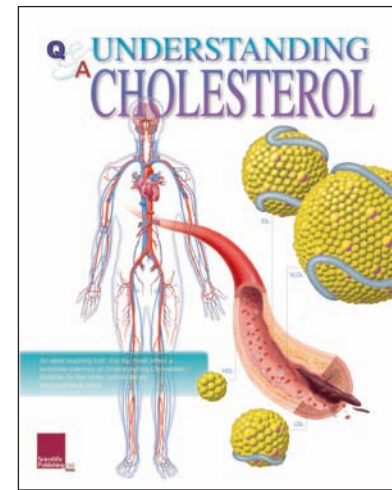
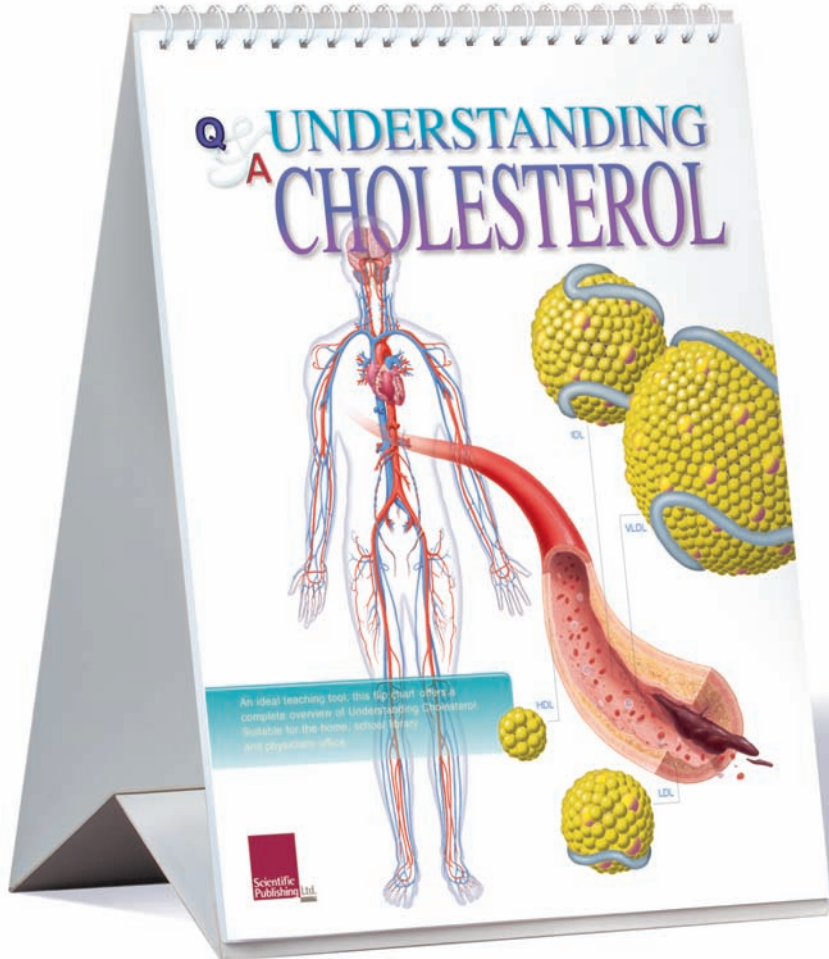


# Introducing an exciting new teaching tool

## Understanding Cholesterol flip chart

This beautifully illustrated flip chart study guide is an ideal reference tool for home, library, or patient education. Each flip chart provides an in-depth, yet easily accessible exploration of the featured topic, complete with clear, concise text and original artwork of anatomy, physiological processes and disease pathology.

- Portable, fully illustrated flip chart design
- Easy-to-read Question & Answer format
- Ideal for home, library and office



Pages from Understanding Cholesterol flip chart

**Q & A**

### What is cholesterol?

Cholesterol is a natural fat-like substance that is indispensable to the human body. It is the component of cells, helping to maintain the cell's structure and stability. It is also essential for the production of hormones and bile acids. Cholesterol is also necessary for the formation of myelin sheath, which surrounds and insulates the nerve fibers.

**What does 'high cholesterol' mean?**

High cholesterol means the presence of elevated levels of lipoproteins in the bloodstream. This can lead to the formation of plaque in the arteries, which can narrow the arteries and increase the risk of heart disease.

**Cholesterol limits**

Cholesterol Type	Desired Level (mg/dL)
Total Cholesterol	< 200
LDL Cholesterol	< 100
HDL Cholesterol	> 40
Triglycerides	< 150

**Q & A**

### How cholesterol travels

Cholesterol is transported in the blood by lipoproteins. The most common lipoproteins are Low-Density Lipoprotein (LDL) and High-Density Lipoprotein (HDL). LDL is often referred to as 'bad cholesterol' because it can contribute to the formation of plaque in the arteries. HDL is often referred to as 'good cholesterol' because it can help remove cholesterol from the arteries.

**What is a lipoprotein?**

A lipoprotein is a complex of lipids and proteins. It is responsible for the transport of lipids in the blood. There are several types of lipoproteins, including Chylomicrons, VLDL, LDL, and HDL.

**Q & A**

### Endogenous pathway

The endogenous pathway is the process by which cholesterol is synthesized in the liver. It involves the conversion of acetyl-CoA to cholesterol through a series of enzymatic reactions. The liver then packages cholesterol into lipoproteins, which are released into the bloodstream.

**Exogenous pathway**

The exogenous pathway is the process by which cholesterol is absorbed from the diet. It involves the absorption of dietary cholesterol in the small intestine, followed by its transport to the liver via chylomicrons.

**Q & A**

### Exogenous pathway

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**Reabsorption & elimination**

Cholesterol is reabsorbed in the small intestine and eliminated from the body through the feces. The liver also plays a role in the elimination of cholesterol through the production of bile acids.

**Q & A**

### What is atherosclerosis?

Atherosclerosis is a chronic condition in which the arteries become narrowed and hardened by the buildup of plaque. This plaque is made up of cholesterol, fat, and other substances. The narrowing of the arteries can lead to heart disease and stroke.

**Progression of plaque development**

- Endothelial dysfunction
- Inflammation
- Lipid accumulation
- Smooth muscle cell migration
- Plaque formation
- Plaque rupture
- Thrombosis

**Q & A**

### Atherosclerosis and Heart disease

Atherosclerosis is a major cause of heart disease. The narrowing of the arteries can lead to a heart attack, which occurs when the blood flow to the heart is blocked. This can result in the death of heart muscle and can lead to heart failure.

**What is Angina?**

Angina is a condition in which the heart does not get enough oxygen. This can cause chest pain and is often a sign of atherosclerosis.

**What is a Heart Attack?**

A heart attack occurs when the blood flow to the heart is blocked. This can result in the death of heart muscle and can lead to heart failure.

**Q & A**

### Atherosclerosis and Stroke

Atherosclerosis is a major cause of stroke. The narrowing of the arteries can lead to a stroke, which occurs when the blood flow to the brain is blocked. This can result in the death of brain tissue and can lead to permanent disability.

**What are Ischemic strokes?**

Ischemic strokes are caused by a blockage in the arteries that supply the brain. This can result in the death of brain tissue and can lead to permanent disability.

**Cerebral thrombosis**

Cerebral thrombosis is a condition in which a blood clot forms in the arteries that supply the brain. This can lead to a stroke and can result in permanent disability.

**Q & A**

### Causes and treatment of high cholesterol

**Causes**

- Genetics
- Diet
- Lack of exercise
- Obesity
- Smoking
- Alcohol consumption

**Treatment**

- Dietary changes
- Exercise
- Medication