



**Wolverhampton  
Diabetes Care**

## **Cholesterol, Lipids and Diabetes**

Everybody needs to reduce the risk of heart and circulation problems by being careful about diet, exercise and avoiding smoking. Part of that risk is the amount of fat in the blood stream. People with diabetes have a greater risk of circulation problems and it is very important to control the blood stream fats.

### **What are the blood stream fats?**

Cholesterol is a type of fat (lipid) made by the body. It is essential for good health and is found in every cell in the body. Triglycerides are another sort of fat and is important in allowing us to maintain our energy balance. These blood fats are often called lipids and an excessive amount is called "hyperlipidaemia".

### **What are the different kinds of cholesterol?**

There are two main kinds of cholesterol or blood fats often called "good and "bad" although this is a bit of a crude way of looking at it. HDL cholesterol protects against heart disease and it tends to be lower in people with diabetes. LDL cholesterol is deposited in your blood vessels and is associated with circulation problems such as heart disease. Adding both together gives the total cholesterol and its important to remember that it's the balance between the two is important.

### **How does diabetes affect my blood fats?**

Many people with diabetes have problems with their blood lipid levels. The HDL may be low, the LDL high and there will be an excess of triglyceride fat.

### **What causes high blood fats?**

There are several things that may lead to abnormal blood fats and high blood cholesterol: a diet that's high in fat and in cholesterol, lack of exercise and being overweight and drinking alcohol excessively.

### **Who should have a cholesterol and blood fat test?**

All people with diabetes aged over 35 should have their cholesterol and blood fats measured at least every year. It must be tested if they have risk factors such as family history of early heart disease, high blood pressure and they are smoking. Anyone who already has a circulation problem such as heart disease or stroke should have their cholesterol measured.

### **What are the other important factors?**

The blood fats are only one part of the equation in the risk for circulation problems. This risk goes up with age and hugely increases with smoking. Blood pressure is an important factor. A poor diet, being overweight and being unfit and inactive also contribute.

### **How will I know if my cholesterol needs treating?**

This all depends on your risk, the balance of good and bad cholesterol and not always the absolute cholesterol reading. Your risk can be calculated quite simply by putting your age, sex, blood pressure and smoking habits into an equation. If you already have a circulation problem, then you will almost certainly need cholesterol treatment.

## What is the treatment

The main aim of lowering cholesterol is to reduce the risk of heart and circulation disease. There are two ways to treat high cholesterol but remember that, at the same time, weight, exercise, smoking, diabetes control and blood pressure must be dealt with. The first is simple with lifestyle changes including diet, managing weight, increasing exercise and quitting smoking. The second is to combine lifestyle changes with cholesterol and blood fat lowering medicines. When such treatments are given it is nearly always the case that aspirin is given as well in order to lower the risk of blocking the circulation.

## Seeking advice and what care to expect

The management of the risk to your circulation is complex. You should expect good diet and lifestyle advice, good control of your diabetes and blood pressure and help and support to stop smoking. Your blood fats will be measured regularly and the risk of a circulation problem calculated. According to the result you will be advised about the need for tablet treatment to lower the blood fats and the need for aspirin. If you already have had a heart or circulation problem you will almost certainly be on aspirin and a cholesterol treatment, if you are not, ask why.