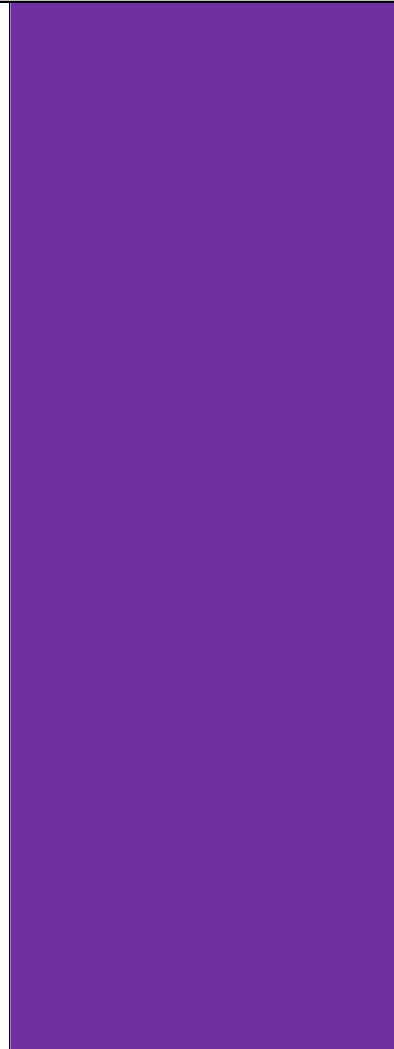


Weight Loss

Unit

6



## Unit 6

### Weight loss

Losing weight depends on energy balance. If we consume more energy from food and drink than we burn through maintaining the body's functions (metabolism) and physical activity, we will gain weight. Cutting calories by reducing the intake of our food and drink, and increasing physical activity makes us lose weight. In short the negative energy balance results in weight loss. If we reduce our daily energy intake to around 500 calories (kcal) below our energy requirements, we will lose about 0.5kg (1lb) a week. This is a sensible rate of weight loss.

#### Benefits of weight loss

Most of the health hazards of obesity are reversed by losing weight. However, the likelihood of gallstone formation may well increase during weight reduction in an obese person. This is because cholesterol from adipose tissue is mobilised, resulting in the bile becoming even more supersaturated with cholesterol. Once desirable weight is achieved the risk is reduced. The psychological benefits are also important- feeling more active, increasing confidence and the ability to wear stylish clothes. But losing too much weight can be harmful, both physically and psychologically, and should not be pursued.

#### Weight Loss Motivation

Motivation is one of the most important factors which determine how successful we are at what we do. It is the driving force that gives us the will to accomplish tasks and eventually succeed at reaching an ultimate goal. Motivation levels can vary each day depending on how we feel, or how we view certain experiences. For anyone to succeed at slimming motivation will be the most important part to work at, it will provide us with the determination to get up and exercise even if we don't feel up to it. Motivation also drives us to stick to the low fat selections and recipes required to keep our progress moving. The strength of our motivation will determine how successful we are in our weight loss efforts as the more we progress and lose weight the more difficult it will be to lose more as the body is pushed past its natural set points.

#### Psychological factors

Successful weight loss can only be achieved if a person wants to lose weight and is motivated to change eating habits. Advice should take account of current eating habits, lifestyle and background, and changes in food intake should be agreed with the person concerned.

Before a person starts making changes to his lifestyle, it's important that he asks himself, if this is the right time. Am I motivated to change? The reasons one decides to lose weight can be personal to the person. Sometimes changes in the circumstances, such as a new job or house move, may be the key to the weight loss success. Whatever is the reason one should make sure that he/she is feeling positive and is ready for the challenge. Some general advice which can be given in addition to dietary advice includes:

- eating from a smaller plate keeping as busy as possible avoiding shopping when hungry
- making a shopping list and then sticking to it
- eating slowly and chewing well avoiding periods of starvation

Support is often a vital ingredient in weight loss, and people should be encouraged to return to the dietician for discussion of their progress.

### **Developing Weight Loss Motivation**

Most people will have some degree of motivation as they have already decided to take action. The problem for many is keeping the levels high enough to prevent any relapse.

