

Liposome (Lipid vesicle)

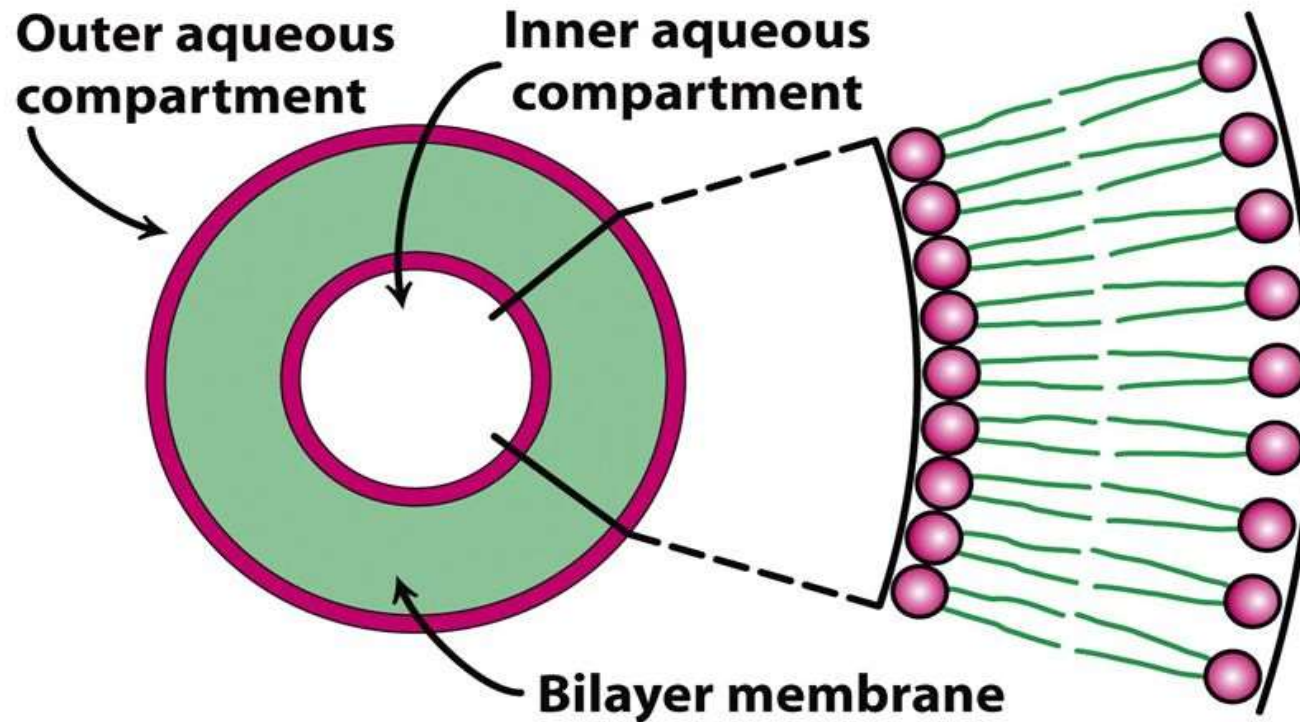
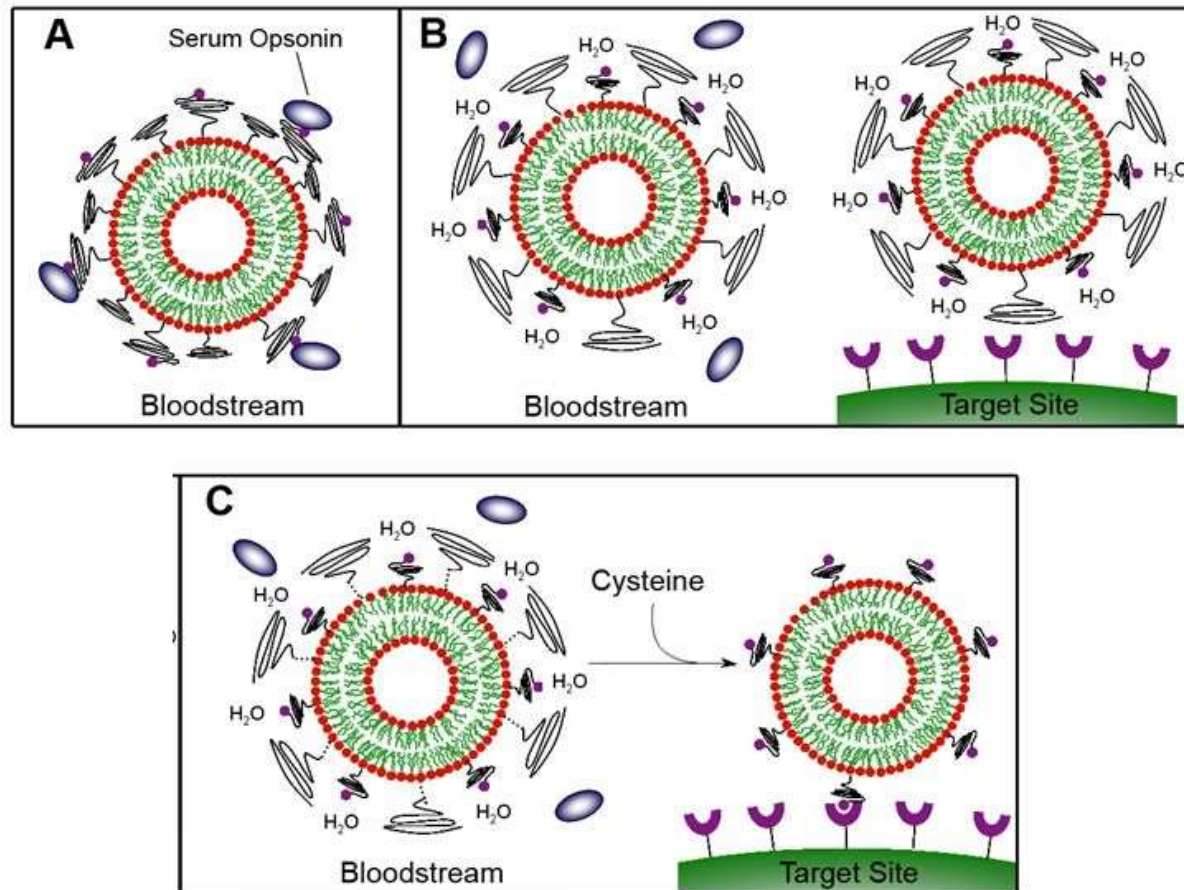


