



# 12.

## seminář LC

# LIPIDY

# Klasifikace lipidů :

## 1/ TUKY a OLEJE

acylglyceroly

monoacylglycerol

diacylglycerol

triacylglycerol

## 2/ GLYCEROLIPIDY

- glycerofosfolipidy

fosfatidylcholin (lecithin)

-“- ethanolamin (kefalin)

-“- serin

-“- inositol

- plasmalogeny
- kardiolipin

### 3/ SFINGOLIPIDY

- sfingofosfolipidy sfingomyelin
- glykolipidy cerebrosidy  
globosidy  
gangliosidy

### 4/ ISOPRENOIDY

- terpeny vit. A (retinoidy)  
skvalen, ....  
dolichol  
ubichinon  
.....
- steroidy cholesterol, ...  
žlučové kyseliny  
pohlavní hormony (androgeny,  
estrogeny, gestageny)  
kortikoidy (gluko- a mineralo-)  
vit. D, kalcidiol, kalcitriol

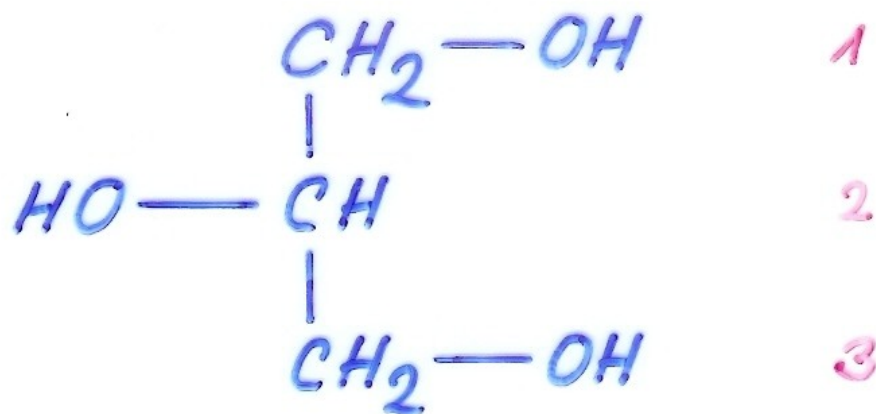
## 5/ V TUCÍCH ROZPUSTNÉ VITAMINY

A, D, E, K (A + D již uvedeny)

## 6/ DERIVÁTY MASTNÝCH KYSELIN

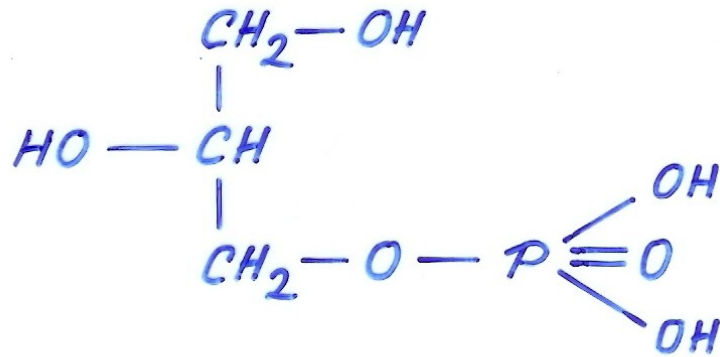
- ikosanoidy prostaglandiny  
prostacykliny  
thromboxany  
leukotrieny

.....

