

Visualizing and Predicting Heart Diseases with an Interactive Dash Board

Serum Cholesterol Levels Vs Age

In Kasakake Village, the serum cholesterol levels of healthy participants were examined. Between the third and fifth decade for males and the third to seventh decade for females, the serum cholesterol levels considerably rose with age. After then, male levels were maintained while female levels fell. Male mean peak levels (\pm SD) were 178 ± 31 mg/100 ml and female mean peak values (\pm SD) were 207 ± 37 mg/100 ml. In men and girls, respectively, the presumptive values of the 0 year old obtained from the regression lines calculated from the plot of blood cholesterol values against age were 129 mg/100 ml and 112 mg/100 ml. The relative body weight calculated using the modified Broca's approach was well linked with the serum cholesterol level across the whole age range of females. Males showed a similar but less pronounced association. In contrast to the trend of the blood cholesterol level, there was no equivalent change in the relative body weight in either sex. The mean cholesterol level (\pm SD) in the umbilical cord blood serum was 65 ± 13 mg/100 ml in the normally delivered full-term babies and increased to 150 ± 46 mg/100 ml during the first one to three months after birth, which was very similar to the presumptive values derived from regression lines in the adults. Additionally, there was a strong association between the body weight and cholesterol level. Conclusion: In healthy individuals, age and relative body weight are significant, independent predictors of blood cholesterol level from the onset of life.

Cholesterol in adults

Sex and gender exist on spectrums. This article will use the terms “men,” “women,” or both to refer to sex assigned at birth.

Your total cholesterol level is the overall amount of cholesterol found in your blood. It consists of:

- low-density lipoproteins (LDLs)
- high-density lipoproteins (HDLs)
- triglycerides

Because it obstructs your blood vessels and raises your risk for heart disease, LDL is also known as "bad" cholesterol. HDL is regarded as "good" cholesterol since it aids in heart disease prevention. The better, the higher your HDL.

Triglyceride levels are included in total cholesterol. These are regarded as the "building blocks" of cholesterol and are a different sort of fat that can accumulate in the body.

High levels of triglycerides and low levels of HDL raise your risk for heart disease.

Beginning at age 20, when cholesterol levels can start to climb, the American Heart Association Trusted Source advises that all individuals have their cholesterol examined every four to six years.

As we age, cholesterol levels tend to climb. Men are generally at a higher risk than women for higher cholesterol. However, a woman's risk goes up after she enters menopause.

For those with high cholesterol and other cardiac risk factors, such as diabetes, more frequent testing is recommended.

Cholesterol in children

Children who engage in regular physical activity, consume a diet rich in nutrients, maintain a healthy weight, and do not have a family history of high cholesterol are less likely to have high cholesterol.

According to current recommendations, every child should have their cholesterol examined between the ages of 9 and 11 and again between the ages of 17 and 21.

Children with greater risk factors should be examined between the ages of 2 and 8 and once more between the ages of 12 and 16 years, such as those who have diabetes, obesity, or a family history of high cholesterol.