

Why Cholesterol Is Important To Your Health

ATHEROSCLEROSIS SYMPTOMS



Healthy artery



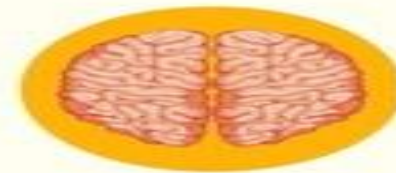
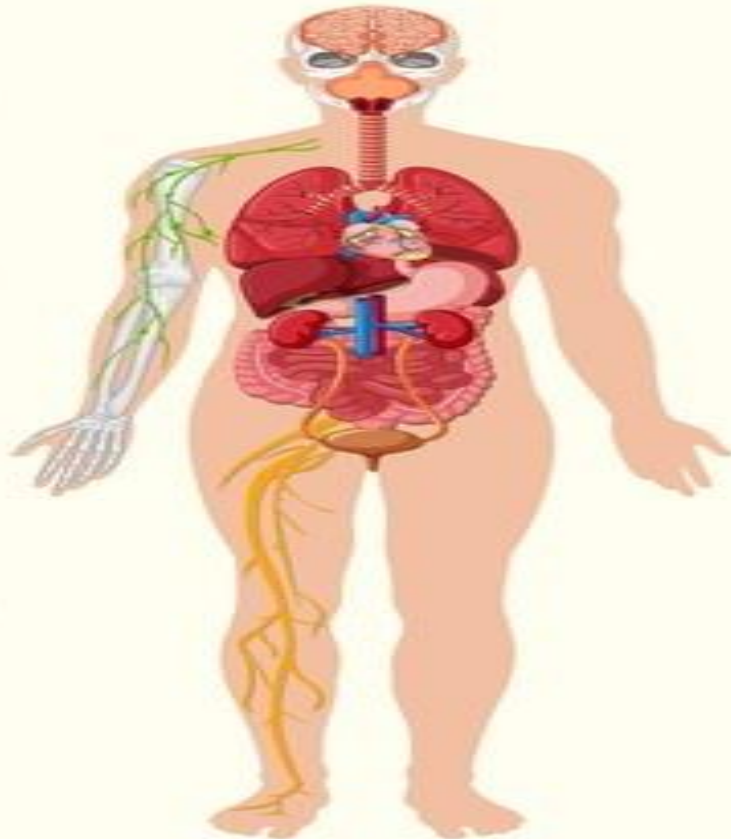
Thrombus



Plaque forms



Plaque ruptures
blood clot forms



- Dizziness
- Fatigue



- Shortness of Breath



- Chest Discomfort
- Chest pain

- It's true that high cholesterol levels are always a cause for us to go towards life-threatening diseases. But did you know that cholesterol is responsible for a variety of important functions within our bodies? If you're looking to understand why keeping cholesterol levels in our bodies is vital, it is essential to take a look at the tasks that this waxy substance performs within our bodies.

How do you define cholesterol?

- It is part of the fat (lipid) family of lipids. It is a white, waxy substance that the body produces. It is also absorbed by the body in the form of cholesterol from our diet.
- **Cholesterol food items**
- The cholesterol-rich foods we enjoy having in our meals include:
 - Dairy products include yogurt, cheese, buttermilk, butter, etc.
 - Fried foods like pizza, burgers, etc.
 - Meat such as beef chicken, mutton.
 - Baked goods such as cakes and pastries, sweets, etc.
 - Eggs

How is the fat (cholesterol) portion of your daily diet is enough?

- The healthy daily diet we eat comprises a variety of food categories. Since our bodies can biosynthesize cholesterol on its own so we don't consider it to be a necessary part of our diet. The lipid profile of an individual who is healthy will depend on the age of the person. In the case of an adult, DRI (Dietary reference intake) recommends consuming that are less than 35% in the form from cholesterol (dietary cholesterol). It is a reference to the fact that 25 to 50 grams of cholesterol from dietary sources are typical if you consume 1000 calories a day.

What is the point at which the level of cholesterol is a medication needed?

- High cholesterol can cause a variety of risks to the person who suffers from it. There is no sign or symptom that indicates high cholesterol. Most of the time, it is the genetic cause. It is a test that can determine the lipid profile the person. If it's less than 200mg/DL, then it is considered healthy to be a healthy adult.
- **The importance of cholesterol**
- It is not a good idea to ignore the importance of cholesterol in our biological systems. The utilization of cholesterol within the body shows its significance.

The building block of cell membrane

- The cell membranes of our cells are composed up of 30% cholesterol (lipid). Its presence within the membranes make it semi-permeable. It allows only the transfer of certain molecules throughout the cell.
- Cholesterol also plays a role in membrane fluidity. It ensures the security of cell membranes during temperature fluctuations. Invaders can inflict harm on cells easily if the cell membrane ruptures for any reason. In order to maintain the cholesterol level the cell membranes are able to deal with these risks.

The role of the nerve impulse (node from Ranvier)

- Nerve impulses are an electric current, which is an electrical threshold in biological systems. Nerve impulses follow their route by leaping. They leap from one place to the next making a node of Ranvier.
- Our nerve cells are made up of tiny patches of myelin on dendrites and axons. The myelin sheath itself is comprised of 27% cholesterol (lipid). Cholesterol (lipid) is a negative conductor of electric. Therefore, when an electrical impulse is detected in the myelin sheath, it leaps over it, creating an arc of Ranvier.

Energy storage

- The body normally stores energy through glycogen. This energy source is readily accessible. But the body is also a fat metabolism. Through this process, the lipid content of foods is stored by the liver to be used when in a stressful situation. A stressed state is when the body requires an excessive amount of energy, such as when exercising, lifting weights and so on.
- **Steroid-based hormones are the hormones that produce HTML0.**
- Cholesterol plays a significant role in the production of steroid-based hormones. Our sex hormones i.e. progesterone (role in the process of pregnancy) along with testosterone (role in the production of sperm) is the main steroid substance that our bodies produce.
- Additionally adrenal hormones, such as aldosterone and cortisol are by cholesterol. It is because cholesterol functions as an ingredient in their production.

Production of Bile

- Cholesterol assists in triggering the secretion of bile. Bile secretion is comprised of amphipathic molecules made from cholesterol in the liver. These substances aid in the digestion of food items.
- **Vitamin D**
- The body requires cholesterol to enable making vitamin D. It's probably the very first molecule in our skin that, when it is exposed to sunlight, it produces vitamin D. Vitamin D is essential for the storage of the calcium within bones.

Conclusion

- The different functions of cholesterol in the biological system provide the clearest picture of its importance. However, high levels of cholesterol are an issue. It can affect the health of an individual and can lead to death.