Figure 12-12
Biochemistry, Sixth Edition
© 2007 W.H. Freeman and Company

Liposomes



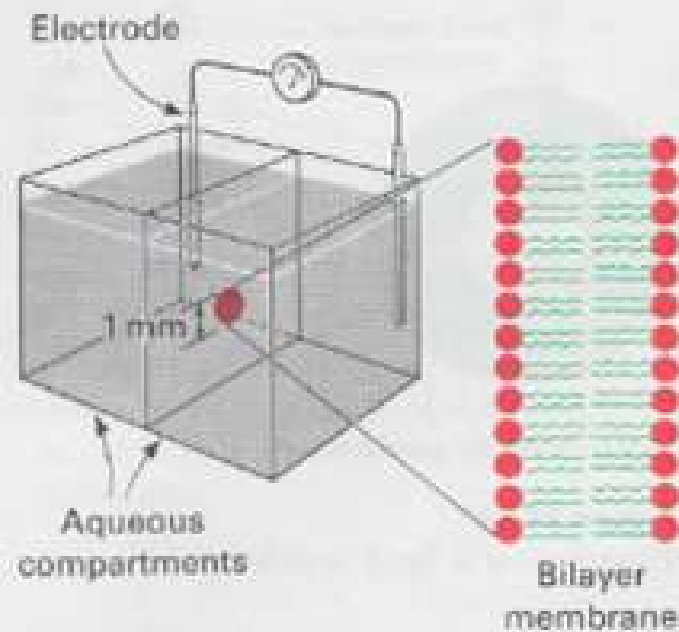


Figure 11-16

Experimental arrangement for the study of planar bilayer membranes. A bilayer membrane is formed across a 1-mm hole in a septum that separates two aqueous compartments.

