

# Life cycle of Cholesterol in Humans

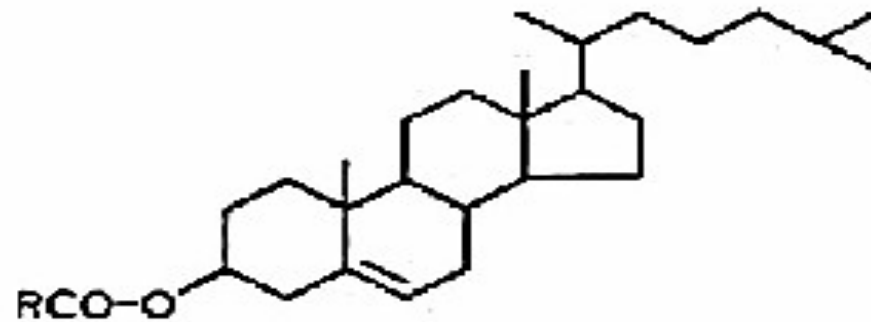
SMPatel

# Food Sources

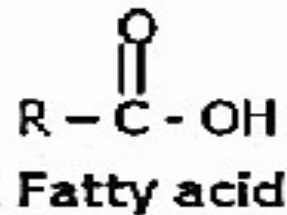


# Digestion – Cholesterol Esterase , Bile Salt

*cholesteryl esters*



