

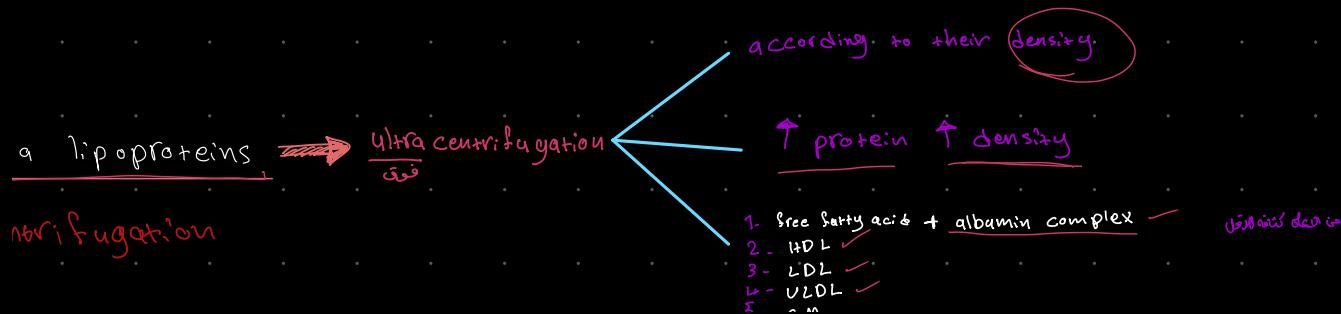
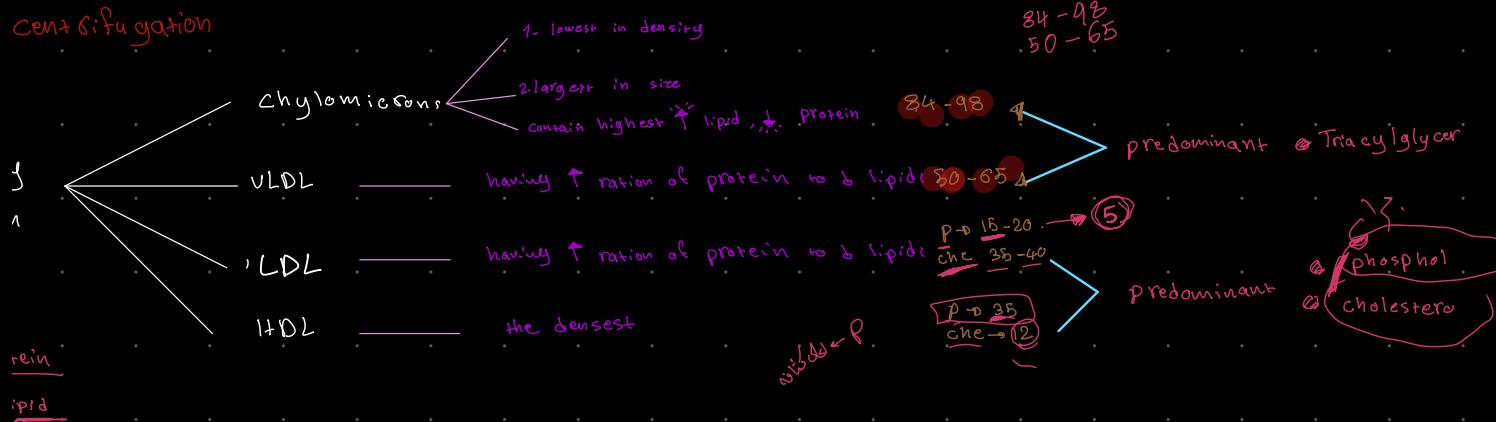
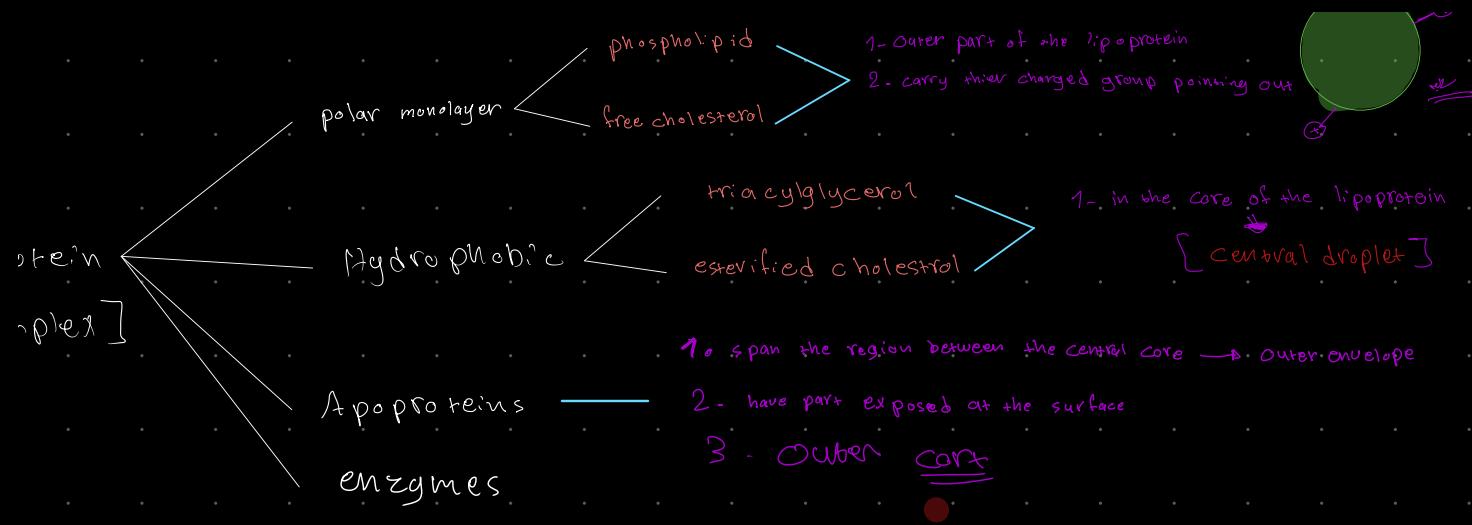
function : transport lipids ($\xrightarrow{\text{apo}}$ triacylglycerols + cholesterol)