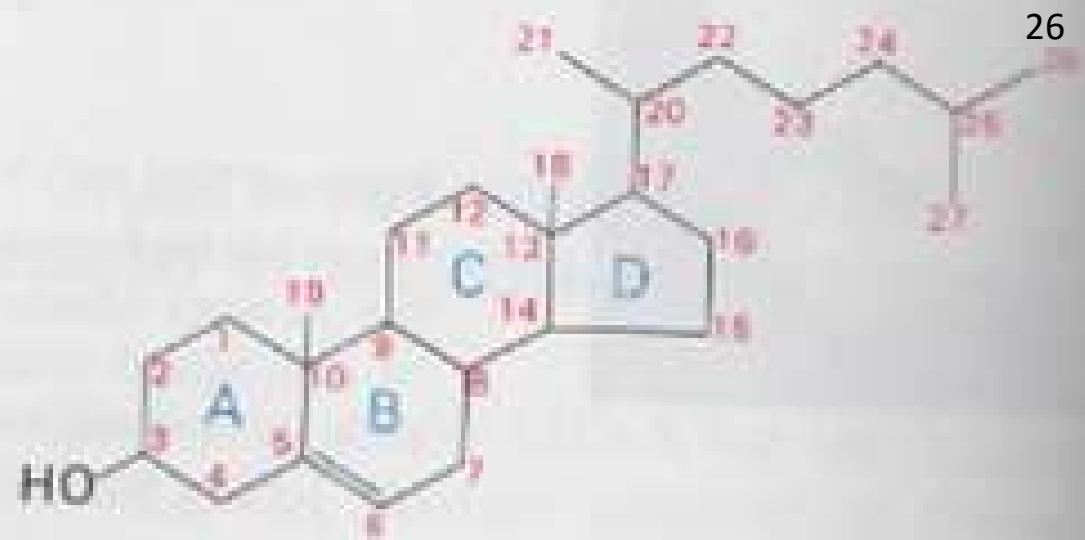
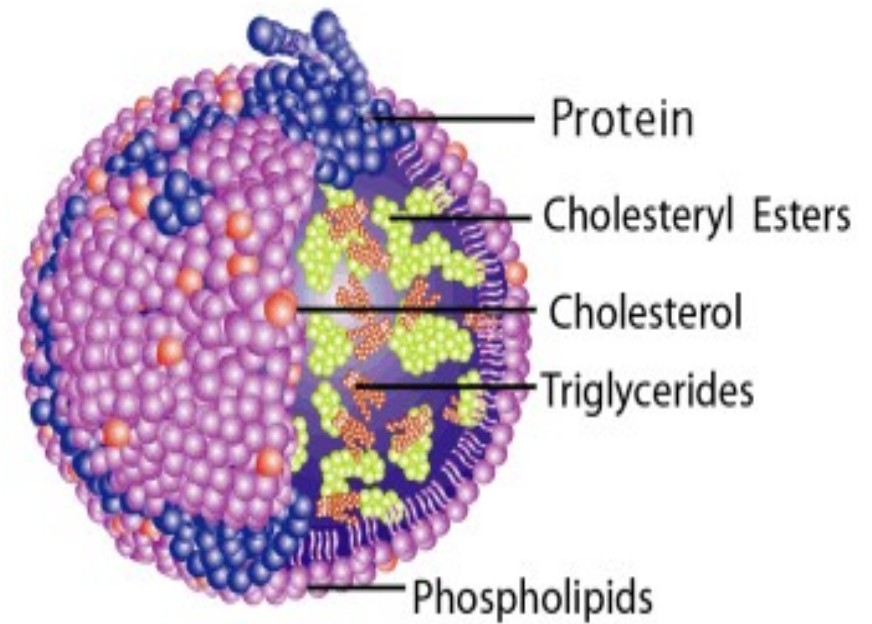
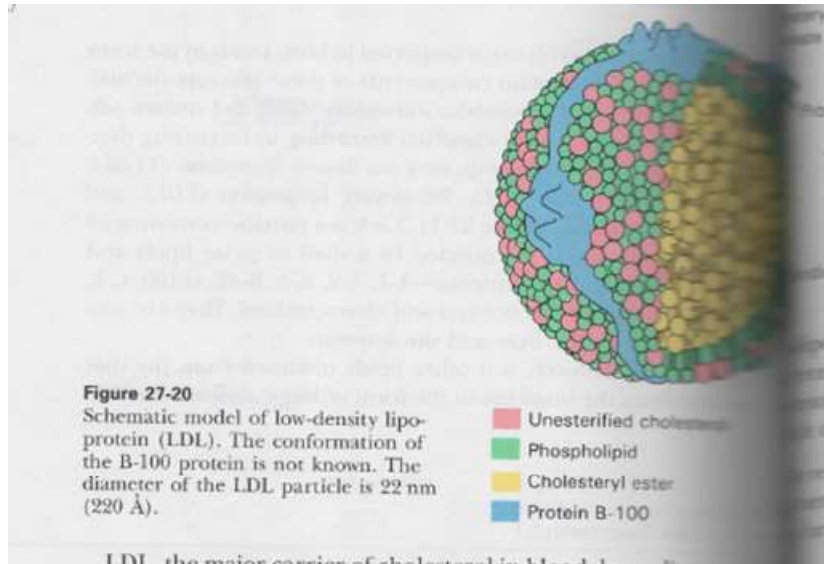