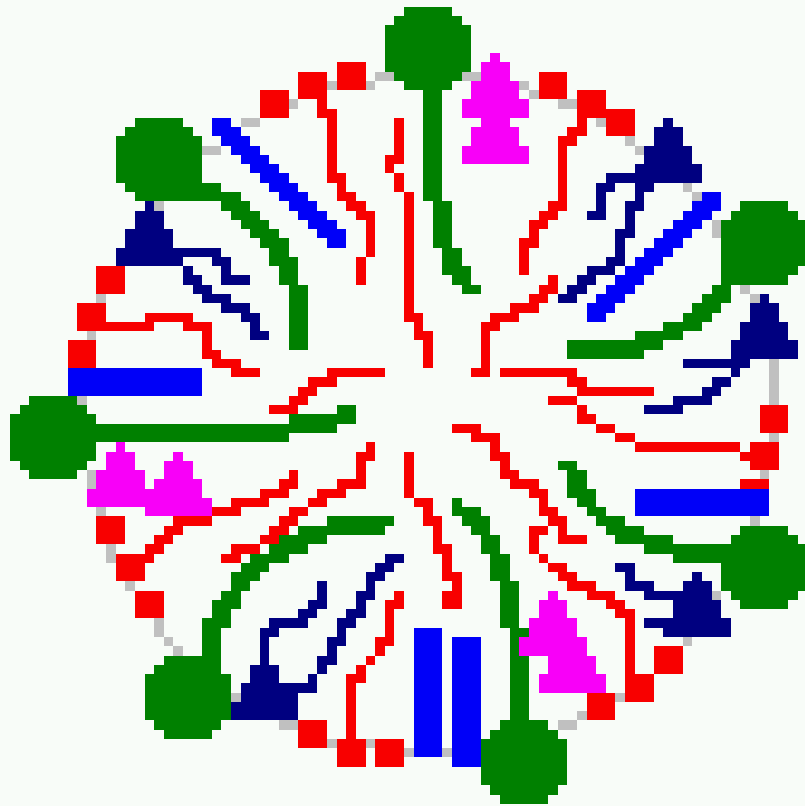
**Cholesteryl ester hydrolase**



+



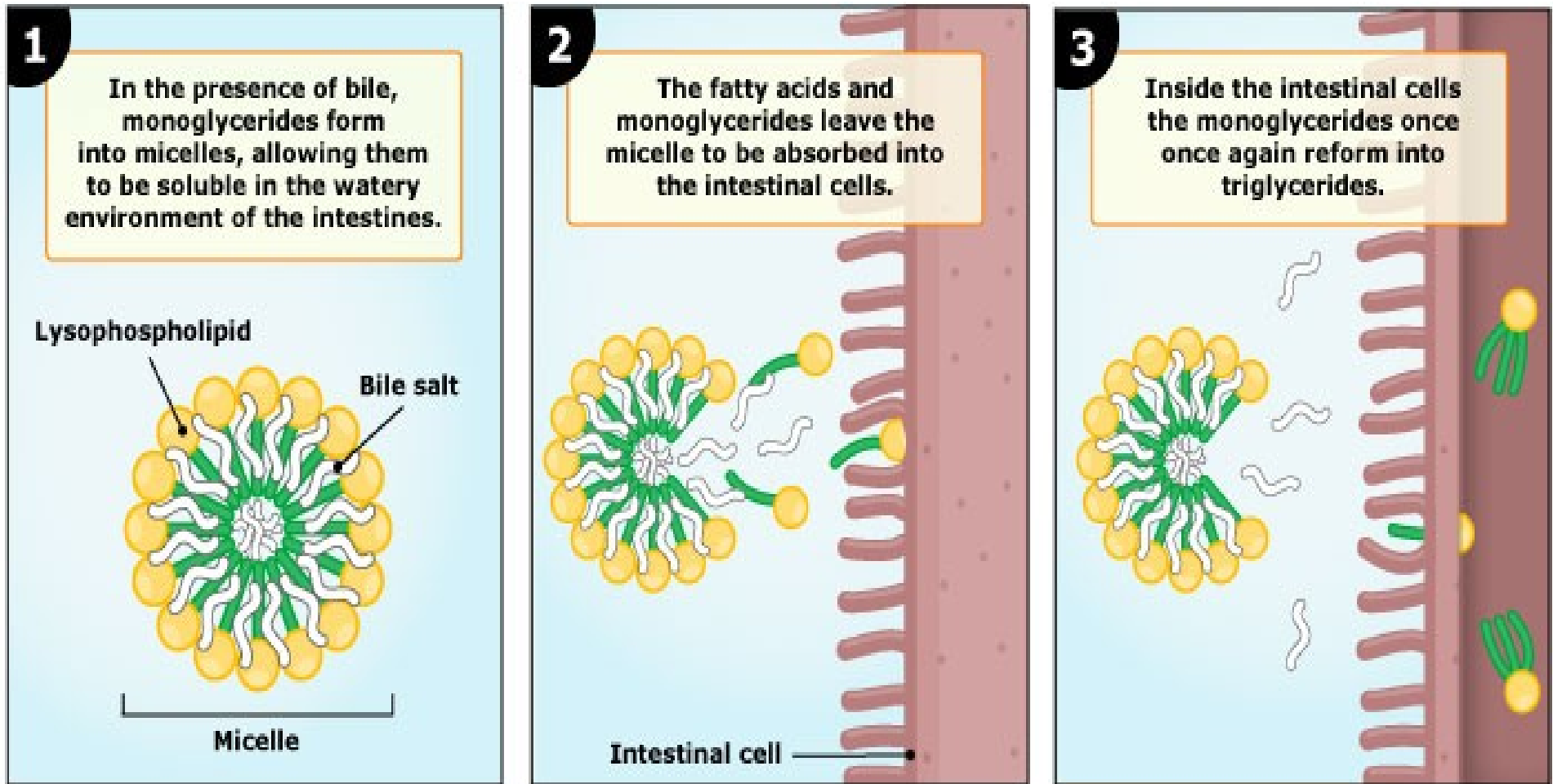
# Absorption, Micelle



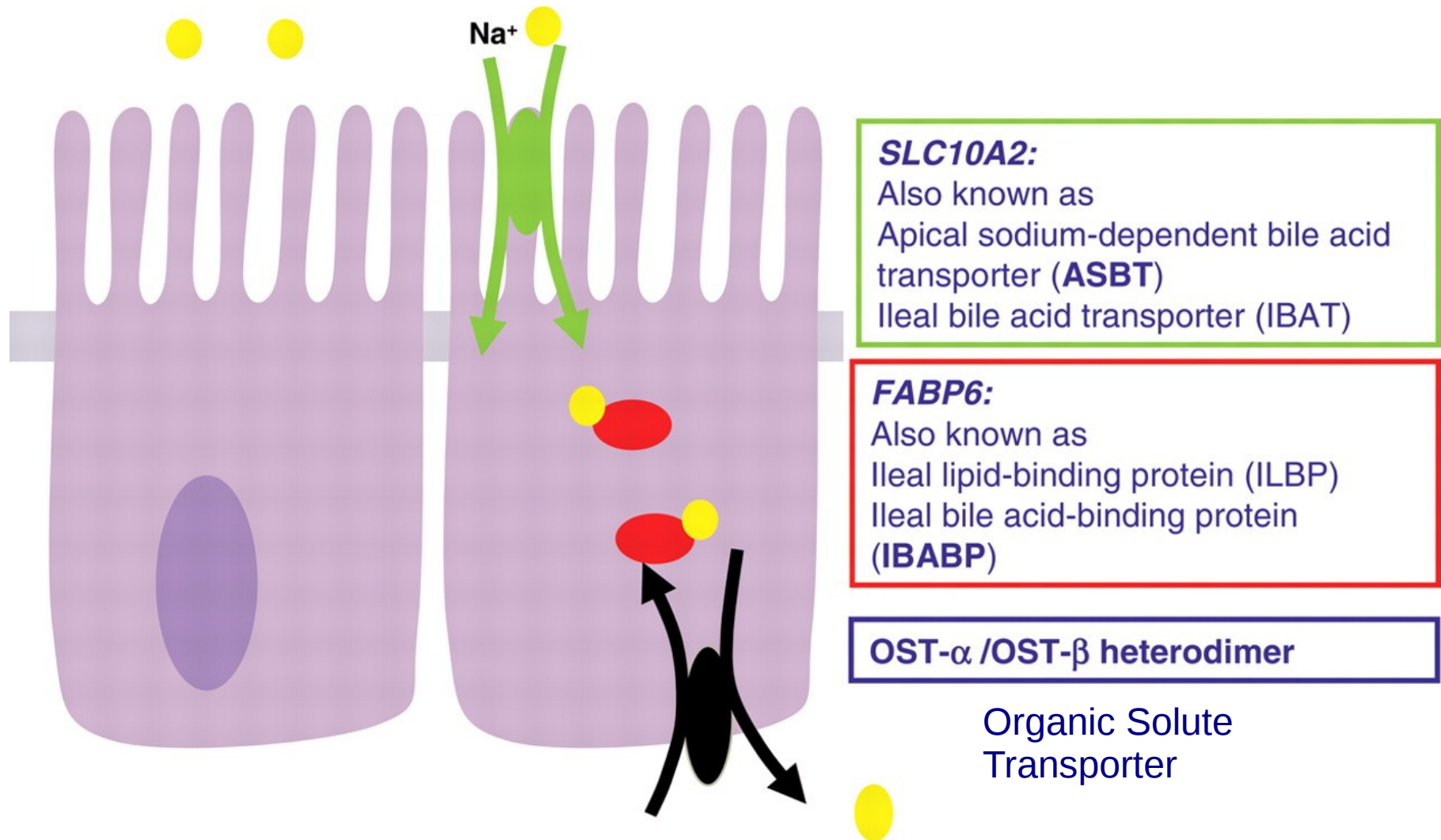
Bile salts  
Monoglyceride  
Fatty acids  
Phospholipids  
Cholesterol