#### **Learning to accept self:**

The most common reason people lose interest in exercise / dieting is due to unrealistic goals. Some see the images in the media or television and want to look like them but people should know that usually the images presented in magazines are of those people who are under weight. Whereas a healthy body weight should be desired and maintained. A person should learn to love himself for who he is, not who he wishes to be. One should acknowledge that he needs to improve his health or weight.

#### **Focusing on positives not negatives:**

Many of us have a tendency to look at our bad points, however once a person starts to accept himself it will be easier to focus on the positive side more. To make it easier a person can try writing a list of all the good things in what he has done or what he likes about his physical self. The he should practice running these positives.

#### **Setting goals**

Setting goals has the advantage of focusing on what one intends to achieve. A goal acts as a form of mental contract with the person and his degree of motivation that will drive him to complete that contract. If the goal is too hard to achieve it can affect the success. The subconscious mind does not distinguish between big or little, it only knows success or failure. If goal is set for four training sessions each week but the person can only complete three then his mind will see this as a failure. For this reason we must set realistic and easily reachable goals. When a person attains one goal it gives momentum to increase the level of motivation further.

To lose weight - and keep it off –the person will need to make permanent changes to his diet and physical activity patterns. First comes the daily routine of the person. Keeping a food diary may help to identify patterns in the eating behaviour. This can help to decide on realistic changes which need to be made. Achievable goals must be set at this stage and modifications to the person's existing diet and physical activity are made. One can aim to lose about five to ten per cent of his initial body weight over a few months. Research shows this kind of weight loss is achievable and will improve the person's health. Once five percent weight loss has been achieved, another target for losing five percent more can be set and achieved.

#### **Sticking with it**

A person may lose more weight in some weeks than in others, but as long as the weight continues to decrease overall there's no need to worry. If weight stays the same for a week or two, the person's focus should be on the amount and type of food he is eating and should try to be a little more active.

## Basal metabolic rate

The term 'metabolic rate' refers to the energy (calories) we expend over a day just keeping our body functions functioning - our heart beating and our lungs breathing, for example. This is often called the basal or resting metabolic rate. Scientists have measured the exact amount of calories overweight and healthy weight people burn while sitting or lying quietly. This was done by measuring the amount of oxygen breathed in and the amount of carbon dioxide breathed out. Results from these studies have consistently shown that overweight people use more energy to keep their bodies working. This is because they have larger bodies with bigger muscles and internal organs. However, after taking into account differences in body size, lean and obese people have been shown to have similar metabolic rates.

Basal metabolic rate can be influenced by body composition. Muscle requires more energy to function than fat. As we get older, we tend to gain fat and lose muscle. This explains why basal metabolic rate tends to decrease with age. Similarly, two people of the same age and weight may have different metabolic rates if one is fitter (and has more muscle) than the other.

Of course, we also use energy to move around during the day. Basal metabolic rate and the energy required for physical activity make up our total energy expenditure, or total energy needs. Our total energy needs depend very much on how active we are. Often, overweight people believe they eat very little and still put on weight, hence the 'slow metabolism' theory, but research has shown people tend to eat more than they think.

When asked to write down everything they've consumed in a day, people tend to report eating far less than they actually do. This may be to impress the researcher or because they genuinely forget to include some items. On the day they recorded their intake, they may even have chosen lower calorie foods than they'd normally eat. The bottom line is we will gain weight if we consume more calories than our body needs. This can be a difficult fact to face, but recognising the need for change is vital for successful weight loss.

## How does Human Metabolism Work?

Our Metabolism is the rate at which the body uses energy to support all basic functions essential to sustain life, plus all energy requirements for additional activity and digestive processes.

Human metabolism is basically made up of three parts:

**Physical activity**

**20-25%**

**Thermic effect of food**

**10%**



**Resting Metabolism**  
**70%**

### **1. Resting Metabolic Rate (RMR)**

This is the amount of calories needed to run all essential functions and chemical reactions while in a rested and quiet state. RMR is the largest part of total metabolism and accounts for 65 - 75% of calories burned in a day.

If lean weight is lost from the body through increased protein metabolism the RMR decreases. This often happens when people go on a strict diet; the body is forced into what's known as a "negative nitrogen balance" which means more protein is lost than what is replaced due to less protein/energy intake. This imbalance causes a gradual loss in lean weight thus lowering the RMR.

