

Eating with confidence for good health: *A dietetics guide*

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Building Healthy Eating – A Framework for Flexibility

Food and fluid are essential basic building blocks of health; physical health for the present and your whole life long, also psychological wellbeing, and a healthy and rewarding family and social life.

This is a list of topics that you might find interesting or useful. You can choose whichever sections you would like to use.

• A regular eating routine. This can help you to:

- Construct a framework to build healthy eating
- o Provide a steady, stable fuel supply to all your tissues and organ systems
- Regulate appetite and food intake
- o Enable you to share in normal family and social eating
- Get a wide variety of foods
- Reduce the risk of food craving and uncontrolled eating

• A healthy mix of foods and fluid. This can help you to:

- o Understand how to choose foods and drinks for good health
- o Feel confident to make good food choices in social situations
- Regulate appetite and food intake
- Correct any nutritional deficiencies
- o Make sure your nutrition is good in the long term
- o Reduce the risk of food craving and uncontrolled eating

• The right amount of food and fluid. This can help you to:

- Judge how much to eat without weighing or counting calories
- o Feel more confident with unexpected eating, or eating in social situations
- Be flexible with eating
- o Reduce the risk of food craving and uncontrolled eating

• Sharing food with friends and family. This can help you to:

- Feel confident eating with other people
- o Join in with unfamiliar situations, celebrations and unexpected eating
- Be flexible to manage normal variations

There aren't any food fairies! You will always need to spend a bit of time planning your eating, making shopping lists, buying and preparing food – and clearing up. You can use this information to make sure your thinking and planning don't take up too much of your time, and are healthy and productive – not useless fretting.

A Regular Eating Routine

To eat in a healthy way you need to have some **structure**, so that you can:

- meet all your nutrition needs
- not have too much of the foods that might become harmful in excess
- be aware of what you are eating without feeling stressed

You also need to **flexible** to meet these needs in different ways at different times, so that you can:

- make adjustments to fit in with the other needs and activities of your life
- share foods that others prepare for you and eat with you
- make changes so you can join in with celebrations and unexpected events

To do this successfully, it helps to have in your mind a **framework for your eating** that you feel confident will meet your needs and preferences, without being too rigid and rule-bound. Most of us develop this framework over the years as we learn to be independent adults, and keep on adjusting it as our lives change. When you have a stable eating routine, you can use it as a benchmark to try new things and experiment, without taking too much risk.

To build your personal framework, think about:

- How often do you eat each day? What's the most often that would be OK for you? What's the least? Except overnight, 3-4 hours is the longest time you should go without eating.
- What times should you eat? How soon after getting up should you eat? What's the longest you should go between meals and snacks? Should there be times when you do not eat? Should you have a planned snack or drink if you wake in the night?
- When is your main meal of the day? Is that the same every day?

Regular meals provide the **steady supply of fuel** that is important for all the cells in your body, so that they have the energy to work. This is especially important for vital organs that need a lot of fuel, in particular the brain. If you go too long without eating, or eat in an uncontrolled or erratic way, your body systems may be deprived or overloaded, and this stresses them. They respond to deprivation by making changes to stop or slow down non-essential functions. You may notice, for instance, that concentration and learning become more difficult, and mood is more unstable, or you feel cold or tired. They may be unable to respond quickly enough to overload, and eating too much in a short time can stress organs such as your liver, pancreas and stomach, sometimes causing long-term damage.

Regular meals play an essential part in **appetite regulation.** A steady stream of nutrients into your blood is a signal to your brain that you do not need to eat just yet. As it slows down, your brain begins to register hunger. Very rapid shifts in the flow of nutrients, from overeating or restriction, can confuse the part of your brain that regulates appetite. Regular eating helps you to learn and remember the best ways to feed yourself, to stay comfortable. Hours of deprivation can make you January 2016

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excessively hungry, risking uncontrolled and binge eating, preoccupation with thoughts of food, and stress to your body and brain.