Figure 27-26
Numbering of the carbon atoms of cholesterol.



apolipoprotein
cholesteryl ester

triglyceride

phospholipid

a protein that binds to lipids

a compound of cholesterol and a fatty acid

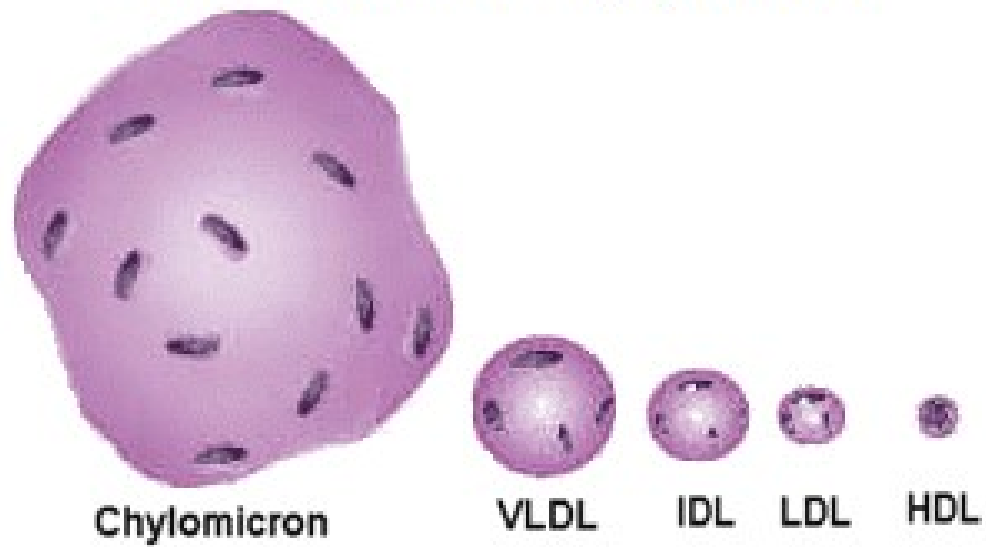
a compound of glycerol and three fatty acids,

an ordinary fat molecule

a compound of glycerol, two fatty acids, and choline phosphate,

an emulsifier like lecithin

Relative Sizes of Lipoproteins



Good cholesterol (HDL), Bad cholesterol (LDL)

LDL and HDL transport both dietary and endogenous cholesterol in the plasma, but LDL is the main transporter of cholesterol and cholesteryl esters and makes up more than half of the total lipoprotein in plasma.