### **2. Thermic Effect of Food (TEF)**

The body uses energy to digest and absorb the nutrients present in the food we eat. The rate of energy used for the Thermic Effect of Food is about 10%; it can be increased depending on the composition of each meal. If we overeat the TEF actually increases due to more food to digest, the stomach and intestines have to work harder and longer. It means if we ate an extra 3500 calories (number of calories per pound of fat) we wouldn't actually gain 1 pound of body fat because the TEF has to be accounted for, we would gain less. The opposite also happens if we cut 3500 calories to lose 1 pound. The TEF decreases because there would be less food/nutrients to process so energy expenditure would reduce, thus we would lose less than a pound in weight. Calories do count but our body has sophisticated mechanisms to balance energy within the body to enable us hold onto as much energy as possible for a time when starvation may occur!

### **3. Physical activity**

The amount of energy the body burns during daily activities such as exercise, recreation, work, housework, etc. Daily physical activities account for 20 - 40% of calories burned each day. This part will vary depending on the individual and how active they are each day. A sedentary person will require less calories to maintain weight than a busy worker in a construction site! It is here where we can have the greatest effect on metabolism. The intensity, frequency and duration of any activity all have an effect on metabolism.

## **Factors that Effect Speed of Metabolism**

### **1. Body Weight**

Size of the body has a major influence on the speed of metabolism. A naturally big body means more cells to maintain which requires more calories; therefore larger people tend to have a high metabolism.

## 2. Weight gain

Extra weight also helps speed up metabolism as each movement requires the contraction of more muscle cells to move the mass; even if much of the extra weight gained is fat it still requires more effort to move, however fat is not metabolically active so metabolism speed will only be higher during movement.

## 3. Body composition

Body composition or proportion of weight determines the speed of metabolism. Body composition is the difference between total lean weight compared to fat weight. A higher percentage of lean body weight results in a high metabolic rate compared with individuals of the same weight with a higher fat percentage.

An overweight person weighing the same as an athlete can burn almost the same amount of calories during exercise; however, the leaner person burns many more calories at rest because lean body weight is much more metabolically active than fat weight. Problems are exaggerated if an overweight person leads a sedentary life, turning down a chance to speed up metabolism naturally!

Another interesting point is that the athlete would be a smaller person (not height) as muscle occupies less space due to its higher density compared to fat, fat takes up more room!

## 4. Sex

Men naturally have a higher degree of lean muscle and research suggests this is mainly due to the male sex hormones resulting in the difference in body size and composition.

## 5. Age

Age affects the metabolism for both men and women. After 30 years of age there is usually a gradual decline in lean body weight and an increase in fat weight although this is mainly due to hormonal changes. This will lead to a lowering of the metabolism.

A decline in our metabolic rate can also be attributed to a gradual change in lifestyle, which is one thing we can control. It is interesting to note that regular exercise in adulthood will slow the rate at which lean weight is lost and help keep metabolism optimal.

## 6. Drugs

There are some pharmaceutical drugs that can influence the speed of metabolism but the more common ones are nicotine and caffeine although the effects are very slight and the health risks outweigh the benefit!

## 7. Hereditary

Differences in our genes can affect metabolism. Some people can have the same weight, fat content and age but have different body types which result in different metabolic rates. Other genes could influence the production of more "beneficial" enzymes which aid fat uptake and utilisation.

## 8. Hormones

Hormones control many of the body's main chemical processes, therefore can influence metabolism. A rise in some of the body's important hormones through regular exercise or even through genetic disorders can increase lean weight and change body composition.

## 9. Psychological state

Stress and anxiety can cause a rapid increase in energy expenditure. When a person is said to be "on edge" or nervous they are in a state of high alert, different chemicals circulate the blood vessels and communicate to cells to break down energy stores ready to provide a greater supply of energy if needed.

## 10. Temperature

It may sound strange but the climate around us can influence the speed of metabolism. If we are too cold we shiver which burns up much energy from the constant contraction and relaxation of muscle cells trying to produce heat to maintain a constant body temperature. When we are hot we also burn more calories through the process of sweating.

## Why we gain weight? Genes

An underlying tendency to obesity may be the result of our genes. People who generally have little problem controlling their weight seem to have a precisely tuned appetite.

People who gain weight, on the other hand, may be less sensitive to their body's signals of fullness. Many genes have been identified that either increase or decrease appetite.

