the menopause. This usually happens around the age of 50.

## **oestrogen**

Oestrogen is the name given to three female sex hormones: oestradiol, oestrone and oestriol. Oestrogen causes women's sexual development during puberty: it is needed to develop breasts, have periods and get pregnant. Oestrogen is also thought to affect women's health in other ways. It may influence their mood, cholesterol levels and how their bones grow. Men have very low levels of oestrogen in their bodies, but doctors aren't completely sure what it does. Oestrogen is an important ingredient in most types of contraceptive pill and hormone replacement therapy.

## **adrenal glands**

You have two adrenal glands. They are on top of your kidneys. Your adrenal glands make hormones that help control your blood pressure, how fast your heart beats and the way your body uses food.

## **menstrual cycle**

The menstrual cycle is the regular monthly process that causes an egg to be released from the ovaries so that a woman can get pregnant. The menstrual cycle causes her period, the bleeding that happens if she does not get pregnant.

## **cholesterol**

Cholesterol is a fat-like substance made by your liver or absorbed from food. It is used by your body to make bile acids (which help your intestines absorb nutrients) and steroid hormones (like testosterone or oestrogen). Cholesterol is also an important part of cell membranes, which are the structures that surround cells. 'Good cholesterol' is called HDL; 'bad cholesterol' is LDL.

## **HDL cholesterol**

Cholesterol is a fatty substance in your blood. You can get it from food and it is also made by the liver. Having a lot of cholesterol in your blood can cause health problems. But HDL cholesterol is sometimes called 'good' cholesterol, because it may lower the risk of heart disease. HDL stands for high-density lipoprotein.

## **LDL cholesterol**

Cholesterol is a fatty substance in your blood. You can get it from food and it is also made by your liver. Having a lot of cholesterol in your blood can cause health problems. LDL cholesterol is often called 'bad' cholesterol. It can build up in your arteries and increase your risk of heart disease. LDL stands for low-density lipoprotein.

## **heart disease**

You get heart disease when your heart isn't able to pump blood as well as it should. This can happen for a variety of reasons.

## **stroke**

You have a stroke when the blood supply to a part of your brain is cut off. This damages your brain and can cause symptoms like weakness or numbness on one side of your body. You may also find it hard to speak if you've had a stroke.

## **blood clot**

A blood clot forms when the cells in blood clump together. Sometimes this happens to stop you from bleeding if you've had an injury. But it can also happen on the inside of your blood vessels, even when you haven't had an injury. A blood clot inside a blood vessel is called a thrombus.

## **pulmonary embolism**

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A pulmonary embolism can give you chest pain, make you feel breathless and uncomfortable or make you breathe rapidly. A pulmonary embolism is dangerous and can kill you if it is not treated.

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