differentiation → ratio of protein to lipids

→ particular apoproteins and lipids that contain

1. small intestine → liver
 2. liver → peripheral tissues

- ▷ Chylomicrons
- ▷ very-low density [VLDL]
- ▷ low-density [LDL]
- ▷ intermediate density [IDL]
- ▷ high-density [HDL]



They form part of the structure of lipoprotein \rightarrow apo B

ion

They are enzyme

cofactors \Rightarrow apo C-II $\xrightarrow{\text{act}}$ lipoprotein lipase

inhibitors \Rightarrow apo A-II $\xrightarrow{\text{act}}$ lipoprotein lipase
apo C-III $\xrightarrow{\text{act}}$

They act as ligands

apo B-100

LDL interaction + lipoprotein receptors in tissue apo B \rightarrow LDL receptor

4

function: carry dietary lipids from intestine \rightarrow peripheral tissue

IDL

3. remove the additional FCG from IDL

path: 1. synthesized \rightarrow 2. secreted by process of exocytosis in to lymph \rightarrow 3. pass in to the blood \rightarrow become mature chylomicrons 4. LDL are generated

2. life \rightarrow 1. on capillary walls in adipose tissue \rightarrow 1. 60% of the LDL fatty acids transported back to liver

muscle \rightarrow cardiac
contain lipoprotein lipase (LPL) \Rightarrow 2. extracellular enzyme

2. 40% of the LDL are carried to extrahepatic tissues

elevated level of LDL lead to form [atherosclerosis] delivered [outer] to adipose tissue, heart, muscle ex: 1- adrenocortical \rightarrow synthesis of steroid hormones

3 - 20% goes to the liver

3 - end chylomicron become progressively smaller
function ↓
 $20(TG) \downarrow, Ch \uparrow / protein \uparrow$

HDL function → fate carry lipids synthesized by liver & peripheral tissue to HDL

fate : synthesized → 1 - produced in the liver triacylglycerol, cholesterol ester, apolipoprotein CII, phospholipid, free cholesterol, variety of apolipoproteins

2 - maturation of nascent HDL → HDL accumulates excess triglyceride, phospholipid, and cholesterol from cell lining the blood vessels

life → 1 - pass through the circulation 2 - central hollow core of HDL progressively fills with cholesterol esters
2 - degrad trig TG by lipoprotein lipase 3 - it takes fatty acid 4 - more globular shape to eventually glycerol

4 - HDL accepts free cholesterol from peripheral tissue

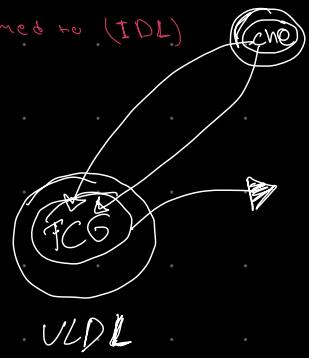
Function : 1. primary function LDL is to provide cholesterol to peripheral tissue to cholesterol ester

- transferred to VLDL
- returned to liver by IDL, LDL

fate : synthesized →

VLDL → 1. remove the additional core (TG) from VLDL

2. It will transformed to IDL



LDL → Liver