People who generally have little problem controlling their weight seem to have a precisely tuned appetite, while people who struggle to control their weight may be less sensitive to their body's signals of fullness. Studies of twins who've been raised apart attribute almost two-thirds of the difference in body fatness to genetic factors. However, genetic factors don't make obesity inevitable.

## Habits

Eating habits develop over many years, and are strongly influenced by our first tastes as babies and dietary patterns formed in early childhood. These are then continuously reinforced as we grow up, which makes them difficult to change. Too often, they lead to eating too many calories. Recognising these unhelpful habits and replacing them with positive behaviour are key steps in successful weight control.

## Food

People who tend to choose foods that are high in fat or contain a lot of energy (calories) in small portions are more likely to gain weight than those who fill their plates with bulky, low-energy foods, such as bread, fruit and vegetables. Bigger portion sizes also mean more calories.

## Emotions

Overeating can also be triggered by our emotions. Some people turn to food or alcohol in stressful situations, such as after a family argument or a particularly difficult day at work.

Other vulnerable times may be when we are feeling tired, bored or sad. Identifying triggers and cues that cause someone to overeat can help to change behaviour in these situations and to avoid unwanted calories.

The person should write down in the food diary that how many times his emotions lead to eating. This will help to identify situations when he is particularly vulnerable to excess snacking.

## Other causes

### Medical conditions

Some medical conditions can cause obesity, but these are rare. Prader-Willi syndrome, for example, is a genetic disorder that can result in obesity because people with the condition don't feel full (satiated) and overeat as a result. Some brain disorders can also cause obesity. For example, brain tumours can result in obesity if they grow in the part of the brain that affects appetite control. However, these are extremely rare.

### Medication

Drugs that treat high blood pressure, inflammatory conditions (steroids) and mood disorders can contribute to weight gain by stimulating appetite or decreasing energy expenditure. In some cases, the weight gain is unrelated to the medication. For example, drugs that help to improve low mood may increase appetite simply because they make the person feel better, so he is more likely to feel like eating. Some drugs encourage the body to retain water. This may lead to weight gain, but as it isn't fat the problem will resolve once the underlying disease has been treated.

### Knowing calorie intake

When planning weight loss, the first thing which is needed is to know the calorie requirement for the person. How can anyone lower daily caloric intake to less than their body requires if calorie requirement is not calculated first. Losing fat weight does not mean simply reducing calorie intake by cutting out complete meals or not eating for a few days. Fat weight should be lost gradually the same way it was gained, it therefore requires a gradual decrease when lowering daily calorie intake.

In order to lower calorie intake slowly we must first calculate the calorie requirements of the body taking into account different body characteristics, such as height, weight, age, gender and activity levels.

In the UK, it has been estimated that the average woman needs around 2000 calories per day to maintain weight. This calorie requirement rises to 2500 for average men. However, these figures are based on averages and may be completely different for many individuals. Women who weigh more will generally require more calories although, if the same person becomes less active then calorie requirements will be lower. Also, men tend to need more calories than women, often due to a leaner body composition. For this reason calorie requirements are highly individual and therefore require a more accurate approach.

Calculating calorie needs for the different type of body characteristics such as height, gender, age and activity levels.

### Calorie Intake to Lose Weight

Calorie intake should be reduced in order to reduce weight, but how much of a calorie cut could make a big difference? Sometimes people make the mistake of cutting calorie intake too much, too soon. They choose to follow a very low calorie intake diet in the belief that more fat will be burned from their excess fat stores. They lose weight rapidly, but fail to realise that most of the loss is simply fluid lost from the cells. The body ends up using up a large portion of protein and carbohydrate stores (Glycogen in the muscles), in order to balance energy

metabolism. This is required to provide energy to make up for the deficit from the low calorie intake. Fat is used up but, only a small percentage.

### **Calorie Intake to lose FAT!**

Sensible weight loss for healthy adults should start with a 500 calorie intake reduction from what the body requires. Then if progress halts for a week or so, calorie intake can be reduced by burning a further 200 calories. This way the body can slowly establish a new energy balance, rather than shocking the system into breaking down lean weight, which actually helps keep the metabolism high, meaning more calories can be burned! The calorie intake should never go below a 1200 calorie diet mark, and in most cases, should stay above 1500 calories. Remember, with 3500 calories to each pound, losing stored fat will be a gradual process therefore; a reduction in calorie intake should be gradual too!

