Three Steps to Eating for a Healthier Heart

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What is heart disease?

‘Heart disease’ is a term used to describe a number of conditions, which includes coronary heart disease and heart failure. The process of coronary heart disease starts when the arteries of the heart become narrowed by a gradual build-up of fatty material. In time the artery may become so narrow that it can’t deliver enough blood (enriched with oxygen) to the heart muscle, for example when exercising. This can lead to a pain called angina. Heart disease can become more serious if a narrowed artery in the heart becomes blocked by a blood clot. This causes a heart attack.

Does it matter what I eat?

Yes! We can all make simple changes to our diet to help keep our heart healthy.

Eating a balanced and varied diet as well as watching our weight all helps to reduce the risk of having heart-related problems.

The information in this booklet is designed to help you understand how what you eat and drink affects your heart, in particular looking at:

- What protects your heart.
- What helps your blood fats (such as cholesterol).
- What helps your blood pressure.
- What helps your heart beat more regularly.
- What helps prevent blood clots.
Three Steps

1. Eat at least five portions of fruit and vegetables every day.
2. Have at least one serving of oily fish every week.
3. Cut down on fatty foods - especially those containing mainly saturated fat.

1. Enjoy a variety of fruit and vegetables - Eat at least 5 portions every day

Fruit and vegetables contain vitamins, minerals and other antioxidants, which may help protect against heart disease, stroke and cancers.

They are a good source of dietary fibre. Fibre is important to help your intestine work properly and may help to reduce the amount of cholesterol absorbed from your food into your bloodstream.

Fruit and vegetables are also low in fat and calories, making them a helpful choice if you are trying to lose weight or to keep to a healthy weight and lifestyle.

Do they have to be fresh fruits and vegetables?

No – you could also include frozen, tinned or dried fruits and vegetables.

Try to avoid adding extra fat or oil. For example, - try low fat dressings/mayonnaise on salads, use only a little oil for stirfrying and avoid adding butter/margarine to vegetables.

Aim to ‘eat a rainbow’. Choose fruit and vegetables that are as many different colours as possible. They each contain different health-promoting factors so a variety will give you the best range.
What is a portion?

- 3 heaped tablespoons of vegetables or beans.
- 1 dessert bowl of salad.
- 1 medium-sized fresh fruit – an apple, orange, banana, pear, peach.
- 2 small fruits e.g. plums, kiwi fruit, satsumas and figs.
- 3 heaped tablespoons of fruit salad (fresh or tinned in juice) or stewed fruit.
- 1 heaped tablespoon of dried fruit.
- 1 small glass (150ml) of unsweetened fruit juice.
- 1 cup of raspberries, strawberries or other berries.
- 1 small handful of grapes.
- 1 slice of large fruit, such as melon or pineapple.
- 1 heaped tablespoon of tomato puree.
- 1 sweetcorn cob.
- 1 avocado or grapefruit.

Note – potatoes are classed as a starchy food (like bread, rice or pasta) and don’t count towards your five a day.
I don’t eat much fruit and vegetables at the moment. How can I get to five portions?

Start by eating one portion a day more than you eat at the moment. Then gradually add in more.
Consider a small glass of fruit juice at breakfast time.
Try some fruit, such as sliced banana, on a bowl of cereal for breakfast.
Consider adding slices of tomatoes, cucumber or grated carrots to sandwiches.

If you need something between meals, consider a piece of fruit or keep some ready-prepared vegetables such as raw carrots, strips of red or yellow peppers, cherry tomatoes or celery in the fridge.
Liven up your soup by adding beans, peas or sweetcorn.
Consider making yourself a smoothie drink. Simply blend your chosen fruit and fruit juice in a liquidiser/blender and serve with ice.
2. Eat more fish – have at least one serving of oily fish every week

Oily fish contain a special kind of fat, which can help protect against heart disease. It helps your heart to beat more regularly and prevents your blood from clotting too easily. The beneficial fats in oily fish are called omega 3 oils. Oily fish also helps brain and eye development in babies and children.

