

## **CHAPTER 2. FUNDAMENTAL FUNCTIONAL COMPONENTS AND CHEMICAL CHARACTERISTICS OF CELL MEMBRANES**

Lipids: Phospholipids are the most abundant lipids in membranes. Phospholipids are amphipathic molecules.

Many proteins in the membrane also have both hydrophobic and hydrophilic parts.

Carbohydrates are hydrophilic parts.

### **Fatty Acids**

Fatty acids are carboxylic acids with hydrocarbon chains ranging from 4 to 36 carbons long (C4 to C36). In some fatty acids, this chain is unbranched and fully saturated (contains no double bonds); in others the chain contains one or more double bonds (unsaturated). Unsaturated fatty acids are usually contain cis double bonds.