**High Cholesterol: Patient Information Leaflet**

**WHY ARE YOU GETTING THIS LEAFLET?**

You are getting this leaflet because you have had a recent cholesterol blood test and this was higher than would be expected.

As you may know cholesterol is a risk factor for cardiovascular conditions such as heart disease and stroke.

To decide how much risk this poses to you we have calculated using a risk score the likelihood of you developing cardiovascular disease within the next 10 years.

This has come out at under 10% - this is classed as low risk.

Nevertheless, given the actual cholesterol value you have is higher than usual, we would strongly recommend you address area of your lifestyle to help lower your cholesterol and so keep a healthy heart.

Please read the advice below:

**RISK FACTORS FOR CARDIOVASCULAR DISEASE:**

Risk factors include:

* Lifestyle risk factors that can be prevented or changed:
  + Smoking.
  + Lack of physical activity.
  + Obesity.
  + An unhealthy diet and eating too much salt.
  + Excess alcohol.
* Treatable or partly treatable risk factors:
  + High blood pressure (hypertension).
  + High cholesterol blood level.
  + High fat (triglyceride) blood level.
  + Diabetes.
  + Kidney diseases causing diminished kidney function.
* Fixed risk factors - ones that you cannot alter:
  + A strong family history. This means if you have a father or brother who developed heart disease or a stroke before they were 55; or, if you have a mother or sister who developed heart disease or a stroke before they were 65.
  + Being male.
  + Severe baldness in men at the top of the head.
  + An early menopause in women.
  + Age. The older you become, the more likely you are to develop atheroma.
  + Ethnic group. For example, people who live in the UK with ancestry from India, Pakistan, Bangladesh, or Sri Lanka have an increased risk.

However, if you have a fixed risk factor, you may want to make extra effort to tackle any lifestyle risk factors that can be changed.

Known risk factors that can be prevented, changed or treated are now discussed further.

**LIFESTYLE RISK FACTORS THAT CAN BE PREVENTED AND/OR CHANGED**

**Smoking**

Lifetime smoking roughly doubles your risk of developing heart disease. The chemicals in tobacco get into the bloodstream from the lungs. They damage the blood vessels (arteries) and other parts of the body. Your risk of having a stroke, and developing other diseases such as lung cancer are also increased. Stopping smoking is often the single most effective thing that a person can do to reduce their health risk. The increased risk falls rapidly after stopping smoking (although it takes a few years before the excess risk reduces completely). If you smoke and are having difficulty in stopping, then see your practice nurse for help and advice.

**Lack of physical activity - a sedentary lifestyle**

People who are physically active have a lower risk of developing cardiovascular diseases compared with inactive people. To gain health benefits you should do at least 30 minutes of moderate physical activity, on most days (at least five days per week).

* 30 minutes in a day is probably the minimum to gain health benefits. However, you do not have to do this all at once. For example, cycling to work and back 15 minutes each way adds up to the total of 30 minutes.
* Moderate physical activity means that you get warm, mildly out of breath, and mildly sweaty. For example, brisk walking, jogging, swimming, cycling, etc. However, research studies do suggest that the more vigorous the exercise, the better for health - particularly for preventing heart disease.
* On most days. You cannot store up the benefits of physical activity. You need to do it regularly.

**Being overweight**

If you are overweight, you are more likely to develop cardiovascular diseases, diabetes, or certain cancers. The increased health risk of obesity is most marked when the excess fat is mainly in the tummy (abdomen) rather than on the hips and thighs. As a rule, a waist measurement of 102 cm or above for men (92 cm for Asian men) and 88 cm or above for women (78 cm for Asian women) is a significant health risk.

**Diet**

Eating healthily helps to control obesity, and lower your cholesterol level. Both of these help to reduce your health risk. Also, there is some evidence that eating oily fish (herring, sardines, mackerel, salmon, kippers, pilchards, fresh tuna, etc) helps to protect against heart disease. It is probably the omega-3 fatty acids in the fish oil that help to reduce the build-up of small fatty lumps called atheroma. Also, fruit and vegetables, as well as being low in fat, also contain antioxidants and vitamins which may help to prevent atheroma from building up. Briefly, a healthy diet means:

* AT LEAST five portions, or ideally 7-9 portions, of a variety of fruit and vegetables per day.
* A THIRD OF MOST MEALS should be starch-based foods (such as cereals, wholegrain bread, potatoes, rice, pasta), plus fruit and vegetables.
* NOT MUCH fatty food such as fatty meats, cheeses, full-cream milk, fried food, butter, etc. Use low-fat, mono-unsaturated or polyunsaturated spreads. One study conducted at Harvard University found that replacing saturated fats with polyunsaturated fats is an effective way of lowering your risk of heart attacks and other serious problems from heart disease.
* INCLUDE 2-3 portions of fish per week, at least one of which should be oily (such as herring, mackerel, sardines, kippers, salmon, or fresh tuna).
* LIMIT SALT to no more than 5 g a day (and less for children). See below for details.
* If you eat meat, it is best to eat lean meat, or poultry such as chicken.
* If you do fry, choose a vegetable oil such as sunflower, rapeseed or olive.

**Salt**

Adults should eat no more than 5 g of salt a day. This is about a teaspoon of salt. Even a modest reduction in intake can make quite a big difference. The current average daily intake of salt in the UK is 9 g per day. About three quarters of the salt we eat is already in the foods we buy. Simply checking food labels and choosing foods with lower salt options can make a big difference. A tip: sodium is usually listed on the food label. Multiplying the sodium content by 2.5 will give the salt content. Also, try not to add salt to food at the table.

**Alcohol**

Drinking a small or moderate amount of alcohol probably reduces the risk of developing cardiovascular diseases (38% compared with teetotallers in one study). That is, 1-2 units per day - which is up to 14 units per week. Drinking more than 15 units per week does not reduce the risk, and drinking more than the recommended upper limits can be harmful. That is, men should drink no more than 21 units per week (and no more than four units in any one day). Women should drink no more than 14 units per week (and no more than three units in any one day). One unit is in about half a pint of normal-strength beer, or two thirds of a small glass of wine, or one small pub measure of spirits.

**FOR FURTHER INFORMATION PLEASE VISIT:**

British Heart Foundation: [www.bhf.org.uk](http://www.bhf.org.uk/) or phone 0300 330 3322

*or*

Patient UK Information Leaflets: [www.patient.co.uk](http://www.patient.co.uk/)