

	Protein	Lipids	Carbohydrates	Nucleic acids
Subunits	Amino Acids	Glycerol + fatty acids Except steroids	Monosaccharides	Nucleotides
Elements	C,H,O,N,S	C,H,O	C, H, O	C,H,O,N,P
Functions	Speed up reactions, structure, fibers, muscle contraction	Energy storage, pigments, plasma membrane	Short term energy, cell wall in plants,	Cellular information, energy molecule
Examples	Insulin, hemoglobin, myosin/actin, enzymes/Salivary amylase/pepsin collagen	Cholesterol, Chlorophyll Phospholipids Fats,oils, waxes,	Glucose, starch, glycogen, cellulose, monosaccharides, disaccharides	ATP, DNA, RNA, cAMP

DEHYDRATION SYNTHESIS/ CONDENSATION

Makes macromolecules by adding ATP and releasing water

HYDROLYSIS (DIGESTION)

Breaks down macromolecules by adding water

Special bond names:

Phosphodiester holds nucleotides together to form nucleic acids

Peptide bond holds amino acids together to form amino acids

Glycosidic linkage holds sugars together to form polysaccharides

Ester linkage holds glycerol to fatty acids in the triglycerides.