

# eating tips...

## DAILY

Use low fat milks, yoghurt, soft margarine

Choose chicken and oily fish rather than red meat

Cook with olive oil; alternatively grill, steam or microwave food

Eat 3-4 portions of vegetables and 2 portions of fruit

Add fibre to your diet, e.g. whole grain bread, bran

Include carbohydrates, e.g. pasta, baked potatoes

Avoid chocolates, crisps, cake

## WEEKLY

Allow only 2 eggs weekly

Remain within weekly limit of alcohol intake:

14 units for women

21 units for men

## OCCASIONALLY

Allow yourself to enjoy your favourite food without feeling guilty!

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### CITY OF LONDON

164 Bishopsgate, London. EC2M 4LZ

T: 020 7377 4646 F: 020 7377 4647

### TOWER BRIDGE

2b More London Riverside, London. SE1 2AP

T: 020 7940 1390 F: 020 7940 1399

### CANARY WHARF

MacKenzie Walk, 25 Cabot Square, London. E14 4QW

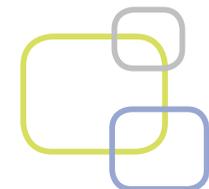
T: 020 7715 7450 F: 020 7715 7459

### GLASGOW

163 West George Street, Glasgow. G2 2JJ

T: 0141 222 9950 F: 0141 221 3028

# explaining... Cholesterol



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### WHAT IS CHOLESTEROL?

Cholesterol is a lipid (fat) that is essential for life as it is an important part of our body's cells and is needed to make a number of hormones. The body itself produces cholesterol in the liver. When saturated fats are ingested from the diet, the liver converts these fats into cholesterol. Saturated fats tend to be hard fats such as dairy and animal fat.

### WHAT CAUSES A HIGH CHOLESTEROL LEVEL?

There are two mechanisms by which the blood cholesterol becomes abnormally elevated:

1. Consumption of a diet containing excess animal fat (saturated fat).
2. Genetic predisposition to high cholesterol: this causes increased blood cholesterol even with normal intake of saturated fat.

### WHY IS A HIGH LEVEL A PROBLEM?

A cholesterol level of 5.0 mmol/l or less is said to be normal. Research shows that figures above this are associated with higher levels of heart disease. Cholesterol is known to attack the walls of blood vessels causing them to become narrow and rigid (atherosclerosis). This is particularly dangerous in the coronary arteries, which supply blood to the heart as blockage results in a heart attack. The higher the level of cholesterol, the greater the risk. Other risk factors for heart disease include smoking, high blood pressure and physical inactivity.

### WHAT ARE HDL AND LDL CHOLESTEROL?

Cholesterol is transported in the blood by lipoproteins known as HDL and LDL (high density lipoproteins and

low density lipoproteins). LDL cholesterol is linked to the development of heart disease whereas HDL removes cholesterol from the blood back to the liver and protects against atherosclerosis. The level of HDL cholesterol can be increased by exercise but is decreased in those who smoke, are overweight or lead a sedentary lifestyle.

### HOW CAN A HIGH LEVEL BE REDUCED?

There are three methods to reduce high cholesterol levels:

**DIET** - A reduction in the intake of saturated fats (found primarily in animal fats).

**EXERCISE** - this increases the level of HDL cholesterol.

**MEDICATIONS** – such as statins, are prescribed for people in the following categories:

- (a) Individuals who have a number of other risk factors for heart disease i.e. high blood pressure, smoking and obesity, but have been unsuccessful in reducing their level of blood cholesterol through diet alone.
- (b) Those with a family history of high cholesterol.
- (c) Those who have had a heart attack or stroke.

### TRIGLYCERIDES

These are another type of fat in the blood and an important source of "fuel" to the body. The main concern with high triglyceride levels is the frequent association with poor levels of HDL cholesterol and other risk factors such as diabetes and high blood pressure. Levels also fluctuate more than cholesterol particularly after recent fatty meals and so high levels should be re-checked on a fasting blood sample.

### DIETARY MEASURES TO REDUCE CHOLESTEROL

Altering your diet can result in a significant reduction of your cholesterol level. However, this should form part of a long-term plan and involve engaging in an overall healthier eating pattern. This will take time and should be done gradually, over a number of weeks. The mainstay of this healthy eating plan is the reduction of saturated fats (i.e. animal fats), and their replacement with polyunsaturated fats (olive oil, soft margarine).

Oily fish such as herring, mackerel, salmon and trout contain certain polyunsaturated fatty acids called omega-3, which have particular beneficial effects in the prevention of heart disease.

Fruit and vegetables provide a natural source of antioxidants which, when consumed through the diet (rather than through vitamin supplements), are thought to have an especially protective effect on the heart.

The addition of fibre to the diet is beneficial for overall health but it is thought that fibre such as oats, dried beans and lentils may also prevent the re-absorption of cholesterol.

Since fat is a major source of energy in the diet, when you cut down on fat intake an alternative source of energy must be supplied. Carbohydrates, for example rice, pasta or baked potatoes, provide a very filling source of energy and are low in fat. Egg yolk is high in cholesterol, therefore it is wise to limit your weekly intake of eggs to two.