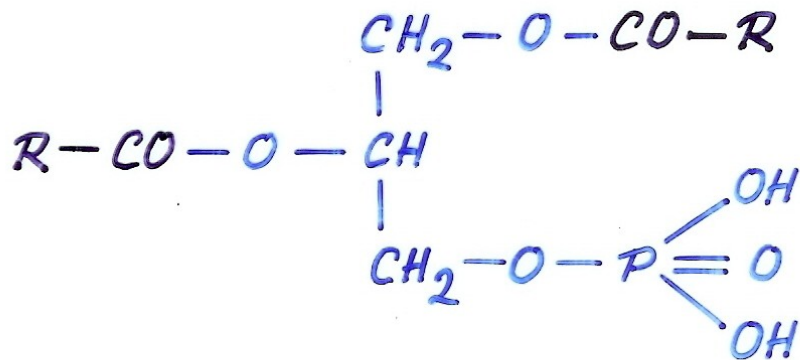


sn-glycerol

sn = stereospecific notation



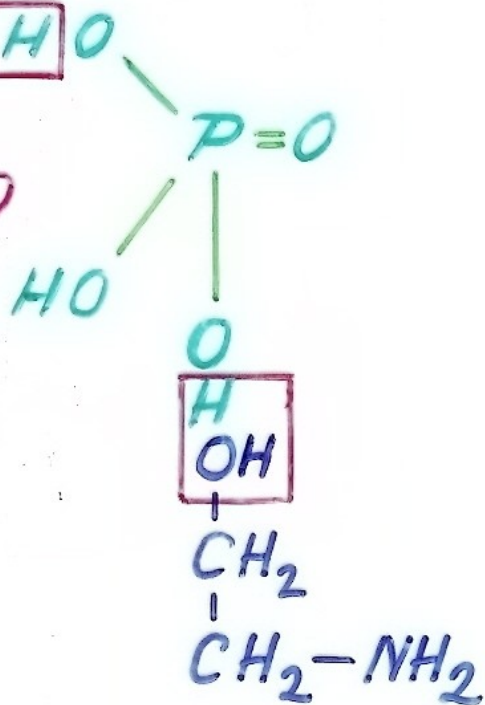
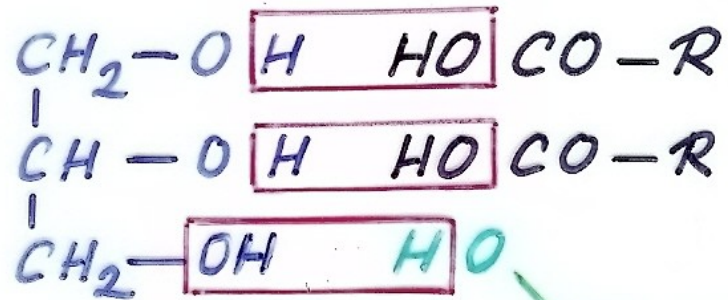
sn-3-glycero-  
phosphate

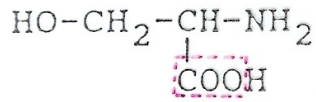


phosphatidic  
acid  
fosfatidová kys.

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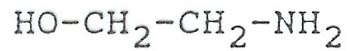
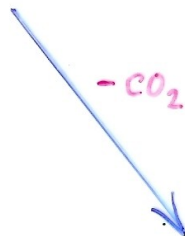






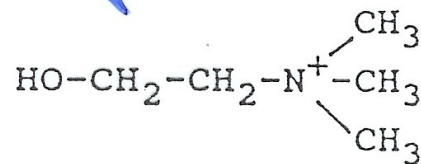
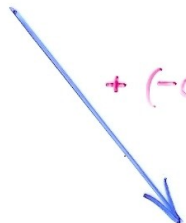
serine