### **Do calories have to be exact?**

When trying to lose weight is important to know what the person's daily calorie needs are, even if it is a rough estimate. With this information one can know the intake of calories needed each day. The number of calories needed means how many calories a body require in order to maintain present body weight. In order to lose weight the person needs to consume less than his body requires but, how much less?

Less Calories Than Body Needs = Weight Loss.

Generally it is around 500 calories less each day. This could be made up of 250 less from diet and 250 extra calories burned from an increase in activity levels. This is fine for an average person who may only need to lose a few pounds however, many people have different energy intakes, and some may be consuming far more than they require before deciding to go on a diet. A better way is to reduce calorie consumption by around 15% of present calorie intake. This is because many people may find out how many calories they require but, they may be consuming more than that figure with their current intake. So, if someone is consuming 3000 calories before dieting, and they reduce it by 500, it would mean a total of 2500 per day. But what if he/she only needs 2500 calories to maintain the present weight; if this is the case then they won't lose any weight at all.

### **Calories needed per day to lose weight**

To determine the number of calories needed to lose weight we must first try to calculate the calories required by the body. Only then is it possible to slowly lower the calories needed by the body until we are in a negative energy balance. The gradual reduction in calories required encourages the body to slowly use up fat stores rather than burning up protein from muscle - this is what often happens when calories are cut too quickly and results in a lowered metabolism!

### **Calorie burning Facts**

The number of calories burned during a day depends on various factors. Some factors we can control like exercising more or working harder, others we have less control over like the metabolism and which fuel cells used for energy.

The faster we move the more calories burned

1. The more effort we put into a movement the more calories we burn
2. A heavier person will experience greater calorie burning than lighter individuals during movement - more effort to move extra weight
3. The more muscle / lean weight we possess the more calories burned even at rest - more cell mass to maintain!
4. Increasing fitness levels increases amount of fat calories burned during most movements

Let's briefly continue on cell contraction a little just to explain something really important about calories used during exercise. When lifting something like a drink, the glass is light and most people accomplish this task easily, but we control that lift by subconsciously recruiting only a small number of bicep muscle cells to contract, if all cells were recruited the glass would probably end up in our face! - The point is:

- less contracting cells = less calories burned
- more contracting muscle cells = more calories burned during exercise

### Calorie Burning Facts on Exercise

Calorie burning can be increased by controlling how we exercise. Different exercises burn various amounts of energy and some use different fuels.

1. Calorie burning is higher when exercise is performed for longer periods
2. If exercise is performed at a faster pace more calories will be used
3. A higher number of calories are burned when exercise becomes intense
4. The heavier an individual the more energy burned during exercise
5. The more lean weight an individual possesses the more energy burned during rest
6. Fitter people tend to burn more fat during exercise

We should all aim to take 30 minutes of moderate exercise 5 days a week. This can be a mixture of all types of physical activity, anything that makes a person slightly out of breath and raises his heart rate slightly.

This table doesn't only show values for organised exercises, but also for more enjoyable pass times, like walking, dancing and gardening which many of us enjoy to do.

ACTIVITY	CALORIES
Leisurely walk	80
Dancing	120
Cycling	160
Running	90
Aerobics	140
Weights	140
Cleaning	50
Driving	35

Swimming	100
Tennis	120
Rowing	200
Golf	45
Circuit Training	260
Skipping	100
Gardening	160
Skiing	130

It is interesting to note that our days resting requirement is 1300 calories for women, and 1600 for men. This is the minimum calories we would need to maintain a healthy weight if we stayed in bed all day!

### Healthy eating

Any weight reduction diet should be based on the principles of healthy eating. Although the diet must be lower in energy than the individual's normal diet, it is important that it should continue to provide adequate amounts of all the essential nutrients. A multivitamin supplement may be recommended if the diet provides less than 6.3 MJ (1500 kcal) a day. Emphasis should therefore be given to foods which are nutrient dense but low in energy. In practice this means that reducing fat and sugar intake and increasing the intake of complex carbohydrates.