Eating regularly, in more or less the same way as the people around you, helps you to feel comfortable to join others for a meal or snack. Eating is part of most social relationships, and helps keep you **connected to family and friends, and to build new friendships.**

Building a Regular Eating Pattern

For most people, three meals and 1-3 snacks each day, is a pattern that works well. Even if your work means changing shifts, or you travel across time zones, you can use that as a basis for planning. Every day, aim for:

- Breakfast usually the smallest meal of the day, and the one that is quick to prepare and eat, but it doesn't always have to be in the morning, it may work better for you at a different time, especially if you work shifts
- A main meal usually the largest meal of the day, with at least two courses, and including cooked foods
- A light meal, that may need to be portable, perhaps sandwiches or salad, or a simple dish such as a filled jacket potato, with items such as yogurt, fruit, soup, cereal bar, nuts, crisps, cake
- A substantial snack, usually in the longest break between meals
- One or two small snacks, that you might change, depending on what you are doing

Look in the next section, on getting a healthy mix of foods, for ideas of what to eat at each kind of meal and snack.

You can begin by thinking about the times of day that you might eat a meal or snack, perhaps within a 1-2 hour time slot for a meal, for instance you might plan your main meal to be any time between 6 and 8 pm. If you need to, you can begin by having something small in your chosen time slot. For example, if you are not used to having breakfast, you could start with fruit or yogurt before 9 am.

Try planning your food and drinks for a day using this template. You can make as many copies of the template as you want.

MORNING	
AFTERNOON	
EVENING	
LVEINING	

A Healthy Mix of Foods and Fluid

This picture shows a healthy mix of foods, in five groups.



The biggest groups show the foods we need to have most – starchy foods; and fruit and vegetables.

The smallest group shows healthy oils and fats.

There are two groups in the middle that are essential in different ways, milk and dairy foods; and meat, fish eggs, nuts and seeds.

Lastly, the picture shows foods we should use just a little – very sweet and very fatty foods.

The right mix of foods will make sure you get all the nutrients you need, and give your body the signals it needs to regulate how much you eat, so that you don't feel deprived and get food cravings, or feel full and bloated.

Think about each group - why it's important and how you can fit it into the way you eat. If you aim to have 3 meals with small snacks regularly over the day, you will have lots of ways to get all the variety of foods you need.



Fruit and Vegetables

Most people know how valuable our "5 a Day" are for good health. We need a variety of fruit and vegetables for the wide range of vitamins and minerals that are essential for protecting many aspects of physical and mental health. They can help prevent conditions such

as heart disease, cancer, depression and dementia. Fruit and vegetables also provide potassium, which is necessary for muscles to work, including the heart muscle. Purging by using laxatives or vomiting causes the body to lose potassium, so fruit and vegetables will help to replace it. Fruit and vegetables also have fibre, for healthy bowel function and lifelong gut health.

Include fresh fruit or juice at breakfast and as a snack or dessert. Have salad in sandwiches and light meals, and a mix of vegetables with cooked dishes and in sauces and casseroles. Use fruit in desserts such as crumbles and pies, baked apples or stewed fruit. The more variety, the better!

It is possible to *overdo* the fruit and vegetables. More than 8 or 9 servings a day can make you feel bloated and stop you getting enough of the other foods you need, can give you stomach pain, and even make your skin turn yellow as excess carotene is stored there. It can also confuse appetite regulation, for instance, if you eat a lot of salad, your stomach might feel very full, but there is little flow of nutrients to your blood and brain.



Starchy Staples

These foods are powerful signals to the brain to regulate food intake. They give the feeling of fullness after a meal, coupled with a steady rise in blood glucose over the next few hours, giving the brain the message to end the meal, and not start eating again for a while. Having starchy foods regularly helps prevent excessive hunger. If you let yourself get too hungry, your thoughts keep turning to food, and this can increase the risk of food craving and uncontrolled eating.

Use the starchy foods that release glucose *gradually* over several hours (low glycaemic index or low GI), such as granary or seeded bread, porridge and muesli, oatcakes, pasta, sweet potato, brown rice, high fibre cereals like shredded wheat. Wholegrain bread, cereals and starchy vegetables also provide protein, fibre, vitamins and minerals, including B vitamins, vitamin E, iron and zinc. Include these foods as cereal, porridge or toast at breakfast; granary bread or rolls, or couscous or pasta salad with a light meal; and pasta, rice, potato or sweet potato with a cooked meal. You can have toast or a scone, or cereal bar or oatcakes with cheese, or cereal with milk, as a healthy snack.