$-\text{CO}_2$

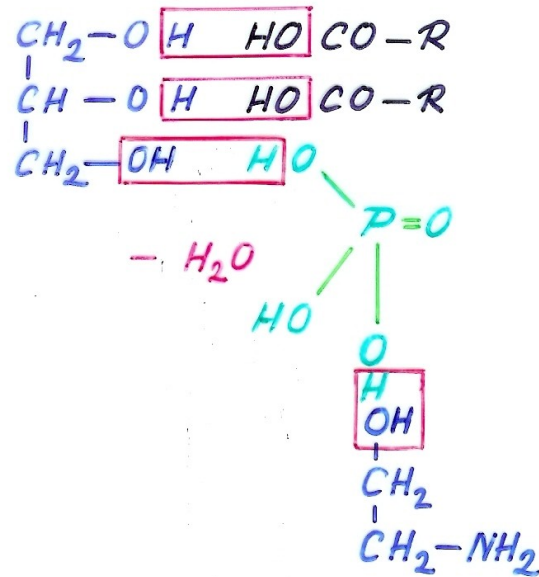


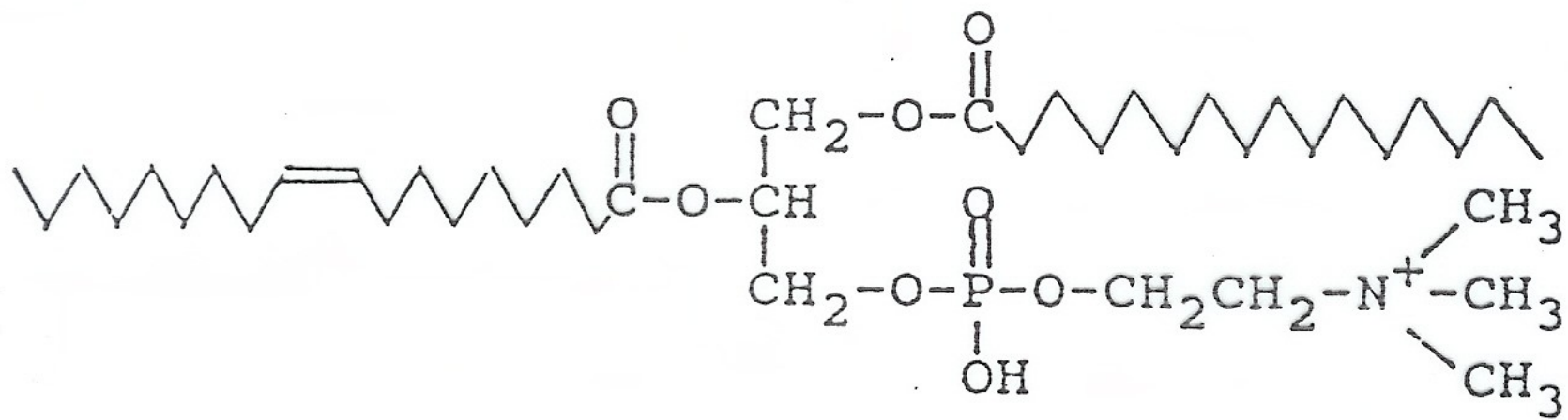
ethanolamine

$+ (-\text{CH}_3)$

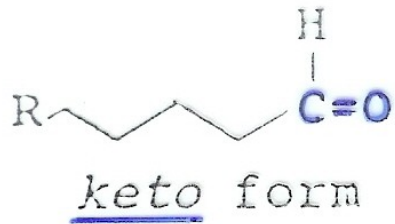


choline

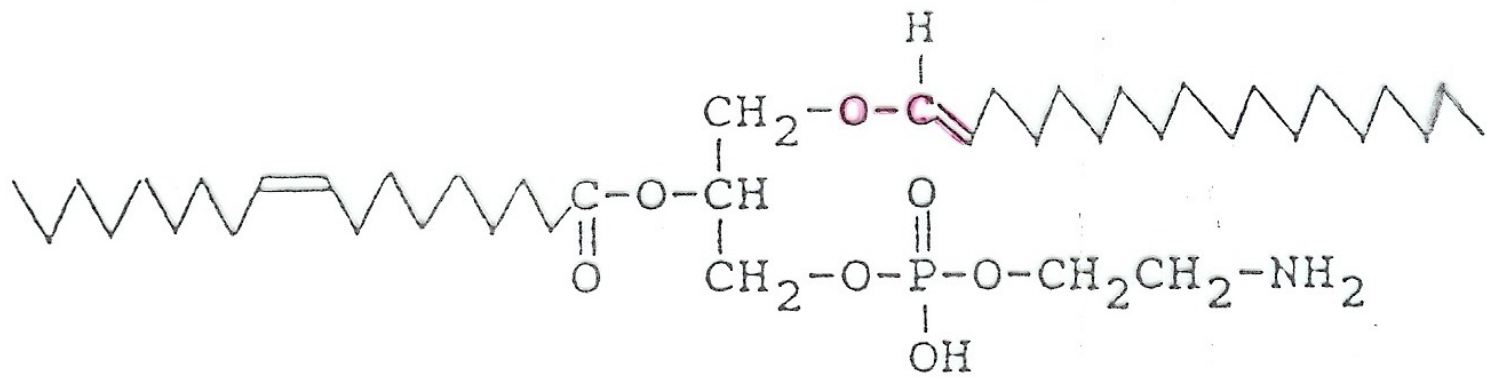
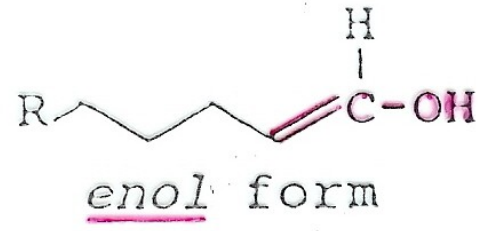




