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# **Weight reduction**

In order to lose weight, your 'energy in' needs to be less than your energy used up. In short, you need to eat less and move more.

### How weight loss works

#### The science

In some respects, it seems quite simple. Your weight depends on how much energy you take in (the calories in food and drink) and how much energy your body uses up (burns):

- If the amount of calories that you eat equals the amount of energy that your body uses up then your weight remains stable.
- If you eat more calories than you use up, you put on weight. The extra (or excess) energy is converted into fat and stored in your body.
- If you eat fewer calories than you use up, you lose weight. Your body has to tap into its fat stores to obtain the extra energy it needs.

So, to lose weight, you need a calorie deficit. You can achieve this calorie deficit by:

- Eating less (taking in fewer calories from food).
- Doing more physical activity (using up more calories).

However, there is now research that shows that this explanation, sometimes called the calories-in/calories-out model, is outdated. There are lots of ways that the different parts of the body communicate with each other to keep body weight the same. There are nerve connections between the stomach and the brain. There are also several hormones involved, including insulin, ghrelin and leptin. The medical term for this is homeostatic feedback. For example:

- If you eat fewer calories, not only does this make you hungry but it also reduces the amount of energy that your body uses, ie eating less makes you less active.
- If you exercise, this is followed by by a period of increased hunger, ie doing more makes you eat more. Exercise also makes you tired, so you reduce the amount of energy your body uses later on.
- If you eat more calories, this increases the amount of energy your body uses, ie eating more may make you more active.

In other words the body adjusts how much energy you use up depending on how many calories you eat.

The important thing seems to be that certain foods can cancel out these natural feedback systems that should keep our weight the same. High-sugar and high-fat foods taste good and can make us feel good too. By triggering the 'reward' centre in our brain, they may be especially good at over-riding these controls.

Foods can be divided into three groups (although most foods are a mixture):

- Carbohydrates:
  - Found mainly in fruit, vegetables, beans, grains and milk.
  - 'Refined carbohydrates' are carbohydrates that have been processed in some way, such as table sugar (sucrose), highfructose corn syrup (found in many processed foods), white flour, and pasta.
- Fats: found in, for example, animal fat, oily fish, butter, cheese, and vegetable oils.
- Proteins: found in meat, fish, eggs, beans, nuts and meat alternatives.

Refined carbohydrates, fructose and sugar-sweetened drinks have been linked with low levels of feeling full (satiety), difficulty controlling our appetite and a lack of excess energy to make up for the extra calories consumed.

There are lots of different 'diets' to help someone lose weight. They often target a reduction in a particular food group:

- Low-fat:
  - The most common form of weight loss diet followed since the 1970s.
  - Diets that involve counting calories are commonly low-fat.
- Low-carbohydrate:high-fat diets (LCHF):
  - No calorie counting required.
  - The Atkins Diet.
  - The Keto Diet.
  - The Banting Diet, as first published in 1864.
  - The Paleo Diet similar to other LCHF diets but excludes dairy foods.
- Low-carbohydrate:low-fat:high-protein:
  - The Dukan Diet.
- Intermittent fasting (reduced calorie):
  - 5:2 Diet.
  - Daily time-restricted fasting (eg, eating only between 12 pm and 8 pm)
  - The Fast Diet.
- Very low-fat, near vegetarian:
  - The Ornish Diet.

One diet does not suit everyone, probably due to differences in our metabolism. All the diets above have been shown to lead to weight loss, with no one diet being more effective than any other. All effective diets should balance good quality of nutrition with the right balance of energy. In addition, a 'diet' should be easy for you to stick to or there will always be the risk that once you stop being on such a diet, you will go back to your old habits and put back on any weight you have lost.

## Tips for losing weight

It is best not to lose weight too fast. You should aim to lose weight gradually. If you lose more than a kilogram per week, you may lose muscle tissue rather than fat. This isn't sustainable weight loss. So, it is recommended that you lose an average of 0.5 to 1 kg per week (about 1-2 lb per week).

"Some people naturally have a larger frame than others. But this causes quite a small variation in weight and is accounted for in the range of healthy BMI. There is really no such thing as someone who is big-boned."

Source: Dr Jan Sambrook

#### Lifestyle change for life

Some people lose weight by strict dieting for a short period. However, as soon as their diet is over, they often go back to their old eating habits, with their weight going straight back on. Losing weight, and then keeping it off, needs a change in lifestyle *for life*. This includes such things as:

- The type of food and drink that you normally consume.
- Your pattern of eating.
- The amount of physical activity that you do.