HDL is produced in the liver and intestine and acts like a scavenger of cholesterol. HDL can bind to cholesterol in cell membranes by using the apo-AI protein to mediate the formation of cholesteryl esters.

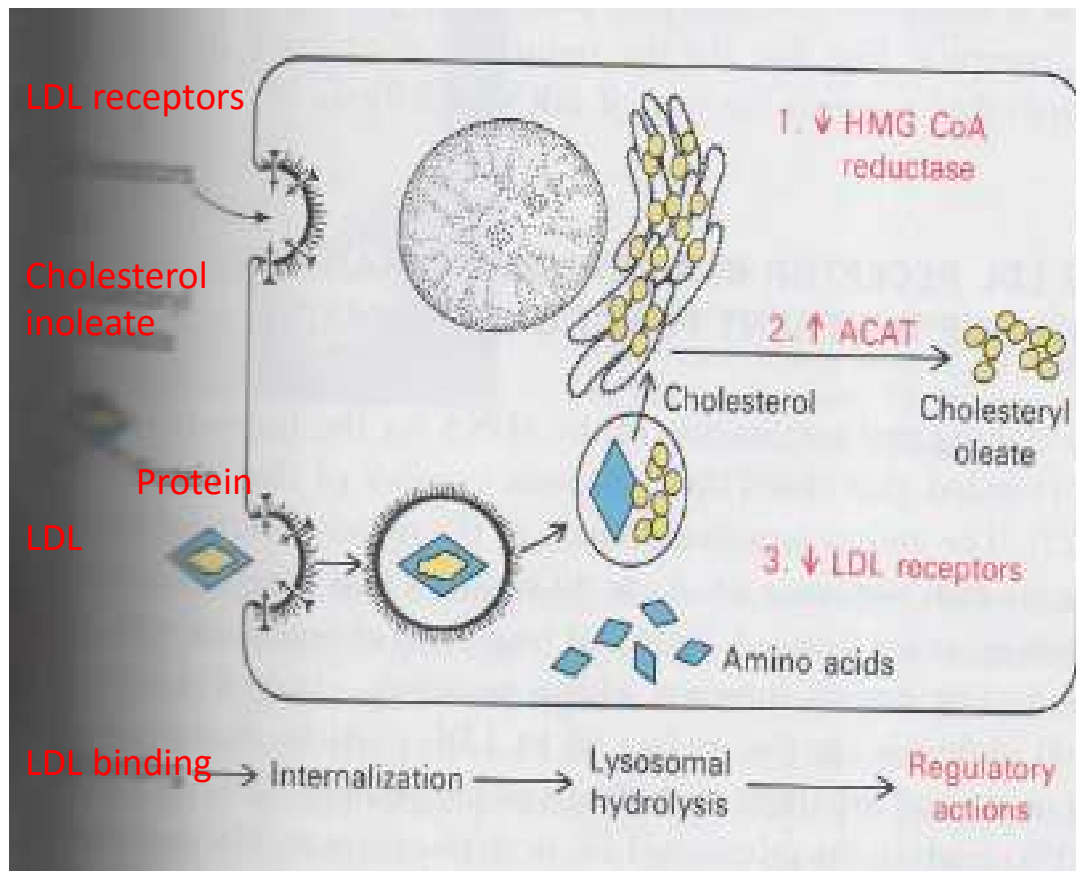


Figure 27-21

Steps in the low-density-lipoprotein pathway in cultured human fibroblasts. HMG CoA reductase denotes 3-hydroxy-3-methylglutaryl CoA reductase, and ACAT denotes acyl CoA:cholesterol acyltransferase. [After a drawing kindly provided by Dr. Michael Brown and Dr. Joseph Goldstein.]