Meat, Fish, Eggs, Nuts, Seeds and Pulses

This group is quite a mix of foods. They all provide protein, and each offers a different variety of other essential vitamins, minerals, essential fatty acids and fibre. Meat, eggs and pulses provide iron and zinc; oily fish supplies essential fatty acids, for brain and heart function; nuts and seeds provide B vitamins and magnesium, fibre and healthy fats for building cell membranes. If you don't get all these essential nutrients, your physical and mental health can be impaired now, and in the future. If you don't eat meat, take care to get iron from eggs, dark green

vegetables, bread and cereals and dried fruit. If you don't eat oily fish, it is difficult to get enough essential fatty acids and vitamin D, it may be sensible to take a supplement.

Aim for a couple of servings from this group every day. You can use meat or fish or egg or peanut butter or hummus as a sandwich filling or with a salad. You can have a larger serving of one of these foods as part of your main meal. Nuts and seeds make a snack that is easy to carry around with you.



Milk and Milk-Based Foods

Milk, yogurt and cheese are the calcium-rich foods, and are also an important source of protein, vitamins and potassium. Calcium is the substance that makes bones and teeth hard. At times of rapid growth, especially the teenage years, your body responds to hormones (oestrogen in girls and testosterone in boys) by rapidly laying down calcium in bones to make them hard and strong. If your body weight is low, production of these hormones may be reduced.

Combined with lack of calcium, protein and vitamin D, this leaves bones short of calcium, and at risk of serious weakness called osteoporosis. If you are under 25 years old, you can make your bones stronger by staying at a healthy weight, and getting a high calcium intake – four servings every day from this group.

If you would like more information about calcium and bone health, look at the NHS Choices website http://www.nhs.uk/Conditions/vitamins-minerals/Pages/Calcium.aspx. For information about osteoporosis and eating disorders, see the National Osteoporosis Society information sheet at https://www.nos.org.uk/document.doc?id=1421.

Cereal or porridge with milk as a regular breakfast gives you a good start. Have yogurt, fromage frais or rice pudding as a dessert or snacks; milky drinks such as cappuccino or hot chocolate or milkshake are good; choose a cheese dish such as macaroni cheese as your main meal sometimes, or cheese as a sandwich filling or with oatcakes as a snack. If you prefer not to have cow's milk, use soya milk with added calcium. Other types of "milk" such as rice or nut products are not adequate,

as they may not provide enough calcium *or* protein. You also need vitamin D to use the calcium – from oily fish, eggs, cheese, and yellow spreads on bread. If you are at risk of osteoporosis (if you have ever been at low weight, even for a few weeks) a vitamin D supplement will probably be helpful. You need 10-25 mcg daily – but don't have more.

Every cell of your body is built from a mix of protein and fats. So, you need protein and fat to grow, to repair damaged cells, and to replace the ones that are worn out. Many of the active substances that keep all body functions working – hormones, enzymes, substances for fighting infection and getting rid of toxins, are built of protein. We all need a constant supply of protein to keep healthy, and milk provides the high quality protein we need –for most people in the UK, around a quarter of daily protein intake comes from milk and dairy foods.



Healthy Oils and Fats

All our body cells have membranes made from fats, and many substances such as hormones are also made from fats, so we need the right kind of fats and oils from our foods. These come from oily

fish, and also from nut and seed oils and olive oil. Use olive oil, and oils such as nut oils and rapeseed oil for cooking, dressings and sauces. Fat-soluble vitamins (vitamins A, D, E and K) are present in the fatty elements of foods such as cheese, eggs, milk, butter and spreads, oily fish, nuts and seeds.



Sweet and Fatty Foods

Healthy eating is not just nutrients. These foods may not provide much to support physical health, and too much can be harmful, but we really need them for emotional and social health. Enjoying food is essential for us to feel satisfied and comfortable. Pleasure

from eating is part of healthy appetite regulation. If we try too hard to avoid these foods, we feel deprived, and this can trigger craving and uncontrolled eating. To take part in social eating, you need to be able to have a full variety of foods. It's not comfortable to feel you have to turn down a gift of expensive chocolate or a cake that a family member has made with love. We all need to learn how to use these foods in a normal way, without having so much that it harms health. It's best to have these foods when you are not very hungry, so you are less likely to overeat them. One or two servings a day is fine, maybe more some days and less on others. You might like a dessert after a healthy main course sometimes, or crisps or chocolate as part of your light meal. Accept one slice of birthday cake, or a cookie with your milky coffee. You can learn to enjoy your food by including a little, and it will help you to feel comfortable joining with what your friends and family have.