Top tip: ask family or friends to help and encourage you to keep to a healthy lifestyle. Consider a lifestyle change for the whole family but do not be put off if you do not get full support.

### Before you start your journey with weight loss

#### Motivation is crucial

To lose weight and to keep it off, it is vital that you should be motivated, really want to lose weight and want to improve aspects of your lifestyle. No weight-loss plan will work unless you have a serious desire to lose weight.

You may not feel that being overweight or obese is a problem to you. So, you may have little motivation or desire to lose weight. That is fine, so long as you understand the health risks.

Top tip: write down the reasons why you would like to lose weight. Keep referring to this list to motivate yourself.

#### Set clear goals with a realistic timescale

Based on the recommended rate of weight loss explained above, set yourself a clear weight loss goal with a realistic timescale. Some people aim to get down to a perfect weight. However, this may be a lot of weight to lose for you and you may become fed up about poor progress, and give up.

You may find it helpful to break up your weight loss goal. For example, you may wish to set yourself a goal to lose 4 kg over the following 4-6 weeks.

Once you have achieved that goal, you can set yourself another, etc.

For most people, you can start to get health benefits by losing even just 5-10% of your starting weight. For example, if your starting weight was 100 kg, losing 5-10 kg in weight will produce some health benefits for you, even if you are still not at your ideal weight.

Top tip: aim to lose weight steadily, around 0.5-1 kg per week. For most people, health benefits can come from losing the first 5-10% of their weight. This is often about 5-10 kg.

#### Set yourself an action plan

In addition to setting yourself realistic weight loss targets, it is also helpful to set yourself an action plan. Be realistic and consider what you feel will have the most impact on your weight. For example, if you currently have a piece of cake every day, your action plan could be to reduce this to twice per week only. Your action plan might start with three main goals; then, once you have achieved these goals, you can reset your action plan and think about other changes you might be able to make. The idea is to make small, gradual changes that you can stick to for life.

#### Monitor your current food intake

It is helpful to know how much you normally eat. Try keeping a diary, writing down everything that you eat and drink over a week or so. Include even the smallest of snacks. Are there times of the day that you tend to snack more? Are you eating three meals a day? Are there some snacks that you don't need? You may find it helpful to discuss your diary with your practice nurse, your doctor or a dietician.

Top tip: don't forget the drinks. Some drinks contain lots of sugar, including alcohol and many fizzy drinks.

### What to eat for weight loss

#### Aim to eat a healthy balanced diet

Briefly, a healthy diet means:

- Avoiding sugary drinks and foods such as chocolate, sweets, biscuits, cakes, etc.
- Eating plenty of fibre in your diet. Foods rich in fibre include wholegrain bread, brown rice and pasta, oats, peas, lentils, grain, beans, fruit, vegetables and seeds.
- Having at least five portions, or ideally 7-9 portions, of a variety of fruit and vegetables per day. These should be in place of foods higher in fat and calories. For example, fresh fruit makes a good, healthy snack if you feel hungry.
- Making up a third of most meals with starch-based foods (such as cereals, bread, potatoes, rice, pasta) is advised in dietary guidelines worldwide. However, many experts now advise avoiding potatoes and refined starch-based foods for weight loss. Wholegrain starchbased foods should be chosen when possible.
- If you are counting calories, you will need to limit fatty food such as
  fatty meats, cheeses, full-cream milk, fried foods, butter, etc. This is
  because fatty foods are very energy dense. Use low-fat options
  where possible but make sure you don't replace the calories with
  foods that contain sugar or other refined carbohydrates instead.
  Examples are:
  - Skimmed or semi-skimmed instead of full-cream milk.
  - If you eat meat, eating lean meat, or poultry such as chicken.
  - Trying to grill, bake or steam rather than fry food. If you do fry food, choose a vegetable oil such as sunflower, rapeseed or olive.
  - Eggs are a healthy option.

- Avoid other foods likely to be high in fat or sugar, such as some takeaway or fast foods.
- Eating three meals a day and not skipping meals. Always have breakfast. Eat each meal slowly, while sitting down. Skipping meals will just make you feel more hungry, make you think more about food and make you more likely to overeat in the evening or snack between meals.
- Trying not to add salt to food and avoiding foods that are salty.
- Including 2-3 portions of fish per week. At least two of these should be 'oily' (such as herring, mackerel, sardines, kippers, pilchards, salmon, or fresh tuna).

You can read more in the separate leaflets called Healthy Eating and Mediterranean Diet. Also, many books on food and health give details. Your practice nurse or dietician may also be able to help.

Top tip: Remember, some low-fat foods and drinks such as alcohol, sugary drinks and sweets, are still very fattening.