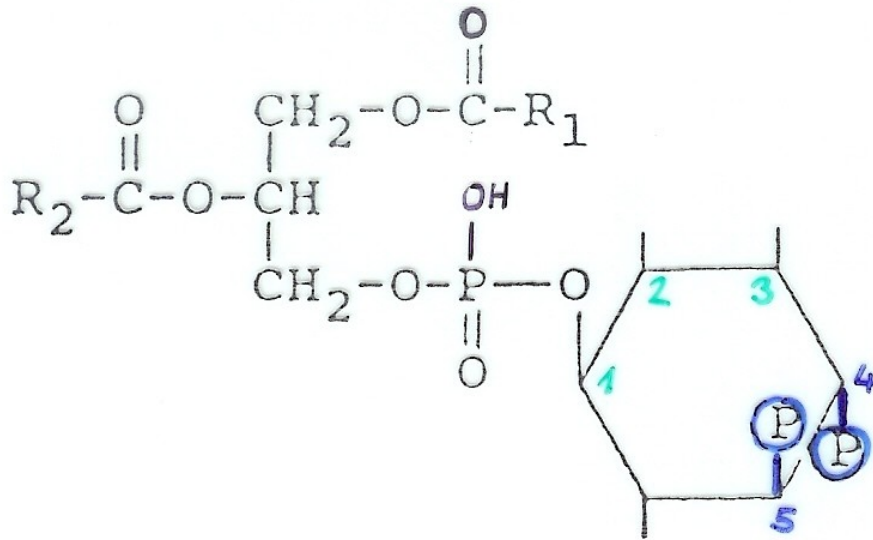
phosphatidylcholine (lecithin)