Fat is the richest source of energy in the diet providing 37.8 kJ/g (9 kcal/g) compared with carbohydrate and protein which both provide about 16.8 kJ/g (4 kcal/g). Foods high in fat should be replaced by lower alternatives, e.g. skimmed milk or semi skimmed milk, reduced fat spreads and cheeses meat should be lean and poultry should be eaten without the skin. Fish consumption should be encouraged. Chips should be eaten only occasionally; oven chips are lower in fat than fries. Frying should be discouraged or reduced to the minimum, and should be baked, grilled or microwaved instead.

Sugar is a source of empty calories'. There is no point in eating sugary foods; they provide nothing but calories. Fizzy drinks and squashes should be of diet type. Chocolate, pastries, cakes and biscuits contain a lot of fat as well sugar and should be eaten only occasionally.

Foods rich in starchy carbohydrates particularly those rich in non-starch polysaccharides (NSP), should be encouraged. Wholegrain cereals, pulses, fruit and vegetables are particularly useful as between the meal snacks.

The advice to eat bread and potatoes while trying to lose weight is a surprise to many. Because carbohydrates have long been viewed as fattening and many slimmer avoid it. Yet on a weight on weight basis carbohydrate provides less than half the energy of fat. Bread and potatoes are not of themselves fattening; the problem lies in the fat that is put on them. Thus a slice of bread provides only 273 kJ (65 kcal); spreading with butter can easily double this figure. A portion of boiled potatoes provides about 420 kJ (100 kcal); the same sized portion of chips provides 1.3 MJ (300 kcal). It is not necessary to omit favourite foods completely. An occasional bar of chocolate or a packet of chips does not run a diet.

### Healthy weight loss diet

A sensible rate of weight loss is around 0.5kg to 1kg (1lb to 2lb) a week. To achieve this, the person needs an energy deficit of 3,500kcal to 7,000kcal a week, which means eating 500 to 1,000 fewer calories a day. This can be done by replacing high-fat foods with those that are low in fat such as fruit, vegetables, unrefined carbohydrates and lower-fat dairy products, and by being more physically active.

It's also important to watch the size of the portions. Portion control is important. Many of us have little idea of the amount of food our bodies really need. It is best to severely restrict the amount of calories one eats. However, it is very important not to skip meals. Our body needs regular intakes of right foods. The number of calories we are taking in obviously does matter, but counting calories is not the whole story to weight loss. How our body processes the food we give it plays as big a role in weight management as how much we eat.

### Meat, fish and alternatives

Meat, fish, eggs and alternatives, such as beans and lentils, provide protein, which is essential for growth and repair. These protein-rich foods, meat in particular, are also good sources of iron, selenium, zinc and B vitamins. Lean sources of protein can also help to curb our appetite. To help reduce the calories one gets from fat, the person should remove the skin from chicken, cut off obvious bits of fat from lamb, beef, and should use minimum oil for cooking. A person should eat two portions of fish a week, one of which should be oily fish rich in omega-3 fatty acids, such as salmon, sardines or trout.

One should eat two portions of protein-rich foods every day. A portion is equivalent to:

- Meat and fish the size of a pack of playing cards
- Two eggs
- Four tablespoons of lentils or beans

### Bread, cereals and potatoes

Starchy carbohydrate foods, such as bread, potatoes, rice and breakfast cereals, provide us with energy and other nutrients, including iron and B vitamins. Starchy foods should make up about a third of the total daily energy intake. Unrefined types should be chosen that are higher in fibre. They'll make the person feel full for longer and help to control hunger. A balanced diet should contain about five portions of starchy foods each day. A portion is equivalent to:

- Three tablespoons of breakfast cereal
- One large slice of bread
- One chapatti
- Three heaped tablespoons of pasta
- Two egg-size potatoes
- Two heaped tablespoons of rice

### Fruit and vegetables

Fruit and vegetables provide essential nutrients such as vitamins and minerals, and contain many other compounds associated with good health. Everyone should aim to increase the amount of fruit and vegetables in their diet. Because fruit and vegetables are bulky and contain a lot of water, they can help to control the calorie intake. One should aim for at least five portions a day.

A portion weighs about 80g and can include fresh, canned, frozen and dried fruit and vegetables.