#### Extra tips for losing weight

- Eat regular meals. This can help you to burn calories at a faster rate and avoid becoming too hungry. It can help in regulating the hormones that are involved in controlling appetite. It can also help you adapt well to a routine, reduce the likelihood of unplanned temptations and encourage you to develop good self-control.
- 2. Eat breakfast. Eating breakfast helps to control your blood sugar levels, can kick-start your metabolism and prevent you from snacking or eating impulsively later on. It has also been linked with increasing activity levels throughout the day, by replenishing your energy levels. Unsweetened cereal or a boiled egg and a slice of wholemeal toast are good options.

- 3. Make sure each meal is balanced. Think about what you're putting on your plate at each mealtime. At least half your plate should be made up of fruit and/or vegetables. A quarter of the plate should contain your meat, fish, beans or other protein sources. If you aren't limiting your carbohydrates then the other quarter should contain your unrefined starchy carbohydrates such as potatoes, brown rice or bread. A balanced meal will provide you with all the nutrients you need while keeping your blood sugar levels steady and satisfying your hunger.
- 4. Dessert is a treat, not an essential part of a well-balanced meal.
- 5. Don't let yourself get too hungry. If you go for long periods without eating, this can result in you eating more when you eventually do eat and can cause you to crave unhealthy snacks. Eating every 3-4 hours will help to prevent this.

#### Plan what you eat

It is important to plan ahead. Perhaps you could plan each day's meals and recipes the day before, or plan a week's meals at a time. In this way you will know exactly how much food you will be eating. This is better than looking in the cupboard and fridge before mealtimes or snacks to see what is there.

It is best to separate eating from other activities. This helps you to keep to your planned eating for the day. So, try not to eat whilst on the move, whilst watching TV, during meetings, while driving, etc.

Top tip: plan tomorrow's eating today.

#### Change your eating habits

Do you have any eating habits that can improve?

Are you eating larger and larger portions when you have a meal?
 Deliberately try to take smaller portions when you have a meal. Do not feel that you have to empty your plate. Perhaps change the plates in your cupboard (which may be large) to more mediumsized plates. In this way you will naturally serve up smaller portions.

- Do you need to snack? What do you have for snacks? Try changing chocolates, cakes or crisps for fruit or avoid snacking altogether if you think you may just do it out of habit. The Better Health Healthier Families website listed in 'Further Reading and References' below gives tips about healthy snack alternatives.
- Do you have second helpings at mealtimes when you are really already full?
- Skipping meals is usually a bad idea. It sounds a good idea but many
  people just become hungry, have snacks later in the day and eat too
  much at the next meal. Eating at regular mealtimes may be a first
  important change. It is best to have three healthy meals a day.
- Do you always have a pudding? Will a light yoghurt do instead of a sweet pastry? Or maybe you aren't actually hungry for a pudding and eat it out of habit or because it tastes good?
- Do you eat quickly? Are you ready for a second helping before most people have half finished their first plateful? Overweight people, on average, eat faster than slimmer people. It is best to train yourself to chew each mouthful for longer and to eat slowly.
- Do you give yourself time to feel full? It takes 15-20 minutes for the brain to register that you feel full. The hormones that regulate your appetite need time to kick in. So, eating slowly and allowing yourself time to feel full can help you to lose weight.
- Do you watch TV while you are eating? Sometimes having distractions and not concentrating on mealtimes can cause you to overeat. Sit down at the table during meals, focus on what you are eating, taste the food and become more aware of your food and eating habits.

Top tips: eating three healthy meals each day, including breakfast, is better than skipping meals. Eat slowly, chew longer. Put your knife and fork down between each mouthful.

Change the food you buy

One step towards improving eating habits is to change the contents of your shopping basket. For example, if you never buy biscuits and sweets, they will not be in the cupboard to tempt you. Most food labels say what is in the food, so this can help you to buy healthier food. It may be helpful to plan a shopping list and stick to it. However, whilst you are learning which are the healthier foods, it may also be helpful to spend some time comparing food labels before deciding on what to buy.

Top tips: do not shop for food when you are hungry; after a meal is best. Remove temptations by changing the contents of your cupboards.

#### Try new recipes

Most people have a standard set of recipes and meals that they repeat. These may be old favourites; however, you may need to adapt these and also find new, healthier recipes.

Top tip: when you are on a weight-reducing diet, try to learn a new healthy recipe each week. When you have reached your goal weight, you should then have plenty of new healthy meal ideas to help keep your weight down.

#### Consider eating more soup

There is some evidence that eating soup may fill you up for longer. Also, if you have soup as a starter to your meal, you are less likely to overeat for the rest of your meal. If you take, for example, chicken and vegetables and have this with a drink of water, you will feel full for a certain period of time afterwards.