# Cholesterol delivered to cell membrane

## Micelle



# Bile Acid absorbed in Ileum



Pattni S , and Walters J R F Br Med Bull 2009;92:79-93

# Intestinal mucosa

**C + FA**



**CE**



**Chylomicrone**

# Cholesterol in blood

H-Bond

Water solubility

Unique Transport system

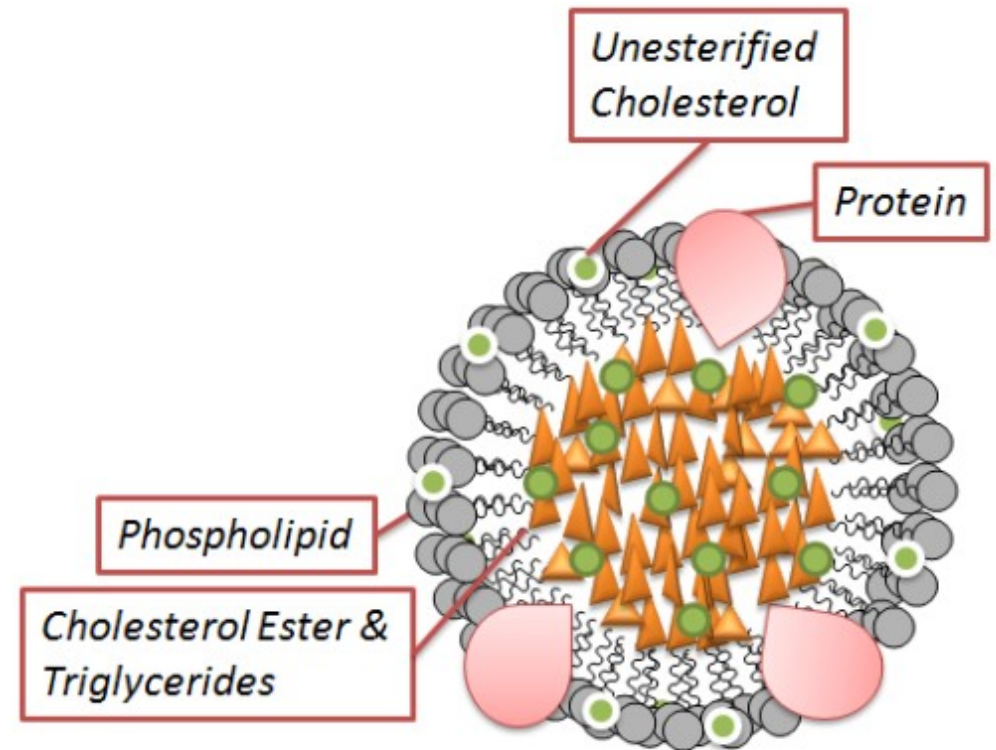
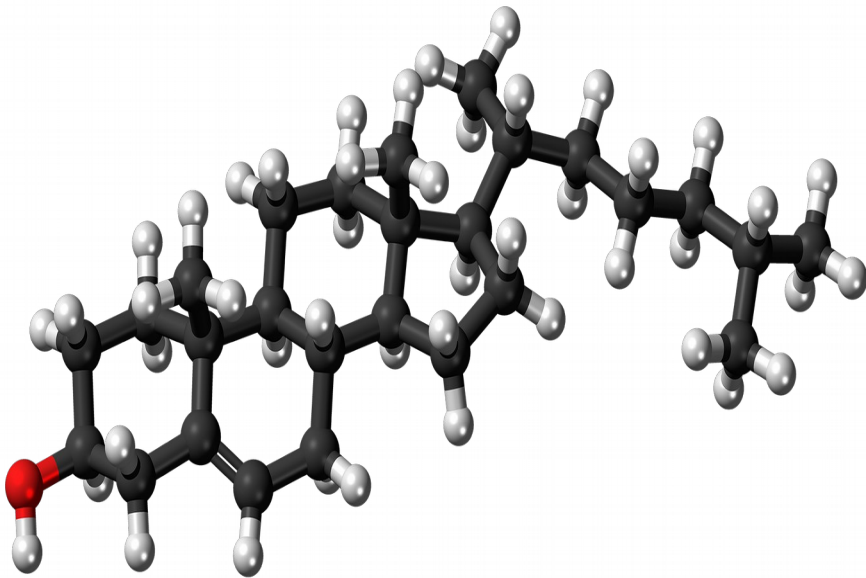
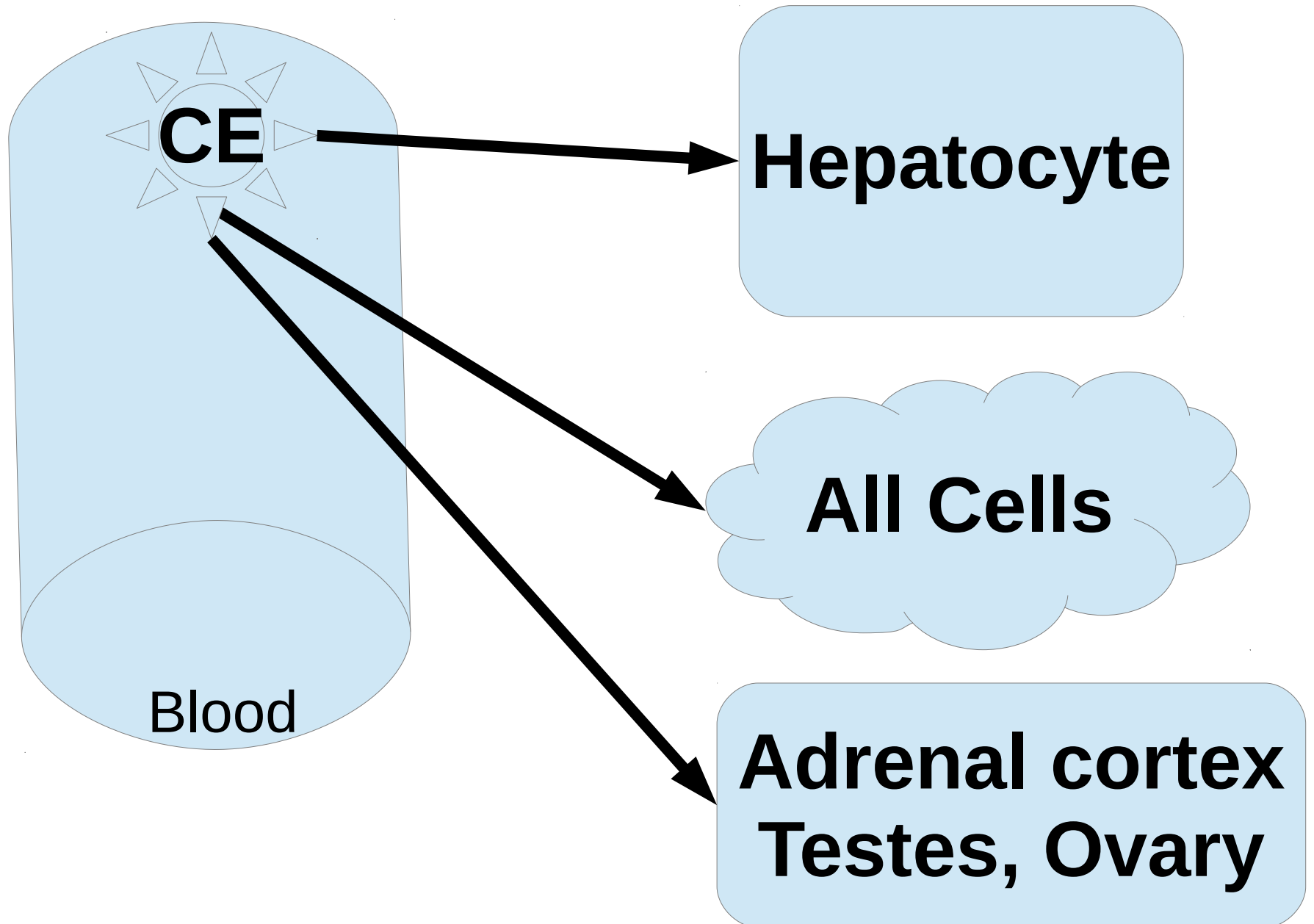