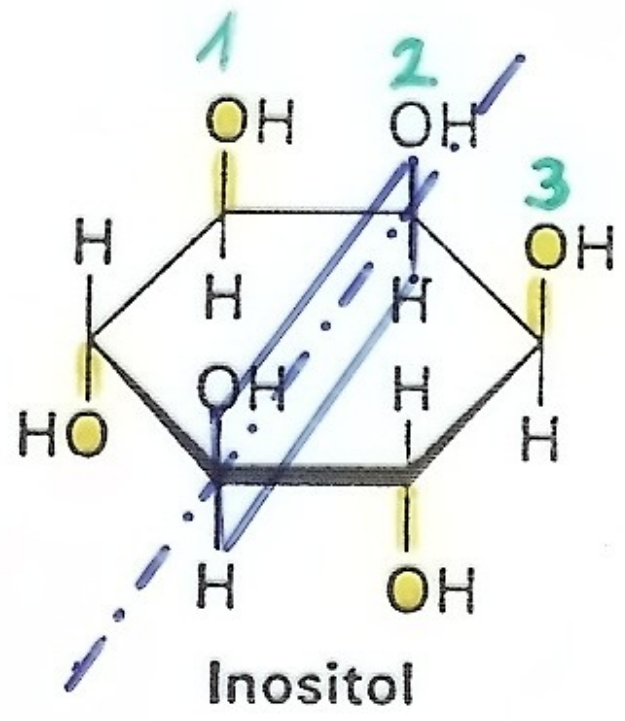
aldehyde

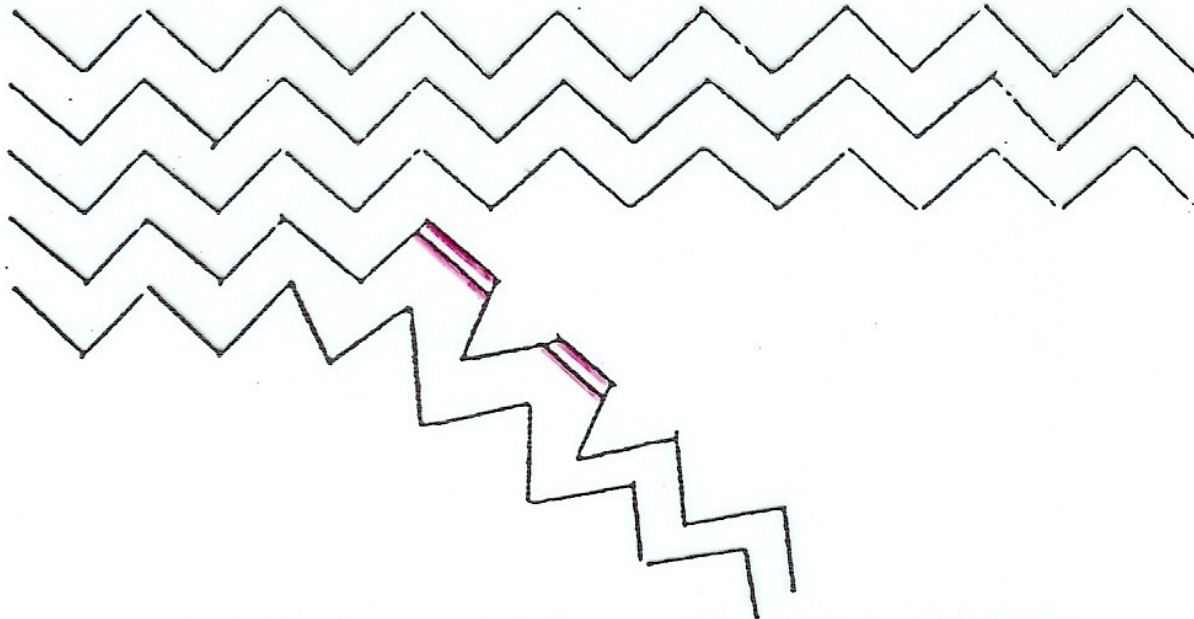


plasmalogen

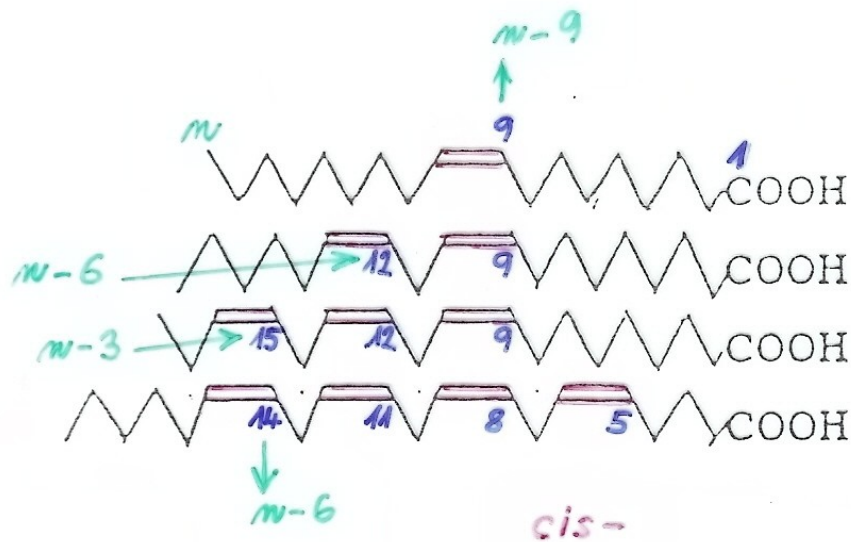


phosphatidylinositol-4,5,-bisphosphate





impaired molecular packing



oleic acid ( $\omega 9$ , C18:1)

linoleic acid

linolenic acid

arachidonic acid