However, if you take the same food but blend it with the water to make a soup, eating the soup can keep your hunger satisfied for a longer period. This is thought to be due to the fact that your stomach empties more slowly if you eat soup than if you eat chicken and vegetables and drink water separately. As a result, your stomach wall is stretched for a longer period and messages are sent to your brain switching off the feeling of hunger for a greater period of time.

Top tip: make sure that it is a low-calorie soup that you are eating. Avoid creamy or high-calorie soups.

Are you feeling physically hungry?

Your appetite is a very powerful thing. This is why many people find it so difficult to lose weight. It is true that some people feel hungry more often than others. However, feeling hungry does not always mean that your body physically needs food. Sometimes you can feel emotional hunger. For example, feeling hungry because you are tired, bored, fed up, upset, etc.

Think about this and try to resist eating as soon as you feel hungry. Feeling hungry is not bad or dangerous for you. Are you feeling physically hungry or are you just looking for food to fulfil an emotional hunger? If you do have a strong appetite, try to fill up at mealtimes with lots of leafy vegetables and fruit. These have a lot of fibre and bulk but are low in calories. There is also some evidence that foods containing a lot of protein, such as eggs and fish, may be best at making you feel full for longer.

Top tips: drink lots or water and eat lots of vegetables and protein-rich foods to help counter physical hunger. Think about whether your hunger is for emotional reasons.

#### A note about special diets

Many special 'wonder' diets are advertised but they are often not helpful. This is because your old eating habits will usually return after a short special diet, and weight often goes back on.

Top tip: it is not usually a special diet that you need, but a lifelong change to a healthier diet as part of a healthier lifestyle.

### Be careful about what you drink

Many people use drinks full of calories to quench their thirst. Sugary drinks (such as cola, tea and coffee with sugar and milky drinks) all contain calories. Alcoholic drinks also contain a lot of calories.

Giving up sugar in your tea or coffee is a simple way to help you to lose weight. Most people really miss the sugar at first but after a week or two without, they have got used to it.

One of the easiest ways to cut back on calories is simply to drink water as your main drink. Drinking water just before meals may also help people to lose weight.

Top tips: keep some water in a bottle in the fridge. Chilled water is surprisingly refreshing. The Better Health Healthier Families website listed in 'Further Reading and References' below also gives tips and advice about drink swaps to cut down on the calories.

### Increase your physical activity levels

It is recommended that all adults should aim for at least 30 minutes of moderate-intensity physical activity on at least five days of the week. However, if you are overweight or obese and are aiming to lose weight, if possible you should try to do around 60-90 minutes on at least five days of the week.

Experts disagree on how much exercise helps with losing weight. Some recommend that it has to be really vigorous in order to help but few people can maintain this for long. However, there is no disagreement at all about the benefits of exercise for health and to counter the risks of being obese or overweight.

Moderate physical activity includes: brisk walking, jogging, dancing, swimming, badminton, tennis, etc. In addition, try to do more in your daily routines. For example, use stairs instead of lifts, walk or cycle to work or school, etc. Avoid sitting for too long in front of the television or a computer screen. Take regular breaks whilst working.

The good news is that you don't have to do this physical activity all in one chunk. You can break it up into blocks of 10-15 minutes. See the separate leaflet called Physical Activity for Health.

Top tip: build your exercise levels up gradually. If you are not used to physical activity, try starting with a 30-minute brisk walk every day and then building up from there.

# Monitor your behaviour and progress

Just as keeping a food diary can be helpful at the beginning if you are trying to lose weight, it can also be useful as a way to monitor your eating during your weight loss. Studies have shown that keeping a food diary can help people lose weight just through the process of writing things down. You can use the same diary to keep a track of your physical activity levels as well.

It is also important to weigh yourself regularly to monitor your progress. Once weekly is recommended. The first kilogram is the easiest to lose. This is because you lose water from your body at first as well as fat.

Be aware that the first kilogram or so may seem to fall off but then the weight loss slows down. This is normal. Also, don't be disheartened by minor weight increases or levelling off in weight for a few days. Look for the overall trend in your weight loss over several months.

Top tip: regular weighing and encouragement by a practice nurse or dietician may be helpful.

### Get help and support

Some people may feel motivated enough and have all the information they need in order to lose weight without any help from others. However, you don't have to try to lose weight alone. There is a wealth of help available. Ask your doctor or practice nurse for advice. A referral to a dietician may be helpful.