A portion is equivalent to:

- Two large tablespoons of vegetables, such as peas, carrots, Swede or broccoli
- Whole fruits, such as one apple, one orange, one pear
- A handful of grapes
- Two tablespoons of strawberries or raspberries
- One small glass of fruit juice
- A handful of dried fruit

### **Milk and dairy foods**

Foods such as cheese, yoghurt and fromage frais are an important source of calcium as well as providing protein and vitamins. Low-fat or reduced-fat versions should be chosen to reduce the amount of calories in

the diet. One should aim for around three portions of dairy foods a day. A portion is equivalent to:

- A medium-size glass of milk
- A small pot of yoghurt
- A small matchbox-sized piece of cheese

### **Foods containing fat and/or sugar**

Fatty and sugary foods, such as crisps, spreads, oils, creamy dressings, sweets, cakes, biscuits and chocolate and sugar-rich drinks, including alcohol, are high in calories but relatively low in nutrients, such as vitamins and minerals. Eating healthily means including foods that are packed with nutrients rather than packed with energy.

One should reduce the intake of these foods as much as possible. We can do this by:

- Swapping sugary and fatty snacks for fruit, diet yoghurt or a slice of wholemeal toast with reduced-fat spread.
- Choosing water, reduced-fat milk or low-calorie drinks instead of sugar-rich drinks
- Using only a scraping of spread on your bread and using an oil spray to limit fat when cooking

Alcohol contains around 7 kcal per gram. As well as adding calories to the diet, it can stimulate the appetite and weaken our healthy eating intentions.

### **Salt**

On average, we eat over 50 per cent more salt than the recommended level and more than twice the amount we actually need. We've become used to eating foods containing salt, so reducing the amount we consume often means adjusting our palates.

A lot of salt comes from processed foods, so look for low-salt varieties and check the salt content on the label. One can also cut salt by:

- Preparing foods from fresh ingredients as much as possible
- Avoiding salty snacks, such as crisps and salted nuts
- Choosing 'unsalted', 'no added salt' or 'reduced salt' foods

### **Cravings**

One of the most common problems with diets and food deprivation is cravings. Cravings are usually associated with low blood sugar levels, caused by eating sugar or refined carbohydrates, skipping meals, a lack of protein and good fats in the diet and sometimes an overgrowth in the intestines of the yeast Candida. If our blood sugar level drops too low, our brain is not being fed

with the glucose it needs. The brain will not allow itself to starve. It will do anything to correct this situation, and this includes sending some very powerful signals to the person. When the brain needs glucose, it sends signals to the person to eat sugar, so that it gets glucose very quickly. The solution is to avoid letting the brain get low on glucose. This is why skipping meals is not a good idea.

### How the good fats can help

Cravings for sugar can be alleviated by ensuring that you have some of the good fats in your diet. It is sugar that makes us gain weight not necessarily fats. But the fats we eat need to be good fats, such as olive oil or from nuts and seeds. The bad fats such as hydrogenated fats and trans fats, can make the person gain weight because they are toxic to the system. Good fats can actually make us more metabolically active, which means we will burn more calories if we eat them. The problem with sugar is that it raises insulin levels. Insulin is necessary for life but in excess it can be damaging. Insulin is a fat-sparing hormone, which means that we have high levels of insulin in our blood, signals are sent within our body to store and conserve fat, not burn it. Therefore a person could be running on a treadmill all day long to try to burn fat, but it won't happen because his body is getting chemical messages from the high levels of insulin in the blood to hang onto fat. So weight loss is not simply a matter of calories in and calories out. It also depends on keeping the sugar levels stable. One can do this by eating regular meals that include healthy fats and protein.

### Stress and weight gain

Stress makes us fat. It results in elevated levels of cortisol. Remember that cortisol is not a bad hormone: in fact, we cannot live without it. However as with insulin, chronically elevated levels of cortisol are not good for our health. The key is to strive for balance. Remember that our body has been designed to function as bodies did during the times of feast and times of famine. There were times when people were faced with sudden tiger and peaceful times when they could lie happily under a bush digesting their food. The answer here is to manage the stress levels so that one does not feel stressed all the time.

When we are stressed and our stressors or 'modern tigers' are not going away, cortisol is elevated. This is because the body is gearing up for a fight. To fight, we need energy. One of the things that cortisol does is to encourage our body to make energy from the sources other than carbohydrates such as protein. This means that it has the ability to tell our body to start breaking down our own body proteins (such as our muscles) to make sugar which then enters the blood. High levels of sugar in the blood cause insulin to be produced, but this elevated cortisol situation also encourages insulin. So we can have a situation when we may have high blood sugar levels, high insulin levels in the blood and high cortisol. This situation encourages weight gain which is particularly noticeable around the abdominal area.

