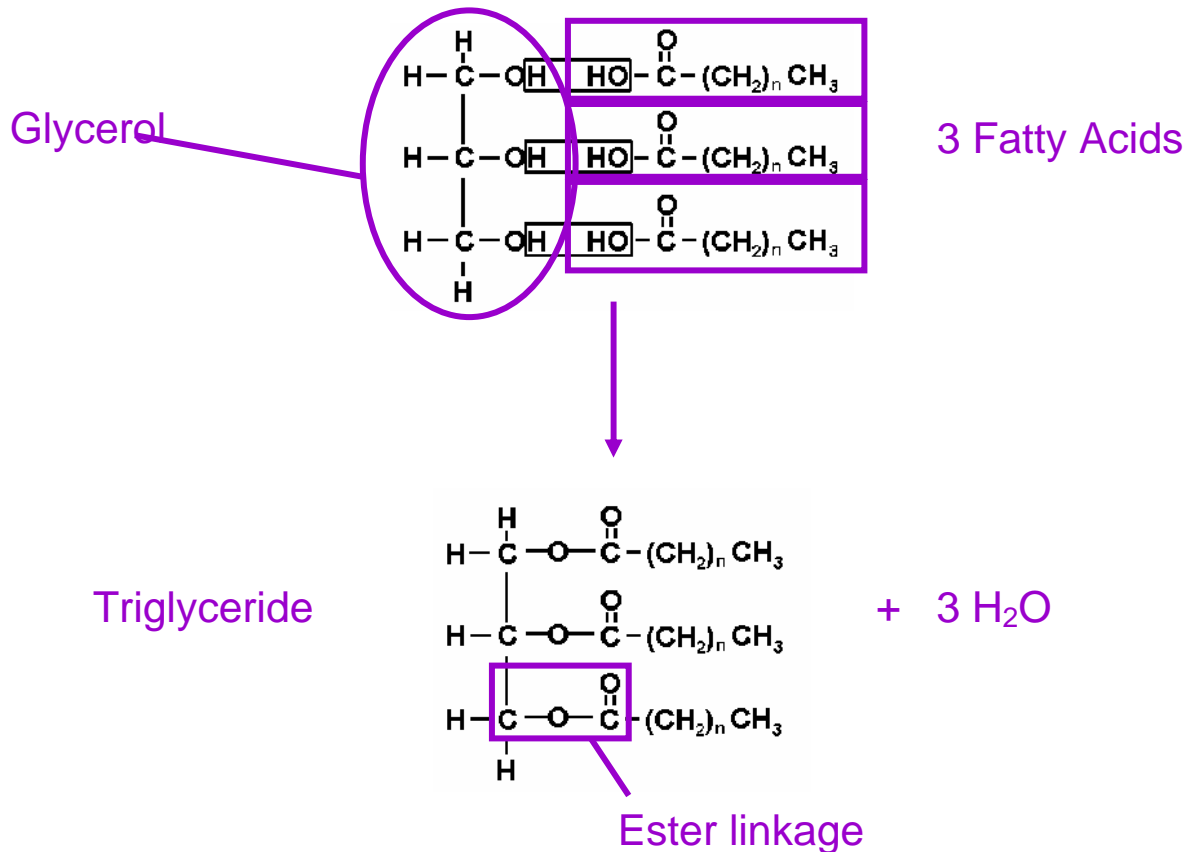


LIPIDS

General Characteristics:

Not soluble in water
Mostly hydrocarbon chains
Fats, steroids, phospholipids

Building Blocks:



Fats:

Glycerol + fatty acids source

Triglycerides have 3 fatty acids

Fatty acids present may vary

Compact energy

Cushions vital organs

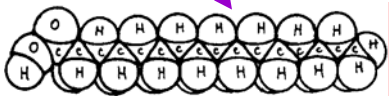
Provides insulation

Saturated:

No double bonds between carbons

Straight chain

Fatty acid



Usually solid at room temperature

Straight chains allow for tight packing

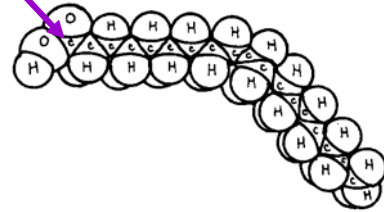
Most animal fats

Unsaturated:

At least 1 double bond between carbons

Hydrocarbon chain is bent

Fatty acid



Usually liquid at room temperature

Bent chain prevents tight packing

Most plant fats

STEROIDS:

