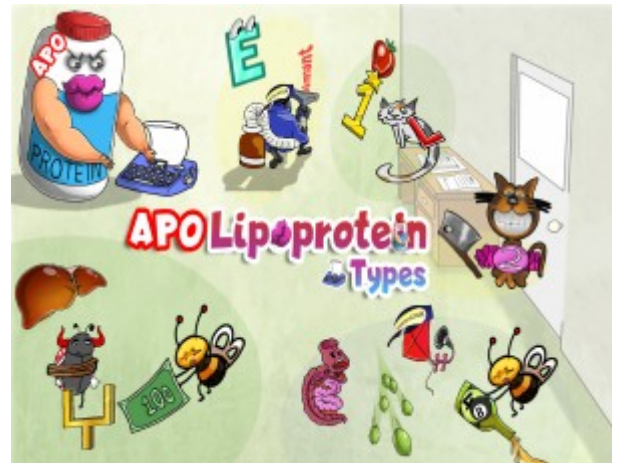


Apolipoprotein Types



PLAY PICMONIC

E

E

Apolipoproteins are proteins that bind to lipids to form lipoproteins, transporting them in the blood, cerebrospinal fluid, and lymph. ApoE binds to everything except LDL. ApoE can bind to chylomicron, chylomicron remnant, VLDL, IDL, and HDL.

Mediates Remnant Uptake

Mediator Remnant Uptake-tube

ApoE facilitates the uptake of chylomicron remnants and aids in their clearance inside the liver.

AI

(A) Apple (1) Wand

ApoA1 is found only in HDL.

Activates LCAT

L-cat

ApoAI activates LCAT (Lecithin Cholesterol Acyltransferase), which helps in maturing HDL. It is responsible for the esterification of free cholesterol, allowing for a greater amount of cholesterol to be loaded onto the protein.

CII

(C) Cat (2) Tutu

ApoCII can be seen in chylomicron, VLDL, IDL, and HDL.

Catalyzes Cleavage

Cleaver

ApoCII is a cofactor of lipoprotein lipase that catalyzes cleavage.

B48

(B) Bee (40) Ounce (8) Ball

ApoB48 binds to chylomicron and chylomicron remnant.

Mediates Chylomicron Secretion Into Lymphatics

Mediator Kite-mic into Lymph-limes

ApoB48 mediates chylomicron secretion from the GI cells into lymphatics, which then continue to the blood.

Only on Particles Originating from the Intestine

Intestinal-guy

ApoB48 only can bind to particles originating from the intestine.

B100

(B) Bee (100) Dollar-bill

ApoB100 binds to VLDL, IDL, and LDL.

Binds LDL Receptor

Binding Ladybug-devil Receptor

B100 binds to the LDL receptor.

Only on Particles Originating from the Liver

Liver

ApoB100 only binds to particles originating from the liver.