Fluid. Most of us need 6-8 drinks a day, each one about 200-300 ml, a large mug.

Every cell in your body needs water for everything it does. Your body is losing water all the time, through your skin, and in your breath, and getting rid of waste products in urine. If you don't replace it, you become dehydrated. If you don't get enough fluid, you may get headaches, or moments of dizziness, for instance when you stand up quickly. Your skin may get dry and papery, and you may be prone to urine infections.

Purging by vomiting or using laxatives makes you lose water, so can quickly make you dehydrated. Work with your therapist to reduce it, and make sure you get extra fluid to replace what you lose.

You can drink plain water, or tea or coffee, milky drinks or fruit juice. You may need more if you are very physically active, or the weather is hot, or you are unwell, or you have alcohol or a lot of caffeine (from coffee or energy drinks). If you drink alcohol, or strong coffee, have a glass of water for each drink with alcohol or caffeine.

You can overdo fluid intake. If you have too much – more than about 2½ litres a day - it can dilute the essential salts in your blood, and that may impair your heart function.

Fizzy drinks can cause problems. You may find you use a lot of diet fizzy drinks. This can interfere with recovering natural appetite regulation, and they are very acidic, so can damage teeth severely, especially if you use them often. If they also contain caffeine (cola and energy drinks) they may interfere with sleep, and can make anxiety worse.

You need to take drinks regularly over the day. Aim to have at least one drink with each of your three main meals, between meals and in the evening.

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Alcoholic Drinks

Many people enjoy drinking as relaxation and part of their normal social life. Alcohol is harmful to your health if you overdo it, so if you do drink, the NHS recommendation is:

- women should not regularly drink more than 2-3 alcohol units a day
- men should not regularly drink more than 3-4 alcohol units a day

It is a good idea to have some days each week when you don't drink alcohol at all.

Alcohol provides calories. It also raises your metabolic rate a bit more than eating other types of food, so when you drink alcohol, your body burns more calories. For that reason, it's best **not** to try to compensate for the calories by reducing the amount of food you eat.

If you are underweight, your liver is more stressed by alcohol, and it will feel the effects more, so limiting your intake is more important. If you do take alcohol, always have it with food, as this slows down the absorption into your blood, and reduces the effects on your brain and on your liver.

Your kidneys make more urine when you drink alcohol, to flush it out of your body. This can dehydrate you. When you have alcohol, make sure you have plenty of non-alcoholic fluids as well. Alternating alcoholic drinks with water or other alcohol-free drinks helps.

Alcohol can increase the risk of food craving and uncontrolled overeating. It increases your appetite, and reduces your ability to control your behaviour. If you are working to reduce chaotic eating or binge eating, you may find it easiest to give up alcohol until you feel more in control of your eating.

If you don't want to drink alcohol, on social occasions you might want to have fizzy water or tonic water with ice and lemon, then no-one will know just what you are drinking.

If you think drinking alcohol may be a problem for you, please discuss it with your therapist.

• Getting the Meals Right

It is helpful in getting a well-balanced mix to have a basic meal structure in mind. In most cultures, meals include:

Some starchy staple food as the base for the meal. This is usually the lowest-cost item. For a main meal it might be potatoes, rice, pasta, sweet potato or pizza base. For a light meal it is often bread, or couscous or rice with salad. At breakfast, it might be bread, cereal or porridge. You should expect it to be at least a third of the food at each meal. It is easy to adjust the serving size for these foods, so when you are more active, you need more of these foods.

Some protein food. This might be from the milk group, or the meat and fish group. At breakfast it might be milk on cereal, or yogurt, or egg or baked beans. At a light meal it might be a filling for a sandwich such as peanut butter or chicken or cheese, or topping for a jacket potato, such as cheese or Bolognese sauce or tuna or baked beans, or an item with salad such as eggs, hummus, quiche, fish or meat. At a main meal you might have a casserole of meat or pulses, or a fish or cheese dish.

Some vegetables, salad or fruit. If you have a serving of fruit or vegetables at each of your three meals, you are more than halfway to 5-A-Day. At breakfast, have fruit juice or fresh fruit. Have salad in a sandwich, or vegetable soup, and fresh fruit, at a light meal. Have one or two cooked vegetables or a mixed salad with your main meal. Fresh fruit, or juice or a smoothie, or vegetable sticks with hummus, make easy snacks.