Consist of 4 fused carbon rings

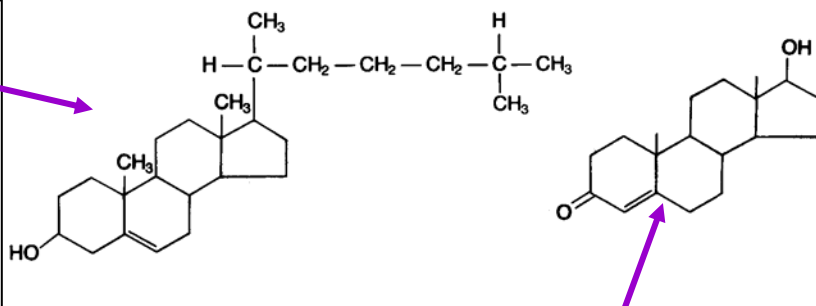
Three are 6-sided

One is 5-sided

Attached functional groups vary

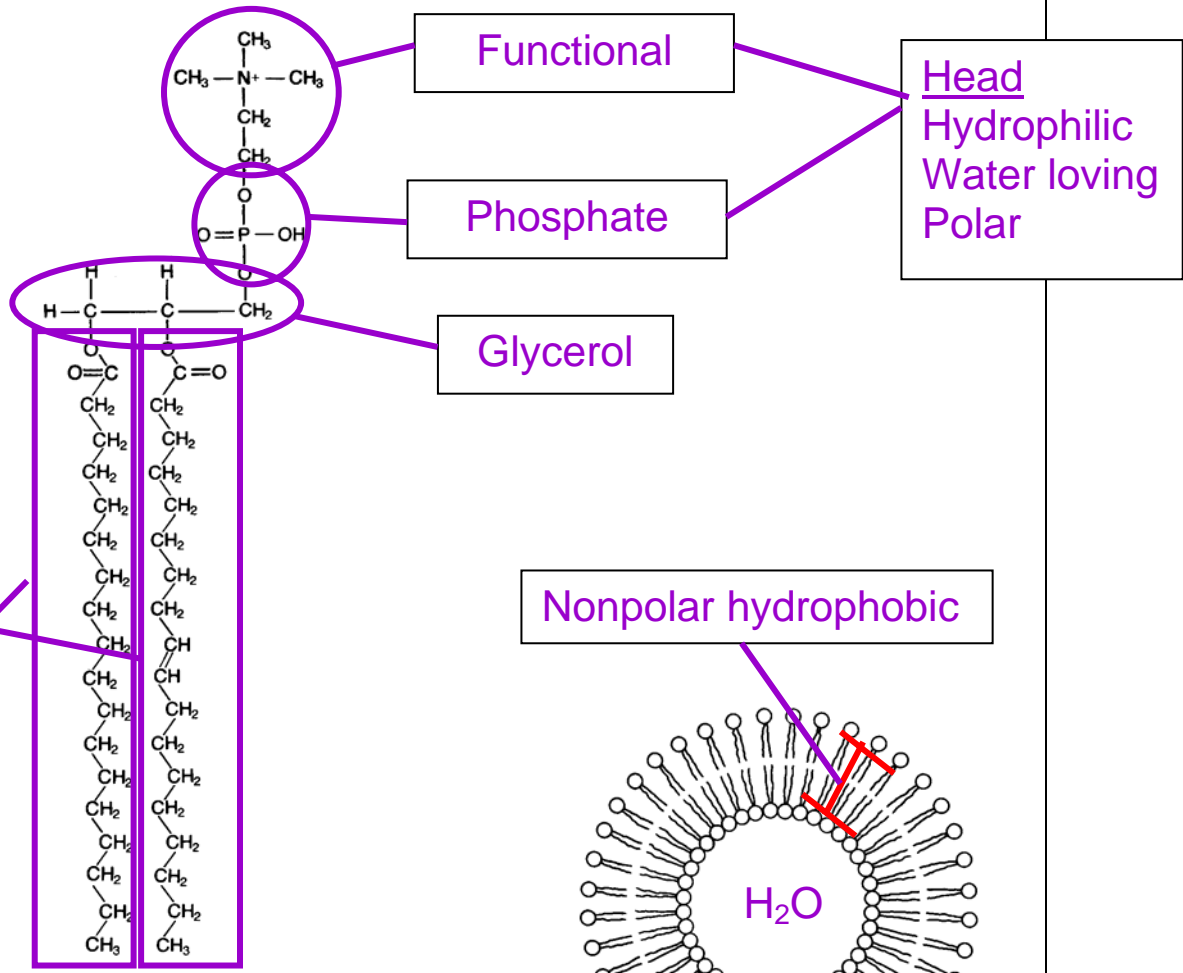
Cholesterol

- Precursor of other steroids
- Component of animal cell membranes
- Contributes to arteriosclerosis



Testosteron

PHOSPHOLIPIDS:



2 Fatty acid chains

- Make up Tail of phospholipid
- Hydrophobic

Nonpolar hydrophobic