What are the oily fish?

- Mackerel
- Pilchards
- Whitebait
- Trout
- Fresh tuna
- Sardines
- Kippers
- Salmon
- Herring
- Sprats

What is a serving?

A serving is about 100g or 4 ounces fish once it’s been cooked. This is equivalent to an average fillet or small tin of fish.

Does it have to be fresh fish?

Tuna needs to be fresh or frozen because canned tuna has had the beneficial oils removed during processing. For all the rest, it doesn’t matter whether it is fresh, frozen, canned or smoked.

I don’t really eat oily fish at the moment. How can I get going?

Try canned pilchards on toast.

Buy a can of pilchards or sardines in tomato sauce, mash the whole contents together and spread on toast.

Try a fillet of smoked mackerel or salmon. You can buy these ready-prepared from supermarkets.

Try smoked salmon on bread or crackers.
What about cooking fish?
You can grill, poach, bake or microwave fish.
Tinned fish can be included in a risotto or lasagne.
Have a look at the back pages for some suggestions of ways to cook fish.

What if I really don’t like fish?
There are a couple of other options.
Firstly you could try fish oil capsules.
Secondly, your body can convert some of the oil found in nuts and seeds to the same kind of fat as those found in fish. However, the process isn’t very efficient so you do not get as much by converting the plant oils as you would from eating oily fish.

Fish oil capsules
i) You are looking for fish oil capsules that contain the fatty acids EPA and DHA. Your aim is at least 500mg (0.5g a day)

   **Example:** you find a product where a capsule contains 120mg DHA and 180mg EPA – 300mg in total. Your target is 500mg so you would need to take two capsules to reach the target.

Note: It is probably better to buy a special omega - 3 supplement rather than use cod liver oil. This is because the cod liver oil supplements do not contain as much EPA and DHA. Cod liver oil tablets also may give too much vitamin A which can be harmful to the babies of pregnant women.
Plant oils

ii) The oil from rapeseed, soya, linseed and walnuts contain a form of omega-3 oils. Your body can convert a small amount of them to the same kind of omega-3 oils found in fish.

Rapeseed oil is usually labelled as vegetable oil in supermarkets and you can use it whenever you need to use oil. Linseed oil can be purchased in health food shops and could be added to salad dressings. Linseeds can be sprinkled on cereal and yoghurts.

There are many foods which are now enriched with omega-3 oils (from plant oils), for example special milks, yoghurts and eggs. The amount of omega-3 oils in each of the products varies so you would need to check the labels.

It may also be worth avoiding sunflower or corn oil. They contain a different kind of fat, which can interfere with the way your body converts the oils above into the kind that protects your heart.
3. Cut down on fatty foods – especially those containing mainly saturated fat

What is cholesterol?

Cholesterol is a fatty substance mainly made in the liver. Your body needs some cholesterol as the building block for some hormones and cell membranes. If you have too much cholesterol in your blood it will increase your risk of heart disease and stroke.

Cholesterol enters the blood and is carried around the body by special proteins. These combinations are called ‘lipoproteins’.

There are two main types: Low Density Lipoprotein (LDL) High Density Lipoprotein (HDL)

LDL cholesterol is involved in the build-up of fatty material and narrowing of your arteries, whereas HDL cholesterol appears to protect against heart disease by removing cholesterol from your circulation.