Figure 25-23
 The LDL receptor consists of five domains with different functions: an LDL-binding domain, 292 residues (green); a domain bearing N-linked sugars, 344 residues (grey); a domain bearing O-linked sugars, 34 residues (blue); a membrane-spanning domain, 22 residues (yellow); and a cytosolic domain, 34 residues (red).

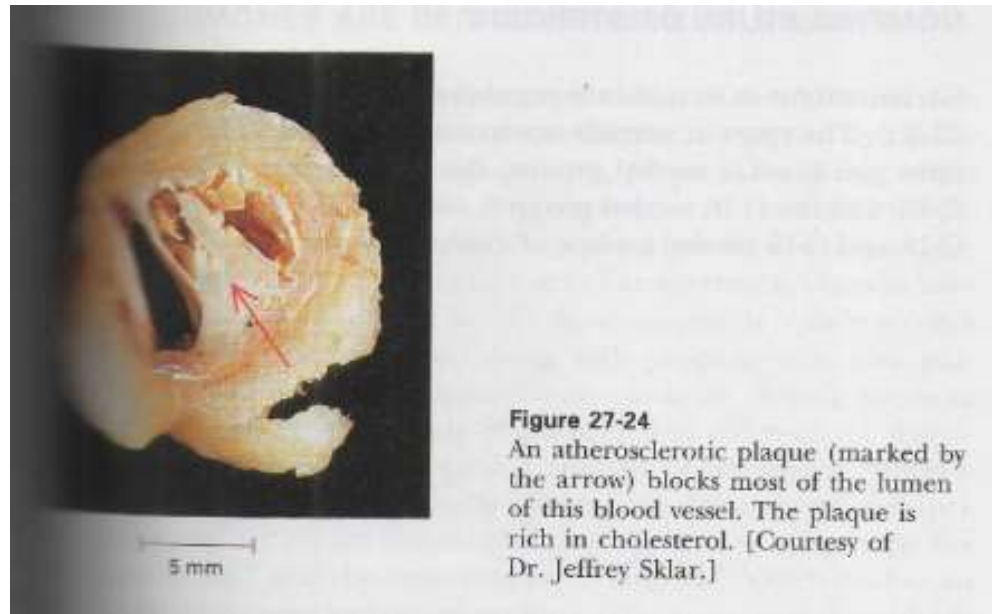
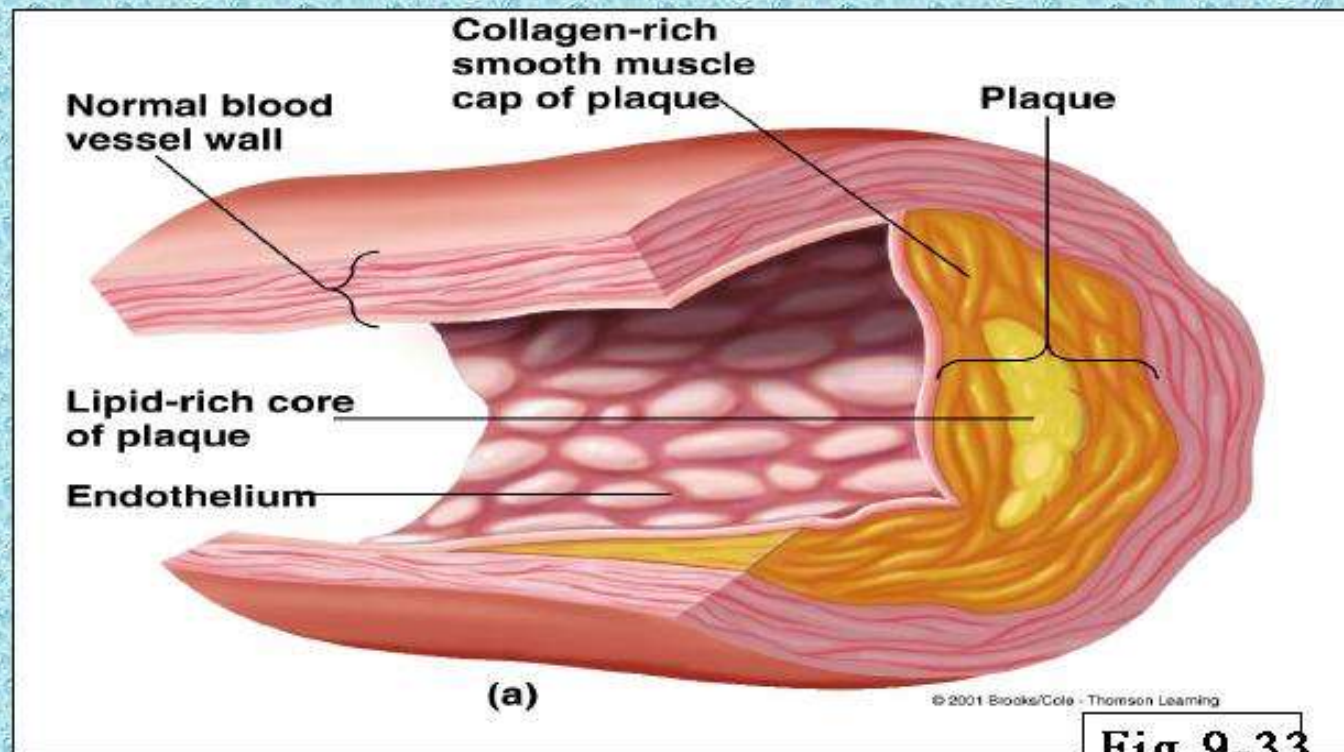