Figure 1. Schematic diagram of a Lipoprotein.

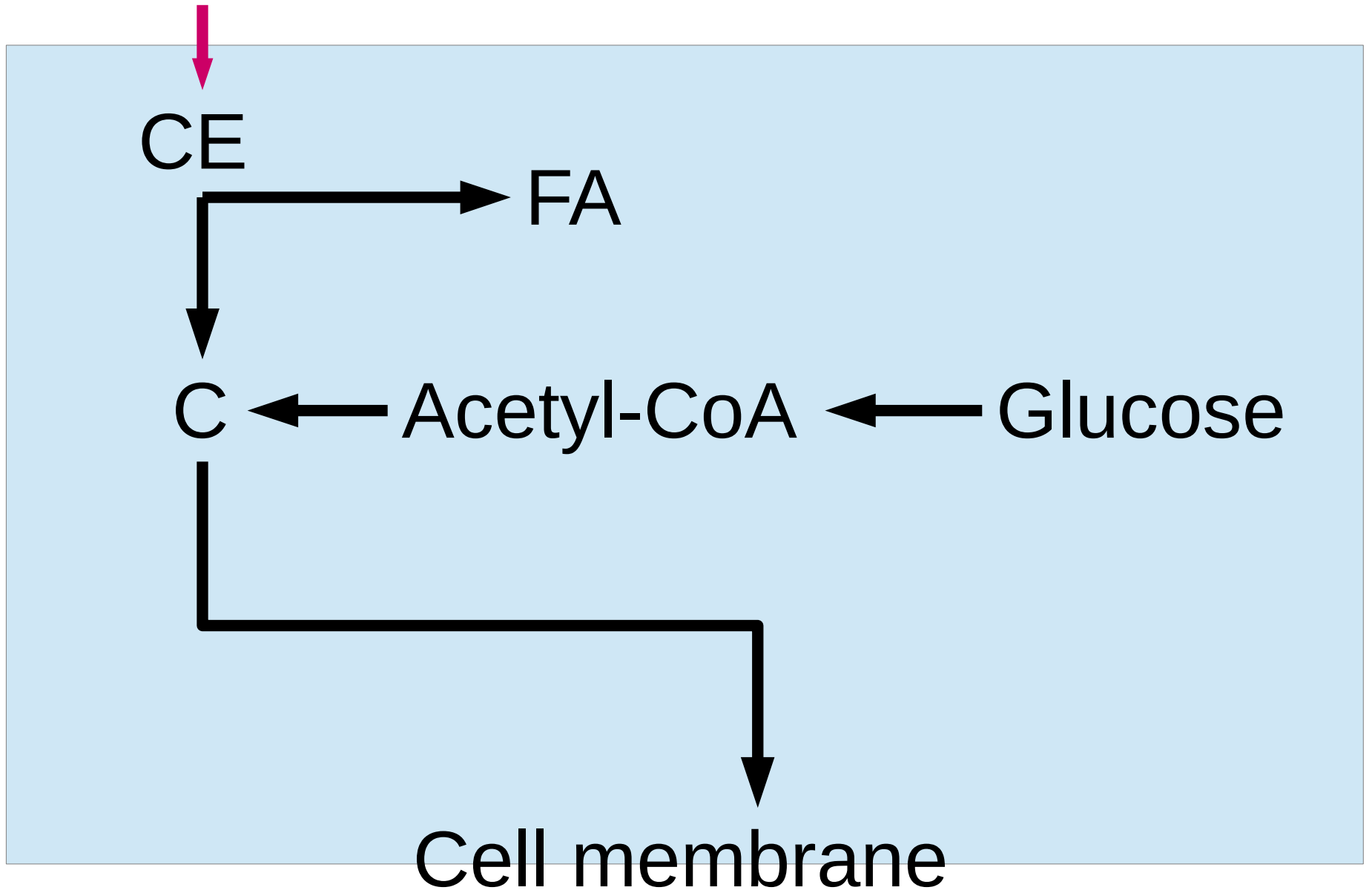


# Lipoprotein is taken up by cells

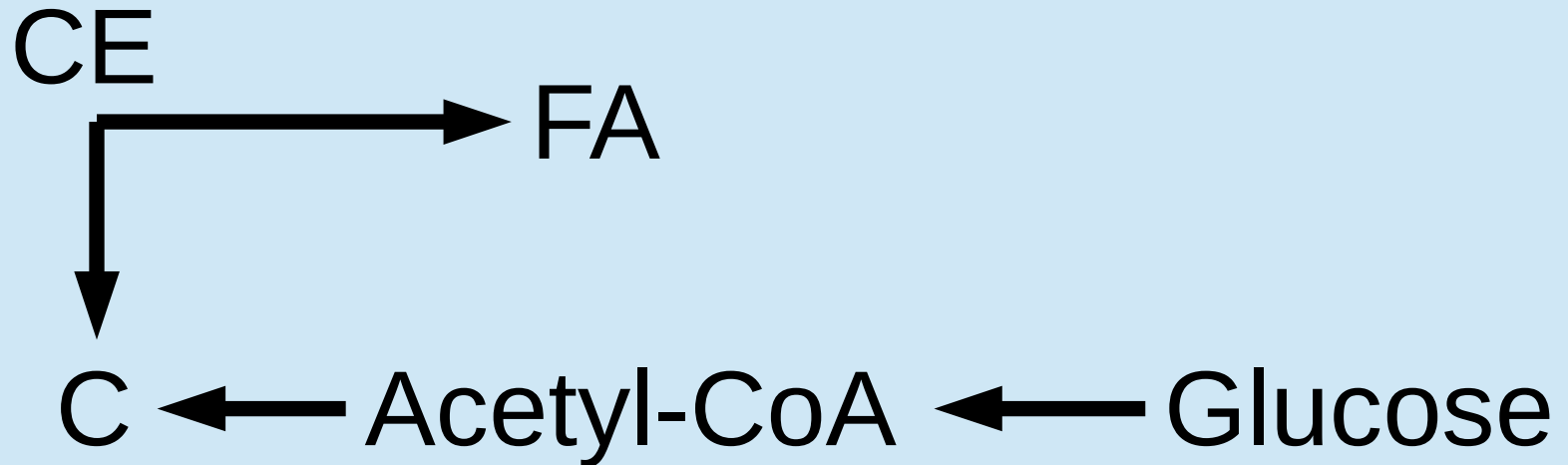


# C, CE All cells

Lipoproteins

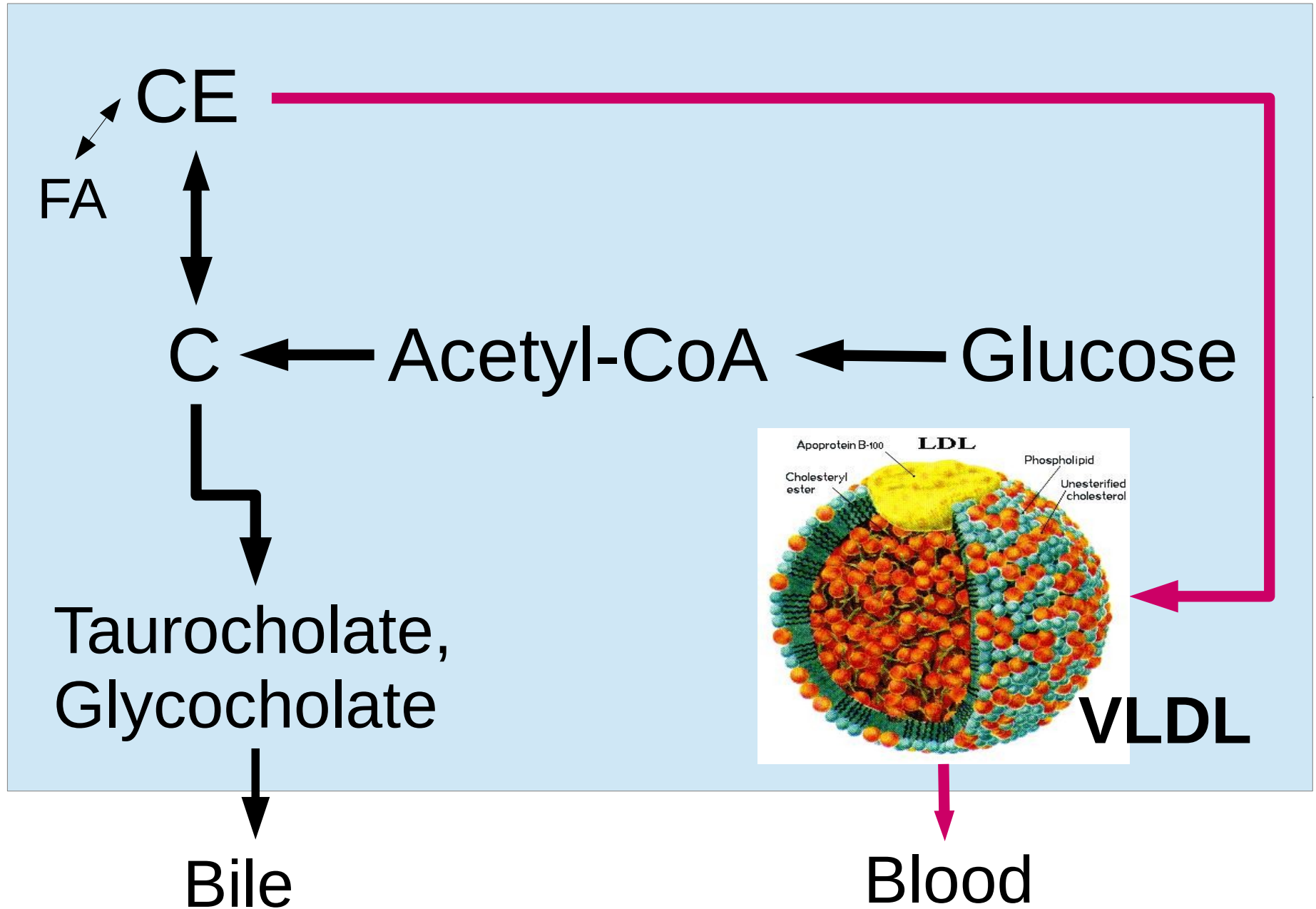