Foods rich in cholesterol, for example eggs, liver, kidneys and seafood such as prawns, do not usually make a big difference to your blood cholesterol level. It is much more important that you eat less saturated fat as this will help reduce artery-blocking cholesterol (LDL) levels.
<table>
<thead>
<tr>
<th>Type of fats</th>
<th>What do they do?</th>
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<tbody>
<tr>
<td>Saturated</td>
<td>They <strong>raise artery-blocking cholesterol levels</strong> (LDL-cholesterol) in your blood.</td>
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<tr>
<td>Trans fats</td>
<td>They both act like saturated fats and raise <strong>artery-blocking cholesterol levels</strong> (LDL-cholesterol)</td>
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<tr>
<td>Hydrogenated vegetable oils</td>
<td></td>
</tr>
<tr>
<td>Monounsaturated</td>
<td>They help <strong>lower artery-blocking cholesterol levels</strong> (LDL-cholesterol) in your blood. Using these fats may also <strong>raise the level of protective cholesterol</strong> (HDL-cholesterol in your blood).</td>
</tr>
<tr>
<td>Polyunsaturated</td>
<td>They help <strong>lower artery-blocking cholesterol levels</strong> (LDL-cholesterol) in your blood.</td>
</tr>
<tr>
<td></td>
<td>However, they lower the level of protective cholesterol (HDL-cholesterol) in your blood.</td>
</tr>
<tr>
<td>Omega-3</td>
<td>A special type of polyunsaturated fat which can help keep your heart healthy (see page 5).</td>
</tr>
<tr>
<td>Where are they found?</td>
<td>What would help me?</td>
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<td>-----------------------</td>
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<tr>
<td>Saturated They raise artery-blocking cholesterol (LDL-cholesterol) in your blood. They are hard at room temperature and are mainly found in animal fats: Fatty meats, lard, dripping, suet, butter, ghee, cheese and milk. Some vegetable fats are also rich in saturated fat e.g. coconut oil, palm oil.</td>
<td>Cut down on saturated fats.</td>
</tr>
<tr>
<td>Trans fats Hydrogenated vegetable oils They both act like saturated fats and raise artery-blocking cholesterol levels (LDL-cholesterol) Naturally found in dairy products but most are formed during manufacturing involving hydrogenated vegetable oil. Oils which have been processed to make them solid like saturated fats – found in manufactured foods such as bought cakes and biscuits.</td>
<td>Aim to avoid products containing hydrogenated vegetable oils which are often found in processed or convenience foods.</td>
</tr>
<tr>
<td>Monounsaturated They help lower artery-blocking cholesterol levels (LDL-cholesterol) in your blood. Using these fats may also raise the level of protective cholesterol (HDL-cholesterol in your blood). Olive oil, rapeseed oil (vegetable oil), peanut oil and avocado. Some margarines and spreads are high in monounsaturated fats.</td>
<td>Choose small amounts of monounsaturated fats instead of saturated fats, wherever possible.</td>
</tr>
<tr>
<td>Polyunsaturated They help lower artery-blocking cholesterol levels (LDL-cholesterol) in your blood. However, they lower the level of protective cholesterol (HDL-cholesterol) in your blood). Sunflower oil, corn oil, soya oil, fish oil and margarines/spreads.</td>
<td>Your body needs a very small amount, as it can’t make it from other fats. However, you would get enough from 2 teaspoons of margarine labelled ‘high in monounsaturates’ or 2 teaspoons rapeseed oil (vegetable oil).</td>
</tr>
<tr>
<td>Omega-3 A special type of polyunsaturated fat which can help keep your heart healthy (see page 5). The best source if sound in fish.</td>
<td>Have at least 1 portion of oily oily fish per week.</td>
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How can I eat less saturated fat?

Choosing Food

- Use skimmed or semi-skimmed milk rather than full cream milk.
- Replace full fat yoghurts with a low fat or diet variety.
- Eat smaller helpings of cheese. Try low fat cheeses.
- Ready meals may be high in fat or oil. Try eating more freshly-prepared ‘basic foods’ or check the labels so you can choose the low fat varieties.
- Choose lean meat and try smaller helpings of meat.
- Make casseroles and stews go further by adding a can of lentils, butter beans, chickpeas or kidney beans.
- Consider having fish rather than meat.
- Eat fewer pies, pasties, burgers or sausages.
- Cut back on crisps, biscuits, cake and chocolate. Try fruit instead.
- Than sauces made with butter or cream.