Sauce or dressing. It is the sauces and dressings that add variety and flavour to meals, that make the meal a pleasure to eat and to share. They help with making the food feel satisfying, so support appetite regulation. You need some fat or oil at meals for your body to absorb vitamins, and an easy way to get this is to use oil for cooking, or in sauce or dressing.

At least one drink with every meal.

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The right amount of food and fluid. Eating Enough – and Not Too Much

Disordered eating can really interfere with normal appetite control, so it is easy to lose confidence in knowing how much to eat.

If you usually keep to the meal structure suggested, managing serving size is less confusing. It is usually easiest to manage the serving size for fruit and vegetables. A serving is 80-100 grams, so an apple or banana or pear, or a couple of plums or satsumas, or a serving of vegetables that covers about a quarter of the plate. Next, think about the protein food. This is often not too hard – a chicken breast or a fish fillet, or 1 egg for a light meal, 2 for a main meal. You can use ready-sliced meat or cheese for sandwiches (not the wafer-thin kind), or a single serve tin of something like tuna mayonnaise. Starchy foods can be more difficult. 2 slices of bread for a sandwich, or a jacket potato is OK. Foods like pasta or mashed potato or rice can be tricky. It should cover about a third of the plate, around 150-200 grams, cooked weight. You might need quite a bit more if you are very active.

Try not to weigh food or count calories or grams, it's not the way healthy people eat, and it can get you very bogged down in detail. Use information on packages, or check what others have. You can use easy measures like a cup to get the right amount of rice or porridge oats. You might like to use ready meals a few times to get an idea of what a normal meal looks like on your plate.

Restaurants may serve large helpings, and this can be difficult to cope with. If you are in a restaurant, you will probably be with other people who can give you some support with judging. Decide together how much is right, and if there is some over, move it to the side of your plate, and enjoy the rest of your meal.

FOOD SERVING SIZES

This list gives information about normal serving sizes of some basic foods. They are roughly the servings that most people would eat as part of a main meal.

The information given on food packages is useful to help judge serving sizes. Using convenience foods that are sold as individual servings can be helpful, and by selecting carefully it is possible to make healthy food choices from them.

The list gives approximate weight. It's best not to weigh every meal, although weighing a serving once or twice to check a portion size can be helpful to learn what a serving size looks like on the plate. Find a handy measure, like a cup, for foods such as rice and pasta as a better alternative to routinely weighing foods.

The list shows a range of amounts. If you have got used to trying to have small portions, it can be difficult to get out of the habit. People judge the amount they want partly by hunger, and that may be difficult until your appetite signals recover. You can use other information to help you judge when you need a larger or smaller portion.

Remember, you need a larger portion if:

- you need to increase your weight
- you have been more active than usual
- you have are recovering from an injury or illness
- you have been in a cold environment
- you have not eaten enough in the earlier part of the day

Meat, Fish And Alternatives		
Food	Handy Measure	Approximate Weight
Beef, pork, lamb	2-3 slices lean, sliced meat 1 pork chop, 2 small lamb chops	100-120g cooked
Chicken/turkey	3-4 slices chicken or turkey A chicken breast	150g cooked
Meat/chicken stewed with vegetables	2 average ladles	300-400 g
Sausages	2-3 standard size sausages 3-6 chipolatas	120-180g uncooked
Bolognaise sauce or chilli sauce or similar minced meat dish	About the size of a tennis ball	200-250g
Fish	A medium fillet of salmon or tuna A fillet of white fish A piece of fish in crumbs or batter 3-4 fish fingers	120g uncooked 150g uncooked
Beans or other pulses	5-6 tablespoons	150g cooked

Hummus	Half an average tub	50-60 g
Baked beans in tomato sauce	Medium can or half large can	200-250g
Tofu	¾ average block	200g uncooked
Nuts or Seeds	1-2 heaped tablespoons	30-50g
Eggs	2 medium eggs	
Hard Cheese	2 x 20g wrapped portions A slice the size of a CD	40-60g