# C, CE in AC, T, O



Glucocorticosteroid, Mineralocorticosteroid  
Testosterone, Estrogen

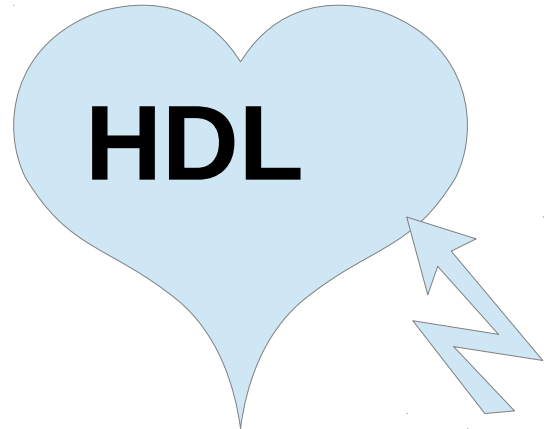
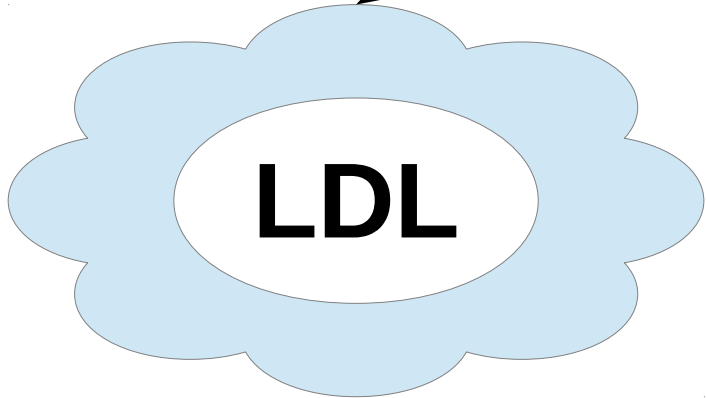
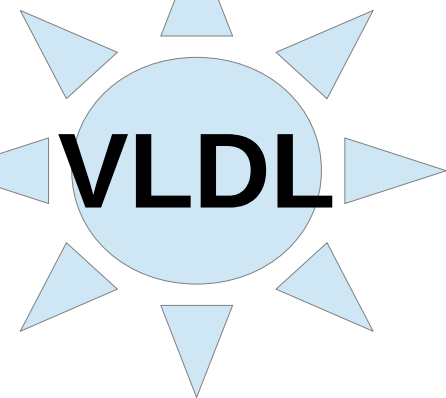
# C, CE in Liver