Cooking and preparing meals

- Grill, casserole, microwave or bake food rather than frying it.
- Trim fat from meat and remove skin from poultry before eating.
- Avoid fried foods – or make sure they are cooked with olive or rapeseed oil instead.
- Use low fat natural yoghurt instead of cream in cooking or on dessert.

How can I change the type of fat I eat?

- Choose a margarine spread labelled ‘high in monounsaturates’ or ‘omega-3’ (rather than butter or a sunflower spread) – and spread it thinly.
- Use rapeseed oil (vegetable oil) or olive oil for salad dressings and in cooking.
Aim for a healthy weight

Being overweight increases your blood pressure and blood fat levels e.g. cholesterol), which can lead to heart disease. It also puts you at risk of stroke, diabetes and other health problems.

Do you need to lose weight?

If you are not sure, ask your Practice Nurse, Doctor or Dietician for further advice.

He or she can check whether your weight is appropriate for your height and check your waist and hip measurements. Carrying extra weight around your waist rather than carrying it on your hips is more of a health risk.

<table>
<thead>
<tr>
<th>Waist Measurement for:</th>
<th>At Increased Risk</th>
<th>At High Risk:</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Men</td>
<td>94cm (37 inches)</td>
<td>102cm (40 inches)</td>
</tr>
<tr>
<td>Asian Men</td>
<td>90cm (36 inches)</td>
<td>90cm (36 inches)</td>
</tr>
<tr>
<td>European and Asian Women</td>
<td>80cm (32 inches)</td>
<td>88cm (35 inches)</td>
</tr>
</tbody>
</table>
Here is a guide to get you started

- A realistic weight loss is about 1lb (0.5kg) per week.
- To lose weight you need to reduce your calorie intake from food and increase the amount of physical activity you take.
- Many people lose weight by just cutting down on fatty and sugary foods. If you don’t, try smaller portions.
- It is better to make small changes to your eating habits, which can then become permanent, rather than going on a ‘crash’ diet which you can’t keep for too long.

Losing just 5-10% of your body weight can help reduce the risk to your health. You may feel lots of other benefits too!

For example, if you weight 16 stone (100kg) you could aim to lose 1½ stone (10-kg).

You can find more help on losing weight from an information booklet titled ‘Lose Weight, Feel Great’ from your Health Promotion Unit.

Alcohol

Drinking a lot of alcohol may increase your risk of high blood pressure, liver disease, some cancers and also may affect your blood fats.

It is, therefore, recommended that everyone drinks alcohol in moderation only. This means men drinking no more than 3 units of alcohol per day and women no more than 2 units per day. It is also advised to have at least 2 alcohol free days per week.
Remember, alcohol is high in calories so if you are trying to lose weight, try to keep alcohol for special occasions or limit the amount you drink.

1 unit of alcohol = \( \frac{1}{2} \) pint beer, lager or cider.
\[
\frac{1}{4} \text{ pint of strong beer, lager or cider.}
\]
\[
1 \text{ small glass of sherry.}
\]
\[
1 \text{ pub measure of spirits.}
\]
\[
\frac{1}{2} \text{ glass of wine.}
\]

Salt

Most people eat more salt in their food than their body needs. Too much salt in your diet can lead to a rise in blood pressure. It is recommended that adults should have no more than 6g of salt per day.

If you have high blood pressure you may be able to reduce it by taking less salt.