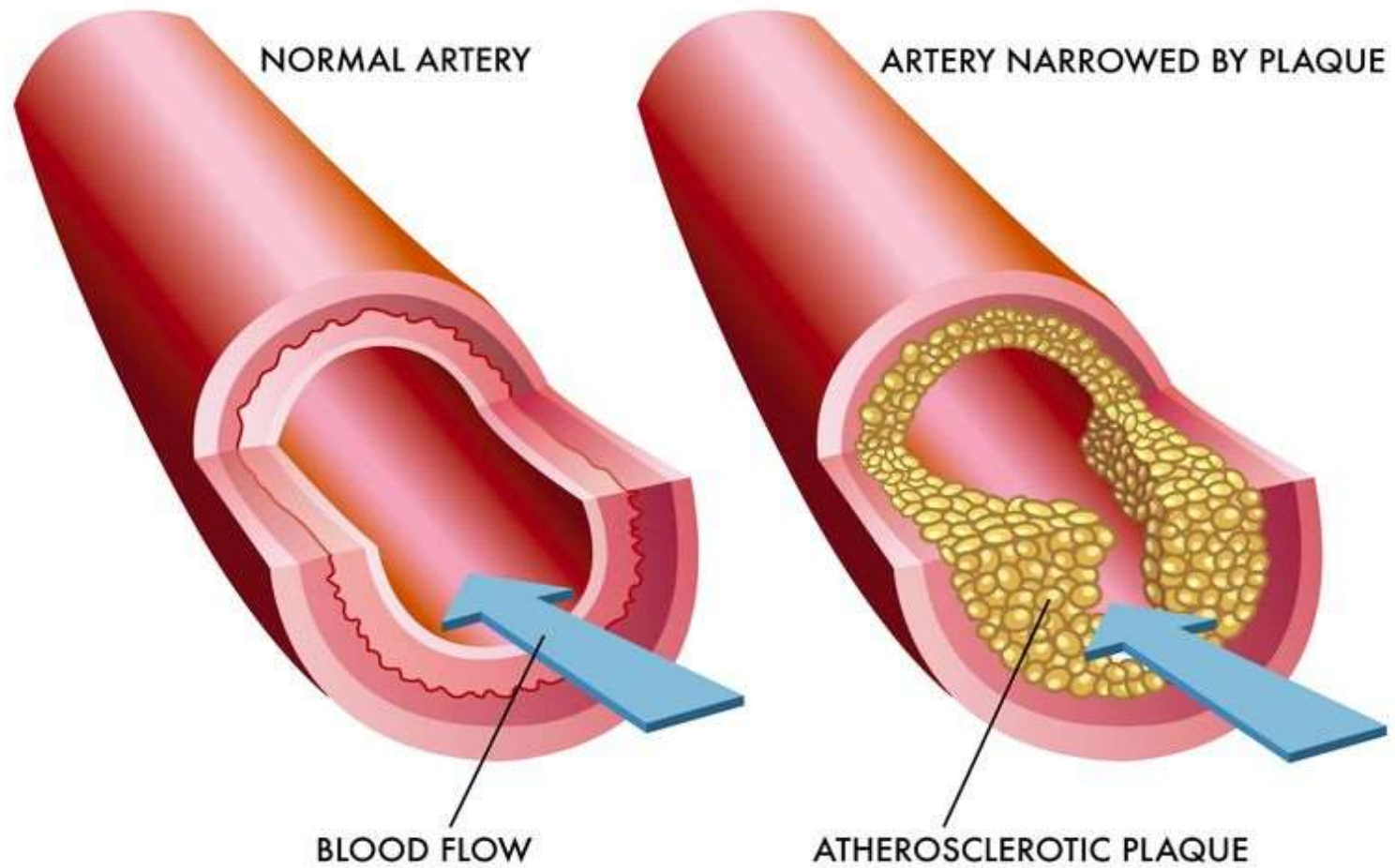
Figure 27-24

An atherosclerotic plaque (marked by the arrow) blocks most of the lumen of this blood vessel. The plaque is rich in cholesterol. [Courtesy of Dr. Jeffrey Sklar.]

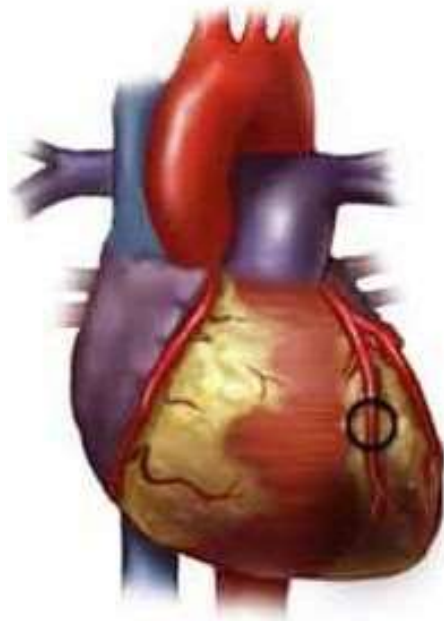
Atherosclerotic Plaque



ATHEROSCLEROSIS



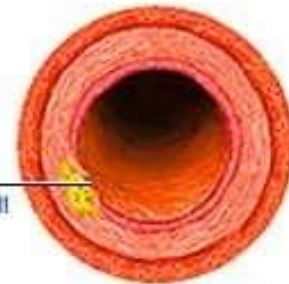
Atherosclerosis



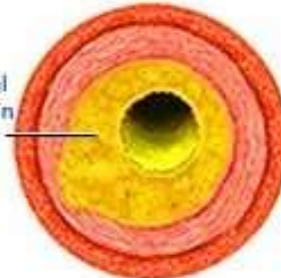
Normal cut
section of
artery



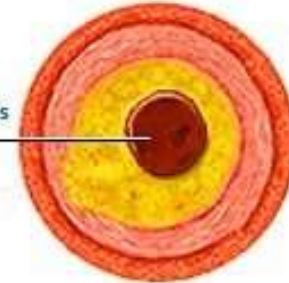
Tear in
artery wall



Fatty material
is deposited in
vessel wall



Narrowed
artery becomes
blocked by a
blood clot



BT 101 QUIZ IS SCHEDULED AS FOLLOWS:

DATE: 10/02/2018 DAY: SATURDAY, No classes on Feb 1 and 5 (for all the Div), will restart from 8 Feb

TIME: 11:30 AM TO 12:30 PM

VENUE:

LECTURE HALL L1(DIV 1),
L2 (DIV 2),
L3 (DIV 3),
L4 (DIV 4).