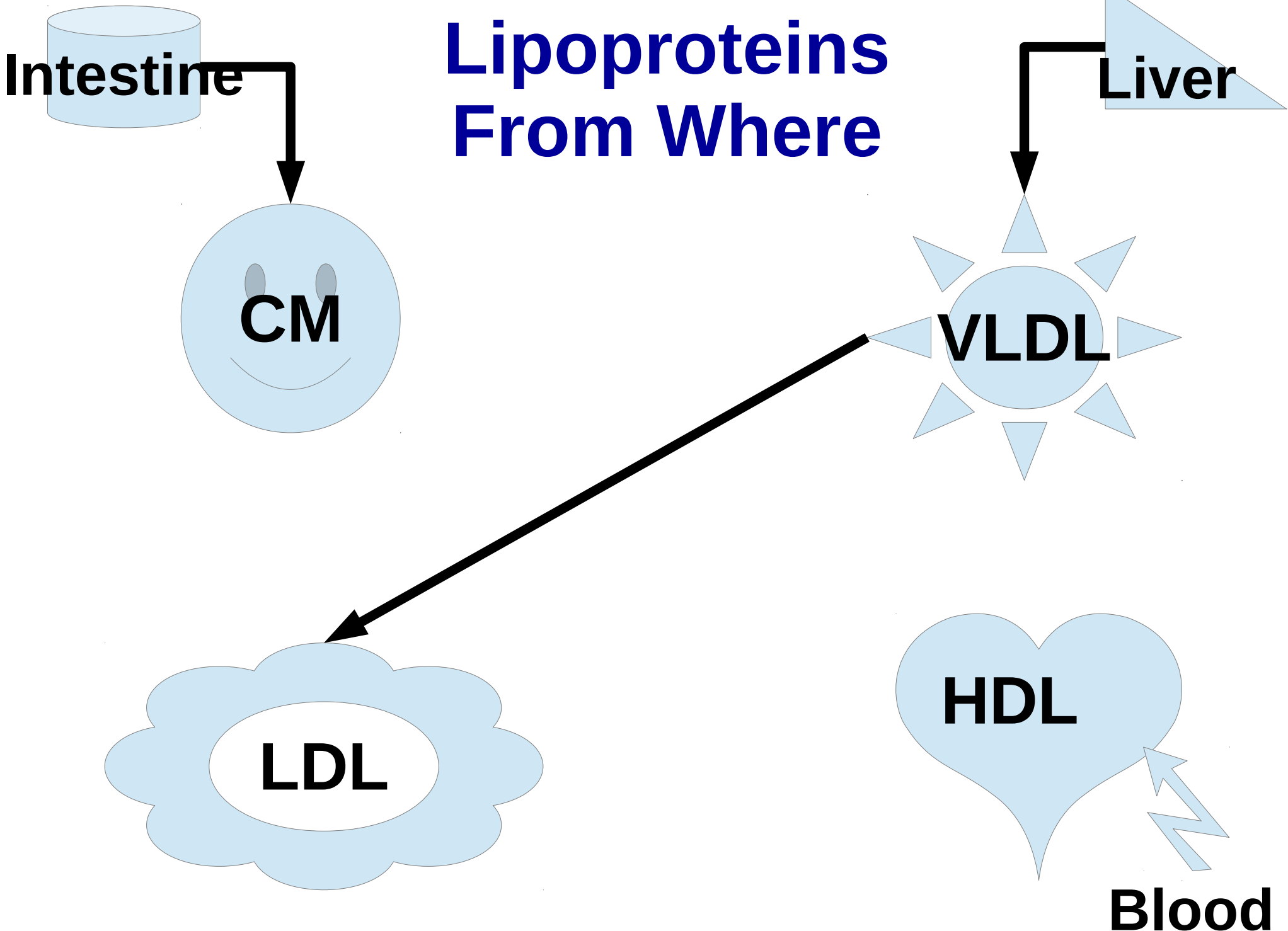
**Intestine**

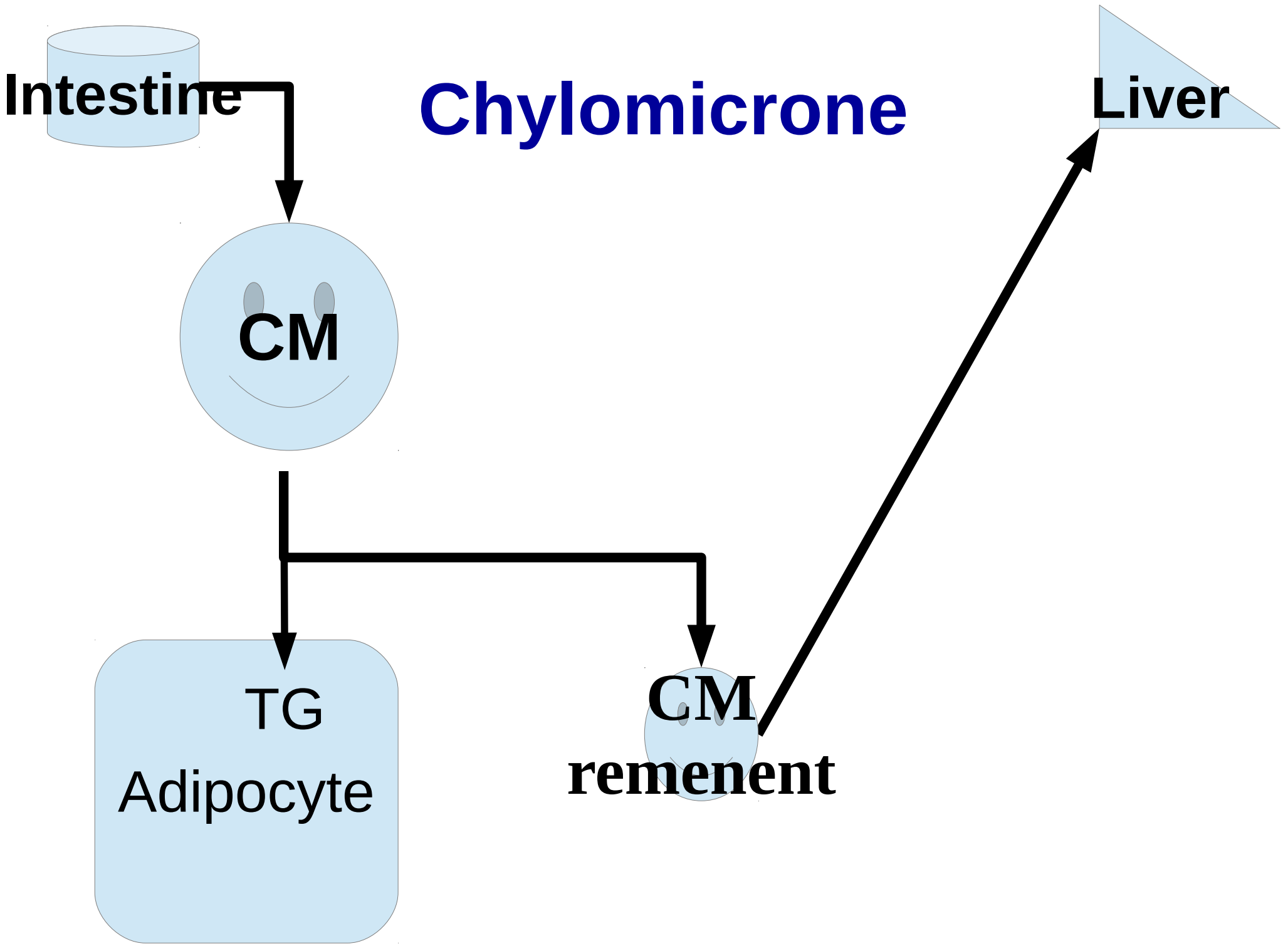
# Lipoproteins From Where