One-on-one counselling or group counselling may be available in your area on the NHS. There may also be some local groups to help you increase your physical activity levels.

A number of commercial weight loss groups meet regularly in the UK. In fact, there is some research evidence to suggest that people who join a weight loss group are more likely to be successful in losing weight than those who don't. There are also internet-based programmes and self-help books that can help you with your weight loss.

## Medicines to help with weight loss

Medication to help with weight loss may be an option for some people who want to lose weight. However, there are no wonder medicines available and lifestyle changes to improve your diet and increase your physical activity levels are still important.

In the UK there are two medicines licensed to help with weight loss: orlistat and liraglutide (Saxenda®). Semaglutide (Ozempic®) is also sometimes used. You can read more about them in the separate leaflets called Obesity (Overweight) and Orlistat (Weight Loss Medicine). It's generally accepted that these medicines only work effectively if used alongside diet and exercise changes.

Note: two other medicines, sibutramine and rimonabant, previously used to help with weight loss, are no longer available in the UK because of concerns over their safety.

See the separate article called What are weight loss injections and are they safe?

### Surgery to help with weight loss

This may be an option if you are very obese. However, surgery is usually only offered if other ways to lose weight have not worked (including diet, increasing your physical activity levels, and orlistat).

Weight loss surgery usually gives very good results and most people do lose a lot of weight. But this is specialist surgery and it is a major operation. In some people, surgery may not be advised because health issues may mean that having an anaesthetic could be dangerous. See the separate leaflet called Weight Loss Surgery.

## Tempting situations and special occasions

It is natural that you will be tempted by different situations to put you off track with your eating and weight loss. It is important to recognise that holidays, festivals, eating out, etc, may affect your everyday food choices and what you had planned to eat.

Can you identify any tempting situations? Some people find that watching food programmes on TV makes them feel hungry. How about smells from the kitchen from someone cooking who is not aware that you are trying to lose weight? Do you get pressure from family or friends to eat or drink more? Can you avoid tempting situations? If not, think about ways of coping with them.

If you are going to be faced with a tempting situation, create a plan of action. For example, if you are going out for dinner your plan of action might be to have a starter and a main course, rather than a main and a pudding - or all three!

Top tip: clean your teeth or take a short brisk walk when you are tempted to eat between meals.

### Stress, depression and your weight

Many people eat as a comfort, or as a way of coping with stress. How do you cope with stress? Is stress, unhappiness, depression, etc, a reason for you to overeat or to binge eat? If so, can you plan alternative strategies? For example, relaxation tapes, going for a walk, talking to a friend, etc.

Top tip: see a doctor if you feel that depression is a problem. Depression can often be treated.

### Keeping the weight off

Many people lose weight but at the end of their 'diet', the weight goes back on. The main reason this happens is because their weight-reducing diet was only a temporary change to their unhealthy diet and lifestyle. To keep your weight off, it is important that you make permanent changes. This usually means:

- Keeping to a healthy diet.
- Exercising regularly.
- A change for the whole household. It is difficult for one member of a
  household to shop and eat differently to the rest. It is best that the
  whole household should eat a healthy diet.

It does not mean less enjoyment of food. However, it may take a while to learn to enjoy *different* foods, meals and recipes. Some people need more support to keep to their new weight than when they were actually dieting and losing weight. A local support group may be able to help.

Top tip: after losing some weight, weigh yourself once every week or two to keep a check on your weight. This way you will see if your weight starts to increase again and you can do something about it early on.

#### Dealing with lapses

When we slip off track, it's easy to feel like forgetting the whole thing altogether. Lapses are a very normal part of losing weight and the way you deal with it can either make or break your weight loss success. It's better to learn from it and move on, rather than giving up completely. If you have a lapse, consider the following points:

- 1. What was the reason for going off track?
- 2. What other ways could I have dealt with it?
- 3. What can I do in the future to deal with the situation better?

Think back to the reasons why you wanted to lose weight in the first place. It can be helpful to consider the positive and successful aspects of your weight loss journey so far. Concentrating on the positive aspects and what you have achieved can help to re-motivate you and remind you not to give up. Tomorrow is another day.

### **Further reading**

- Weight management before, during and after pregnancy; NICE Public Health Guideline (July 2010)
- Johnston BC, Kanters S, Bandayrel K, et al; Comparison of weight loss among named diet programs in overweight and obese adults: a meta-analysis. JAMA. 2014 Sep 3;312(9):923-33. doi: 10.1001/jama.2014.10397.
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- Liraglutide for managing overweight and obesity; NICE Technology Appraisal Guidance (last updated: December 2020)
- Obesity; NICE CKS, August 2023 (UK access only)
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