## Maintaining a healthy weight

### Why keep a diary?

Food diaries help us to become more aware of our eating and activity habits, and problem areas. They give us a basis from which to plan changes and set goals, and allow us to look back and see what we have changed over time. This can be very motivating.

A food and activity diary will also encourage the person to make conscious choices about what he

eats and does, writing it down gives him the chance to think twice before he acts. This is one of the most useful things one can do to help gain control of his weight. It's hard to remember what we have eaten at the end of the day, so we should try to record things as we go. It can also help to make a note of any thoughts or feelings linked to eating, especially if when someone wants to eat for comfort only and when he is not actually hungry.

Writing down everything a person eats and drinks can be difficult but the more honest a person is, the more it will help him. It can take a little while to get used to and sometimes it may seem like a waste of time, but it's worth the effort. People who successfully lose weight and keep it off monitor what they eat and how active they are. This could be in the form of a diary, or in their head. It's a matter of finding out what works best for someone.

### Example of how to fill in the diary

Time	Food and drink	Where and who with	Thoughts
8am	Glass of orange juice	At home with family	Rushing to get everyone organised
9am	Chocolate muffin, large coffee	Coffee shop - alone	Stressed, need something sweet

### Weight loss goal planning

Week/Date	Exercise Calories		Calories Consumed		Weight	
	Goal Calories	Actual Calories	Goal Calories	Actual Calories	Goal Weight	Actual Weight
Week 1						
Week 2						
Week 3						
Week 4						
Week 5						
Week 6						
Week 7						
Week 8						

**Diet Diary**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Calories allowed:** \_\_\_\_\_

**Breakfast**

Food and Beverages	Number of Calories	Remaining Calorie Allowance

**Lunch**

Food and Beverages	Number of Calories	Remaining Calorie Allowance

**Dinner/ Supper**

Food and Beverages	Number of Calories	Remaining Calorie Allowance

**Snacks**

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Food and Beverages	Number of Calories	Remaining Calorie Allowance

**Exercise diary**

**Name:** \_\_\_\_\_

**Calories to burn:** \_\_\_\_\_ (goal)

*Remember 3500 = 1lb of fat*

**Exercise**

Day/Date	Type and duration of Exercise	Number of Calories burned	Remaining Calories To burn
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			

Day 7			

## Maintaining target weight

### Long-term change

If the realistic target weight is achieved but the person goes back to his old eating habits and activity levels he will put the weight back on. It is as simple as that. This is usually the problem with quick-fix diets; they don't help anyone to make changes that one can maintain in the long term.

### Flexible restraint

Many slim people who stay that way by 'watching their weight', show flexible restraint, rather than following rigid all-or-nothing rules. They make healthy choices most of the time, but no foods are seen as forbidden.

This means enjoying small amounts of favourite foods without feeling guilty. And if one does over-indulge, or have a big night out, he should cut back a bit or should do more exercise the next day to balance things out.

### Eating healthily

A person should learn to choose, prepare and enjoy a balanced diet. Low-fat cooking skills, understanding food labels and having the ability to judge portion sizes all help with this.

### How to maintain weight loss

Tips mentioned below can help in maintaining weight loss:

- The person should continue to eat a balanced, lower fat diet with plenty of fruit and vegetables
- The person should not avoid any foods but should just watch portion sizes and limit the amount of certain foods
- He should have three regular meals a day at regular times (starting with breakfast), and fewer snacks
- He can eat out occasionally, but should limit fast food
- He should sit down to eat his meals and should pay attention to what he is eating
- He should Keep 'monitoring himself ' to stay conscious of his new eating and activity habits

### Staying active

Getting regular physical activity is one of the strongest indicators of long-term success. Not only does it burn calories and increase metabolism-boosting muscle, it also boosts self-esteem and beats stress.

Studies show that just walking for 30 minutes or so each day, plus some other activities during the week, may be enough.

### **Learning to deal with stress**

For many people, food is a quick and effective way to deal with stress. Things that can help to manage stress include regular exercise, breathing techniques and challenging negative self-talk that spirals into anxiety.