

Large, easy-to-read print makes it exceptionally user-friendly.

A straightforward organization makes all definitions easy to find.

An abundance of large, high-quality color illustrations and tables make important concepts clear.

Cross references to other entries enhance understanding; pronunciations and word origins appear for most definitions.

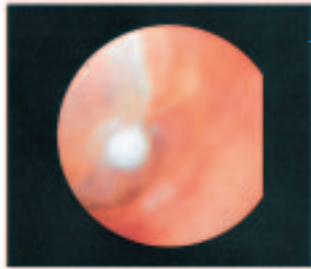
Clear, concise definitions offer easy access to comprehensive information.

cholesteatoma

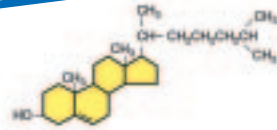
cholesterol test

cholesteatoma /kōlēs'tē-ō-m'ō-m/ [Gk, *chole* + *steat*, fat, *oma*, tumor], a cystic mass composed of epithelial cells and cholesterol that is found in the middle ear and occurs as a congenital defect or as a serious complication of chronic otitis media. The mass may occlude the middle ear, or enzymes produced by it may destroy the adjacent bones, including the ossicles. Surgery is required to remove a cholesteatoma. See also *otitis media*.

lesteral is found in foods of animal origin and is continuously synthesized in the body, primarily in the liver. Increased levels of low-density lipoprotein cholesterol may be associated with the pathogenesis of atherosclerosis, whereas higher levels of high-density lipoprotein cholesterol appear to lower the person's risk for heart disease. Normal adult levels of blood cholesterol are 150 to 200 mg/dL, or 3.9 to 5.2 mmol/L (SI units). Also called **cholesterolemia**. See also **high-density lipoprotein (HDL)**, **low-density lipoprotein (LDL)**, **sterol**.



Cholesteatoma within the eardrum (Dahl and Davis, 1992)



Chemical structure of cholesterol (Tobacco and Patton, 1999)

cholesterase /kōlēs'ter-ēz/ [Gk, *chole* + *aster*, star; Ger, *Sester*, neck, eye; *esterase*, -tāz/], an enzyme in the blood and other tissues that forms cholesterol and fatty acids by hydrolyzing cholesterol esters.

cholesterolemia. See **cholesterolemia**.

cholesterol /kōlēs'ter-ē-ŏl/ [Gk, *chole* + *steros*, solid], a waxy lipid soluble compound found only in animal tissues. A member of a group of compounds called sterols, it is an integral component of every cell in the body. It facilitates the absorption and transport of fatty acids. Cholesterol acts as the precursor for the synthesis of various steroid hormones, including cortisol, cortisone, and aldosterone in the adrenal glands; and of the sex hormones progesterone, estrogen, and testosterone. It sometimes precipitates along with other compounds in the gallbladder to form gallstones. Cho-

cholesterolemia /kōlēs'ter-ē-ŏ-/ 1. the presence of excessive amounts of cholesterol in the blood. 2. the abnormal condition of the presence of excessive amounts of cholesterol in the blood. Also called **cholesteremia**. See also **hypercholesterolemia**.

cholesterolemia /kōlēs'ter-ē-ŏ-m'ē-ŏ-s/ [Gk, *chole*, *steros* + *emia*, abnormal], the increased stimulation of cholesterol in the bile.

cholesterol metabolism, the sum of the anabolic and catabolic processes in the synthesis and degradation of cholesterol in the body. Serum cholesterol level is increased when it is ingested and cholesterol is quickly absorbed. Cholesterol is also synthesized in the liver and can be synthesized by most other body tissues. As much cholesterol is ingested, less is synthesized by the body. Cholesterol is removed from the body by conversion in the liver and excretion in the bile.

cholesterol synthesis /kōlēs'ter-ē-s'īn-thē-s'is/ [Gk, *chole* + *steros* + *genesis*, producing], the elaboration of cholesterol by the liver.

cholesterol-restricted diet. See **low-cholesterol diet**.

cholesterol test, a blood test used to identify patients who are at risk for arteriosclerotic heart disease. Since chole-

Treatment decisions for high blood cholesterol based on LDL cholesterol levels

Patient category	Initiate level	Treat goal
Lifestyle therapy		
Without CAD and with fewer than two risk factors	≥160 mg/dL (4.1 mmol/L)	≤160 mg/dL (4.1 mmol/L)
Without CAD and with two or more risk factors	≥130 mg/dL (3.4 mmol/L)	<130 mg/dL (3.4 mmol/L)
With CAD	≥100 mg/dL (2.6 mmol/L)	≤100 mg/dL (2.6 mmol/L)
Drug treatment		
Without CAD and with fewer than two risk factors	≥190 mg/dL (4.9 mmol/L)	≤130 mg/dL (3.4 mmol/L)
Without CAD and with two or more risk factors	≥160 mg/dL (4.1 mmol/L)	<130 mg/dL (3.4 mmol/L)
With CAD	≥130 mg/dL (3.4 mmol/L)	≤100 mg/dL (2.6 mmol/L)

From Summary of the Second Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Cholesterol in Adults (Adult Treatment Panel II). *Circulation* 99:108, 1999. CAD, Coronary artery disease; LDL, low-density lipoprotein.