Potato, Rice, Pasta And Alternatives

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Food	Handy Measure	Approximate Weight
Potatoes	3 medium boiled potatoes 3 medium roast potatoes 5 new potatoes A medium jacket potato	150-200g uncooked 150-200g uncooked 150-200g uncooked 250g uncooked
Sweet potatoes	4 pieces the size of an egg	200-250g uncooked
Rice	Find a cup that holds about this amount	65-75g dry
Pasta (served as a main course with a sauce)	Find a mug or jug that holds the right amount of your favourite pasta	70-110g dry
Couscous	Find a cup that holds about this amount	65-75g dry
Bread	2 medium cut slices, large loaf A standard oval pitta A bread roll or bagel	75-90g
Cereal, muesli and oats	Find a cup that holds about this amount	30-50 g
Vegetables and Salad		
Vegetables or salad	To cover a third to a half of a dinner plate 2-3 tablespoons cooked vegetables	

Desserts		
Food	Handy Measure	Approximate Weight
Fruit crumble or pie	Use the same bowl a few times so you can learn what it looks like	150-170g
Sponge pudding		150-170g
Cheesecake		110-150g
Rice pudding, or other milk pudding		150-200g
Ice cream	2 scoops	120-150g

Sharing food with friends and family

Sometimes an eating disorder can make it difficult to share food with others, and so some people avoid eating with friends and family. This can be very damaging to your relationships with other people, upsetting for you and for them. It can make it almost impossible to make new relationships if you are nervous to accept invitations. This can be one of the most distressing aspects of an eating disorder, if it leads to social isolation and loneliness. It can also drain away your confidence in eating, as you can't benchmark your eating with what others have, so you get into a vicious spiral.

If you are anxious about eating with others, it can help to make a plan to eat with a person you trust. Ask them to help you plan a meal you can share, perhaps at home or in a café where you can get food you feel will be all right for you. Many places give menu information on websites, so you can plan. Use the information here to choose a healthy meal with a balanced mix of foods. Before the meal, talk to your supporter about what will be helpful for you. Take steps towards sharing food as part of a healthy, enjoyable life.

Managing Challenging and Unexpected Eating

If you have a familiar eating routine, it can be difficult to step outside it. Sometimes you are faced with situations when you need to do just that, and it can be un-nerving.

Invitations to Family or Friends' Homes

You will know in advance for some celebrations, such as weddings or parties, so you can plan. You may be able to help choose what the food will be, or at least find out in advance what will be offered, so you can decide what you will have calmly in your own time. If you have a trusted friend or family member who can be with you, you can agree together how they can best help you.

If you know you will be having, say, a larger evening meal than usual, you can think of it as the main meal plus the bed-time snack, and have the light meal earlier in the day, so that it still fits your normal routine.

If the invitation is unexpected, take a moment to think of what you would usually eat for your next meal. You can probably eat in a way that is roughly equivalent, by checking the food groups. If you really feel you need to, you can cut down or skip the next snack – but no more than that. If you are invited for coffee or a similar snack, will it simply replace your usual snack?

Eating Out

If you have not eaten in a restaurant or café for some time, you might want to practise with a trusted friend, perhaps at a quiet time. Is there a small café or informal restaurant you would feel would be easiest? You might be able to have something small, to try it out and get familiar with it, perhaps even just coffee.

You might be able to help select a restaurant, and suggest one you feel is manageable. Most provide information on their websites, so you can decide in advance on one or two options you could choose.

You might feel able to contact the restaurant, and say you need a special diet for a medical reason, and describe a meal you could eat, perhaps that is similar to something on the menu. Most are quite used to requests like this, and will be happy to help. You could phone or email.

It is fine to miss a starter or a dessert, even if everyone else is having one. It is quite acceptable to leave some food on the plate, the waiter may ask if it was OK, you can say yes, just a little too much.

If a trusted friend will be there, you can agree in advance how they can best support you. You can always take a few minutes outside if you need a little time to calm yourself.

Nutrition and Blood Results

Your blood tests show, among other things, some nutrition indicators. If any problems are found, you may need to adjust your food choice, or have supplements.