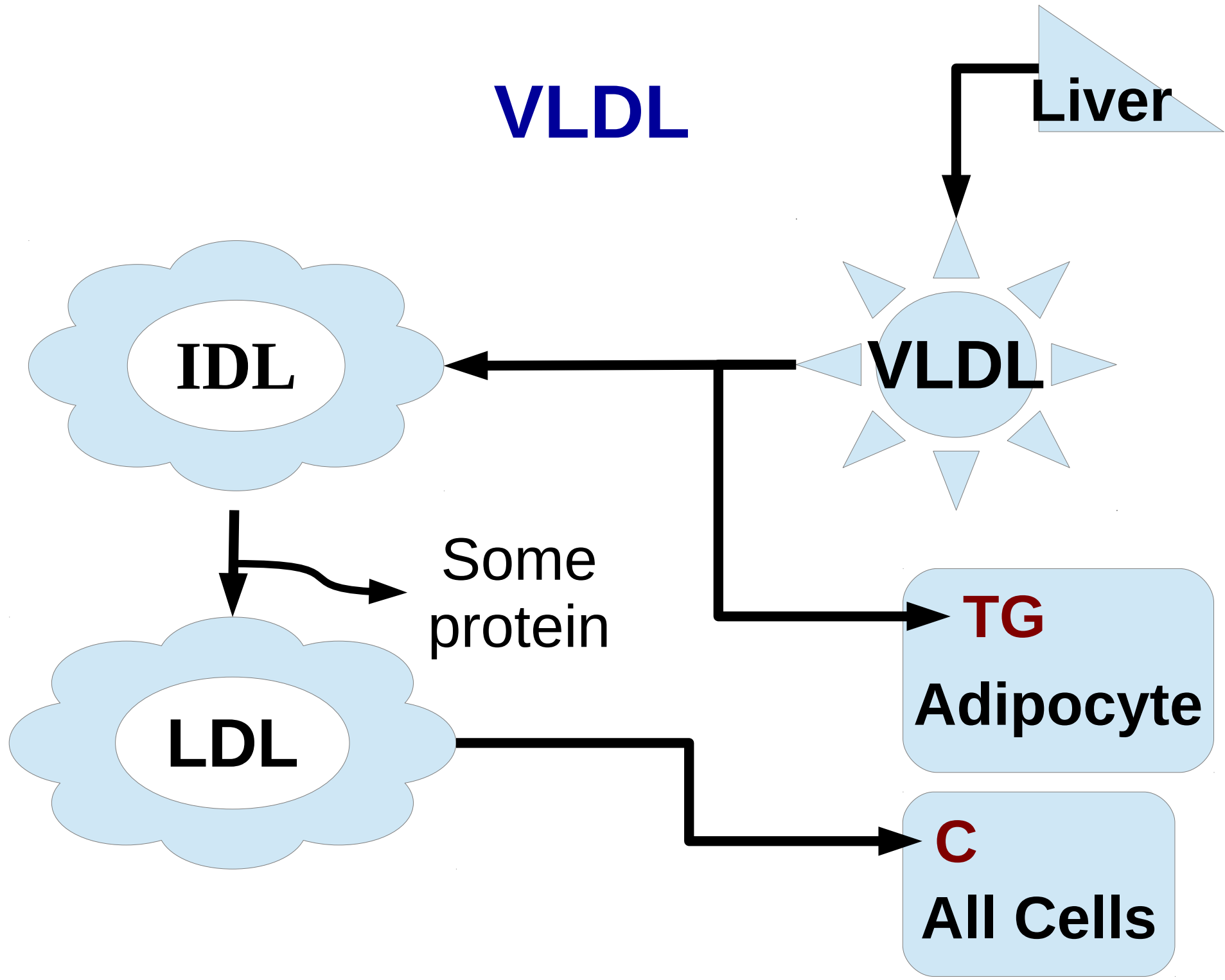
**Liver**

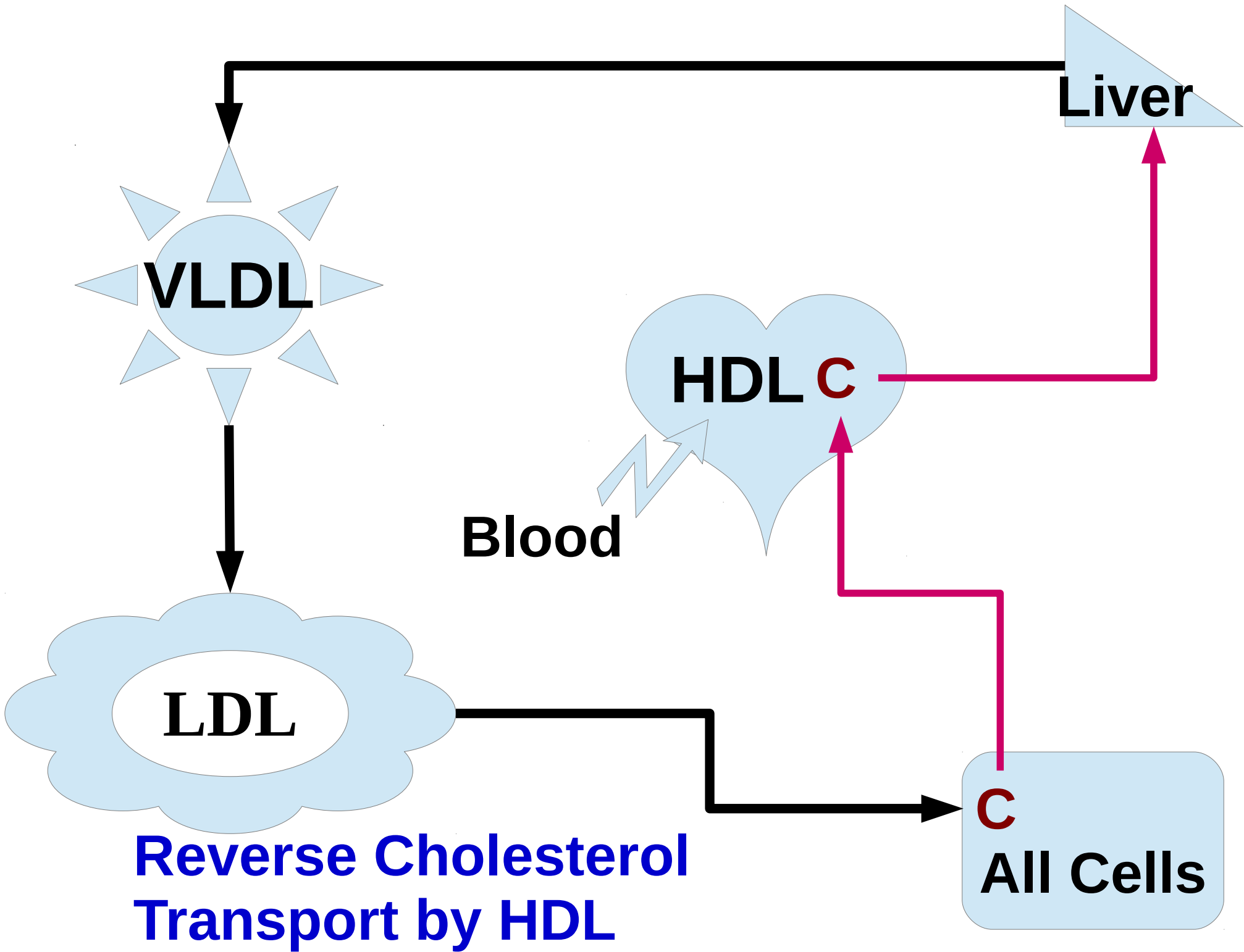


**Blood**











# Why Eggs Die early. Because their cholesterol is high

Eggs have high Cholesterol

high Cholesterol makes eggs yummy

So, We kill Eggs and Eat them

High cholesterol kills ( Eggs too!! )