- Use less salt in cooking.
- Use herbs, spices, pepper, chilli or garlic to add flavour to your food instead of salt.
- Avoid adding salt to your meal at the table.
- Cut back on salty foods such as cheese, processed/canned meats, ready-made meals and salty snacks e.g. crisps and salted nuts.
- Try to use fresh foods when preparing meals as most processed or ‘convenience’ foods are high in salt.
- Sodium is often labelled on foods rather than salt – to roughly convert sodium to salt, simply multiply the sodium figure by 2.5.
<table>
<thead>
<tr>
<th>Meal ideas</th>
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</thead>
</table>
| **Breakfast** | Glass of fruit juice.  
               | Fresh, tinned or dried fruit with breakfast cereal or porridge.  
               | Kippers and bread.  
               | Tomatoes or beans on toast |
| **Snack meals** | Lentil, pea or vegetable soup with bread.  
                   | Sandwiches, rolls, pitta bread or jacket potatoes filled with lean meats and tomato, low fat hummus and grated carrot, tinned sardines, salmon or pilchards, egg mixed with low calorie salad cream and salad.  
                   | Smokes mackerel fillet served with salad and bread. |
| **Main meals** | Casseroles made with lean meat and vegetables, served with broccoli or cabbage and boiled potatoes or rice.  
                   | Chilli-con-carne made with lean mince, tinned kidney beans and tomatoes and served with rice and a salad of raw vegetables.  
                   | Salmon or tuna fillet with peas, carrots and new potatoes.  
                   | Mackerel risotto (see recipes).  
                   | Pasta served with a vegetable sauce and a bowl of mixed salad.  
                   | Lean roast meat with potatoes and root vegetables roasted in olive oil and served with a green vegetable and cauliflower. |
Ways to cook fish

**Baked salmon fillet:** set your oven to Gas Mark 5, 375F, 190C. Place the salmon fillet on an 8 inch square piece of oiled foil, sprinkle with a little lemon juice and black pepper, then wrap the whole thing up and tuck in the ends to form a parcel. Place on a metal baking sheet and transfer to the oven for about 25 minutes.

**Grilled:** brush the fish with olive oil or rapeseed oil. Sprinkle with pepper, then place under a pre-heated grill for about 5 minutes before turning the fish over and grilling it on the other side.

**Microwaving:** fillets and fish steaks cook well in the microwave. Place a salmon fillet in a microwave-proof dish. Squeeze a little lemon juice over it and sprinkle with black peppercorns. Cover the dish with a plate or lid and microwave on full for 5 minutes. Remove the lid (be careful – hot steam will escape). Prod the fish with a knife. If it feels the same in the middle as at the sides, it is ready. If not, microwave for another 2 minutes.
Mackerel Risotto – serves 2

- 6oz (170g) easy-cook rice.
- Pinch salt.
- 3/4 pint (425ml) water.
- 1 tablespoon vegetable (rapeseed oil).
- 1 small onion, peeled and diced.
- 1 clove garlic, peeled and crushed.
- 1 small green pepper, deseeded and finely chopped.
- 14oz (400g) can chopped tomatoes.
- Worcestershire sauce.
- Paprika.
- 7oz (200g) can mackerel in tomato sauce.
- Salt and freshly ground pepper.

Place the rice, salt and water in a pan and bring to the boil. Simmer with the lid on until the rice is cooked and all the water has been absorbed.

Heat the oil in a pan and fry the onion, pepper and garlic until softened. Add the can of tomatoes. Add the Worcestershire sauce and paprika to taste. Season with salt and pepper. Add the can of mackerel. Add the cooked rice gradually and mix well together.

Serve with a salad.

Three Steps to eating for a healthier heart
Useful contacts

The British Heart Foundation
Tel: 020 7554 0000
www.bhf.org.uk

Heart UK
Tel: 0845 450 5988
www.heartuk.org.uk

Food Standards Agency
www.eatwell.gov.uk
www.bdaweightwise.com

If you require advice on any other issues related to your health, such as giving up smoking or increasing your physical activity, please contact your Doctor or Practice Nurse.

NHS Constitution. Information on your rights and responsibilities. Available at www.nhs.uk/aboutnhs/constitution
If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

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