**Lipids**

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| **Monomer/Polymer** | None, lipids are not big enough to be considered polymers |
| **Fats**  |
| **Components**: -1 Glycerol molecule -3 Fatty Acids **Properties:** Hydrophobic  | **Functional Groups:****-**Hydroxyl **-**Carboxyl  |
| **Method of construction:**Dehydration synthesis x3**Method of destruction:**Hydrolysis | **Linkage:** Ester linkage |
| **Saturated:** hydrocarbon chain completely saturated with Hydrogen atoms**Unsaturated:** 1 or more double bonds between C atoms, replace H atoms in hydrocarbon chain -**Cis:** Hydrogens on same side -**Trans:** Hydrogens staggered | **Functions:**-Energy storage: stored in adipose cells for energy-Protection: maintain body temp, cushion organs |
| **Phospholipids** |
| **Components:** **-** 1 glycerol molecule - 2 fatty acids - 1 phosphate group (- charge) -small additional polar molecule**Properties:**  -Hydrophilic head (phosphate group) -Hydrophobic tails (hydrocarbon chains) | **Function groups:** hydroxyl, carboxyl**-**Phosphate Group: |
| **Function:** Cell membrane |
| **Steroids** |
| **Components:** **-** 4 fused rings - distinguishing chemical groups attached to rings | **Structure**:http://www.people.vcu.edu/~urdesai/intro.1.gif |
| **Function:** Component of cell membrane, hormones (made in liver, obtained from diet) |