Blood test	Nutrient	Foods to help	Notes
haemoglobin iron ferritin	iron	Red meat, especially liver Eggs Breakfast cereals and bread Dried fruit Dark green vegetables	Tea reduces iron absorption, so don't have tea with meals. Vitamin C increases iron absorption, so orange juice with meals is helpful. If you do not eat animal foods, it may be difficult to get enough iron. It may be helpful to talk to a dietitian.
potassium	potassium	Most fruit and vegetables, especially potatoes, bananas, tomatoes . Coffee, especially instant, cocoa, chocolate. Meat and fish Milk and cheese.	Vomiting and using laxatives can reduce blood potassium to dangerously low levels.
sodium	sodium (salt)	Most foods	Don't take extra salt You may need to limit fluid if sodium is low
urea	protein	Milk, yogurt, cheese Eggs Meat, fish Beans, pulses, nuts Bread and wheat cereals	
phosphate	phosphate	Milk, yogurt, cheese Meat, fish Peanut butter	If your phosphate is low, you may need to reduce your sugar intake, and possibly other carbohydrate foods
magnesium	magnesium	Wholemeal bread whole grain cereals Milk, yogurt Fruit and vegetables, especially bananas.	
calcium bone mineral density (from scan)	calcium	Milk, cheese, yogurt Nuts and pulses	You need Vitamin D (from oily fish, margarine, eggs) to absorb calcium. If you do not eat animal foods, it may be difficult to get enough calcium. It may be helpful to talk to a dietitian.
zinc	zinc	Red meat, especially liver. Shellfish Peanut butter, nuts and seeds Cheese.	Iron supplements can reduce zinc absorption If you do not eat animal foods, it may be difficult to get enough zinc. It may be helpful to talk to a dietitian

Healthy Blood

Red blood cells carry oxygen to all your tissues, in the form of haemoglobin. If your haemoglobin level is below normal, this is anaemia. It can make you feel completely exhausted and unable to do energetic tasks. Red cells wear out quickly, so need to be replaced regularly. Like all cells, building new ones needs calories, protein and B vitamins, so if any of these nutrients is lacking, your blood cells may not be replaced as they wear out, or new ones may be abnormal. Red cells contain iron, so it is essential to have enough iron to replace worn out cells.

Your body normally keeps some stores of iron, in the form of ferritin. If your iron intake is low, the stored iron is used up. A low ferritin level in your blood shows the stores are running out. If you are not eating adequately, your body will conserve iron as much as possible, by slowing down the replacement of old red cells. Your periods may stop, and this also helps to conserve iron.

If you have anaemia, you will need to take iron supplements. This can cause some minor side effects such as constipation, so may not be pleasant. If your ferritin is low, you can rebuild iron stores and prevent anaemia, by taking a multi-vitamin and mineral, which has a small amount of iron, and by increasing your iron intake from food.

Foods that contain iron

Bread and Cereals - Bread is a useful source of iron and zinc. Some breakfast cereals have added iron, such as bran flakes. The label will tell you if it contains iron. Choose cereals that contain iron, and have some every day.

Meat - Red meat is a good source of iron and zinc. Lean meat is better than fatty kinds. If you eat meat, try to have red meat at least four or five times a week. Liver and kidney are very high in iron so, if you like them, have one of them every week. Liver pâté or liver sausage are useful. Soya products such as tofu and soya mince provide some iron, but less than meat.

Eggs - Egg yolk is rich in iron, so try to have two or three eggs a week. If you don't eat meat, it is a good idea to have an egg most days.

Vegetables - Dark green vegetables are a good source of iron, so have some most days. Potatoes are also useful. Beans, such as baked beans and kidney beans, contain iron, so are especially useful for vegetarians.

Dried Fruit - Dried fruit such as prunes, raisins, dried figs and dried apricots provide iron. You can use them straight from the pack as a snack, or added to breakfast cereal. Tinned or stewed, they make a healthy dessert or breakfast dish.

Vitamin C helps your body to absorb the iron from food, so it is useful to have some fruit or vegetables along with iron-containing foods, such as orange juice with your breakfast cereal, and vegetables or salad with meat. Tea reduces iron absorption, so don't have it regularly with meals.

If you are vegetarian or vegan it is more difficult to get enough iron and zinc. It may be useful to get help from a dietitian.

Healthy Bones

One of the most serious risks of poor nutrition and low weight is osteoporosis. This is weakening of the bones due to loss of calcium for bone tissue. The causes are complicated, and the main one is loss of normal production of the hormones oestrogen (in women) or testosterone (in men). Lack of calcium in the diet also contributes. Vitamin D is needed to absorb calcium, so if there is not enough, that can add to the problem. Magnesium and zinc are also constituents of bone.

As part of normal growth, calcium is added to bone tissue rapidly during infancy, teenage years, and in women after childbirth and breastfeeding. This process is promoted by weight-bearing exercise, as long as the hormones are present. Otherwise, the amount of calcium in bones reduces gradually through adult life. For women, there is more rapid loss in the menopause years, when oestrogen level reduces. So, it is important to build up calcium in bones during growth, to keep them strong throughout life.

The most important protector for bone health is keeping at a healthy weight, so that hormone production is normal. It also is important to make sure that plenty of calcium and vitamin D are available.

If your weight has ever been low, even for a short time, you need to have a high intake of calcium and vitamin D for life.

Foods for Bone Health

Milk, Cheese and Yogurt

Milk is very rich in calcium, and contains vitamin D. Low fat milks have as much calcium as whole milk, so can be a healthy choice. Low fat milks contain less vitamin D, so if you prefer low fat milk, make sure you have other sources of vitamin D in your diet.

You can have milk in milky coffee and drinks like hot chocolate, malted milk, milkshakes and yogurt smoothies and drinks. You can get desserts like custard, rice pudding and caramel custard in tins and cartons, so they are very easy. If you enjoy cooking, use milk in sauces, soups and puddings.

Cheese and yogurt are rich in calcium and are easy to use. Low fat cheese and yogurt have as much calcium as full fat types. Have these foods most days.

Aim for 3-4 servings of milk, cheese or yogurt every day.

If you prefer soya milk, use one that has added calcium.

Eggs

Eggs are a useful source of calcium and vitamin D. Two to four eggs a week is healthy for most adults, more for vegetarians.

Fish

Oily fish (such as tuna, sardines, pilchards, mackerel, salmon, kippers) are very rich in vitamin D, so have them twice a week at least. The bones of small fish such as sardines and pilchards are rich in calcium, so eat them along with the fish. Shellfish are also good. Fish also supply zinc.

Bread and Cereals

Bread contains calcium (except for some wholemeal bread - the label will tell you). Some breakfast cereals have added calcium and vitamin D – check the label. Wholegrain and bran cereals are rich in magnesium. Wholegrain cereals provide magnesium.

Fruit, Vegetables, Nuts and Seeds

Green vegetables contain calcium, and so do some fruits, specially oranges, grapefruit and dried fruit. Fruit and vegetables provide boron. Dark green vegetables are good for magnesium. Everyone needs at least 5 servings of fruit and vegetables a day – aim to get a good variety. Pulses like peas, beans and chick peas are good for calcium. Have them in soups and casseroles, or tofu or hummus. Nuts, seeds and tahini are good, too. These foods are also rich in magnesium.

If You Are Vegetarian or Vegan...

Getting enough vitamin D may be difficult if you do not eat oily fish. Have eggs regularly, and choose foods with added vitamin D, such as cereals and spreads. Spend time in daylight most days.

If you keep to a vegan diet, it is very difficult to get all the nutrients you need for healthy bones, and you may need the help of a dietitian with this. Talk to the doctor about whether you need a bone scan.

For further information on bone health, see the National Osteoporosis Society website at www.nos.org.uk

Healthy Gut

If you are underweight, and not eating adequately, your stomach and bowels are affected. The muscles of your gut wall become weak, so food and fluid do not move along as quickly as normal. This can make you feel full and bloated after eating just a small amount, and can cause wind and constipation. These effects will recover as your general nutrition improves. You can try a few things that may help you to feel more comfortable:

- eat regular small meals and snacks
- don't go too long without eating
- avoid fizzy drinks
- keep to a normal pace of eating, not too fast or slow
- avoid chewing gum
- don't overeat fruit and vegetables keep to your five a day, keep the portion to 80 grams, and spread them over the day

Purging can also affect your gut. If you vomit, the acid can erode tooth enamel, discolouring your teeth and making them painful. If you vomit, rinse your mouth with plain water. Don't brush your teeth straight away, as that can scrub off more of the enamel while it is soft. It is important to see your dentist regularly for help with this, as any damage will need expert repair.

Vomiting can also damage the tissues of your throat and mouth, making them sore. The muscle that closes the top of your stomach may get damaged, and not seal properly, so you get reflux and indigestion. Your bowels can come to depend on laxatives if you take them regularly, so they don't work naturally. These problems usually recover when you stop purging and eat well.