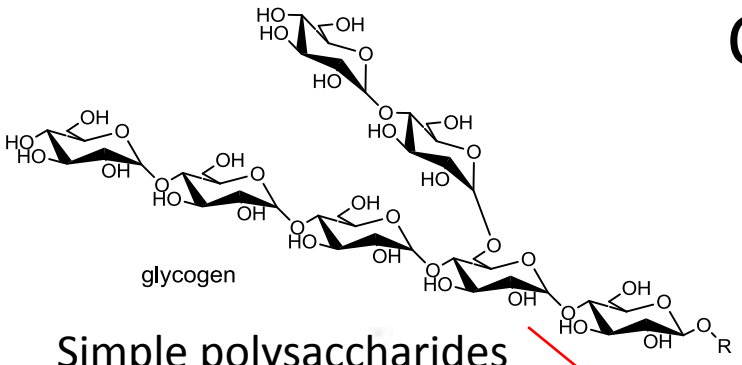
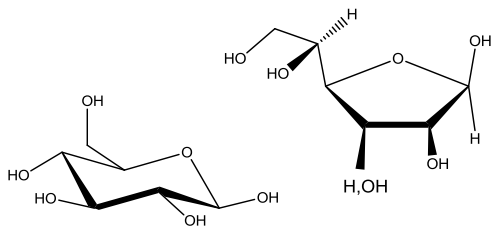
CARBOHYDRATES



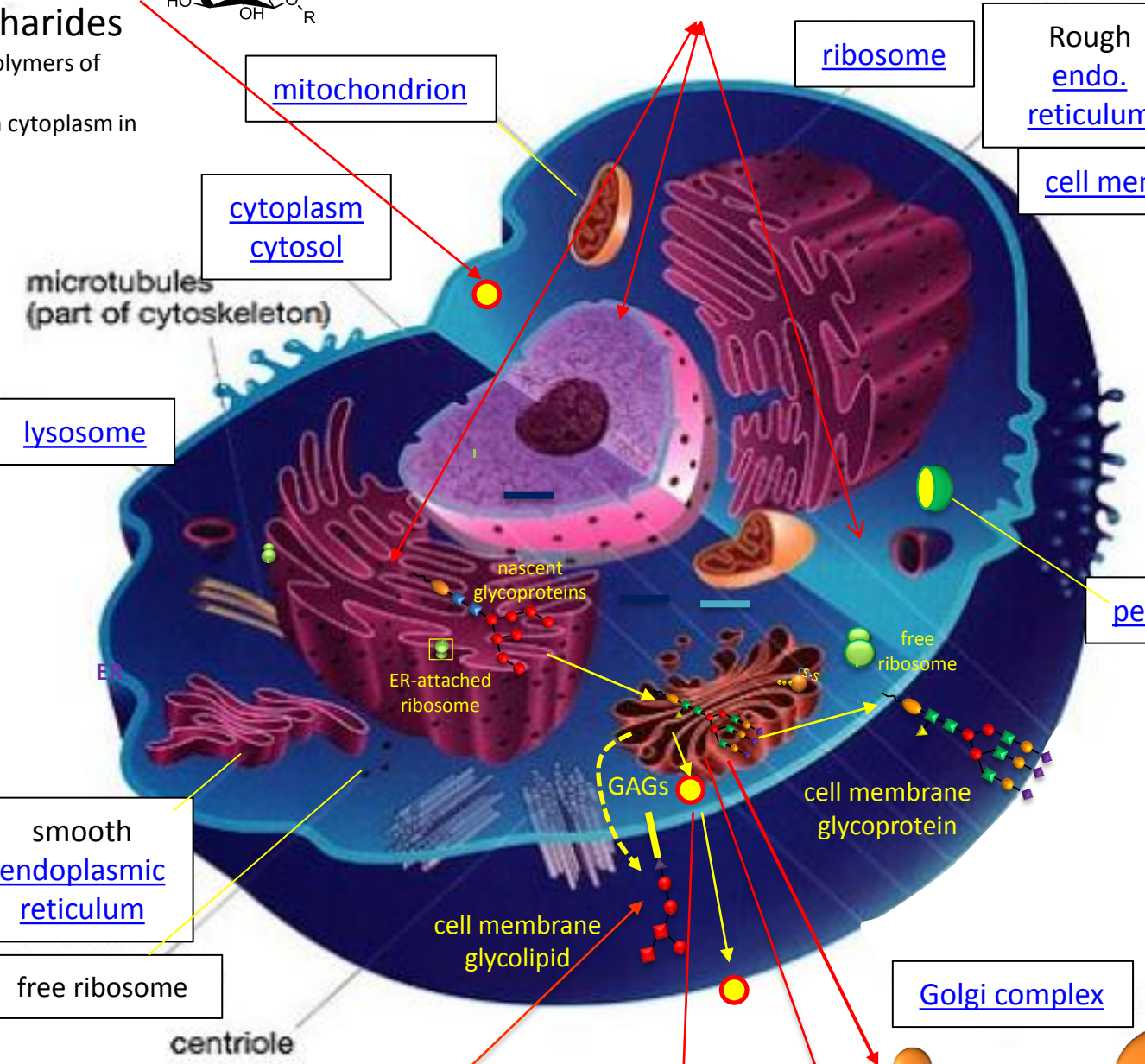
Simple polysaccharides

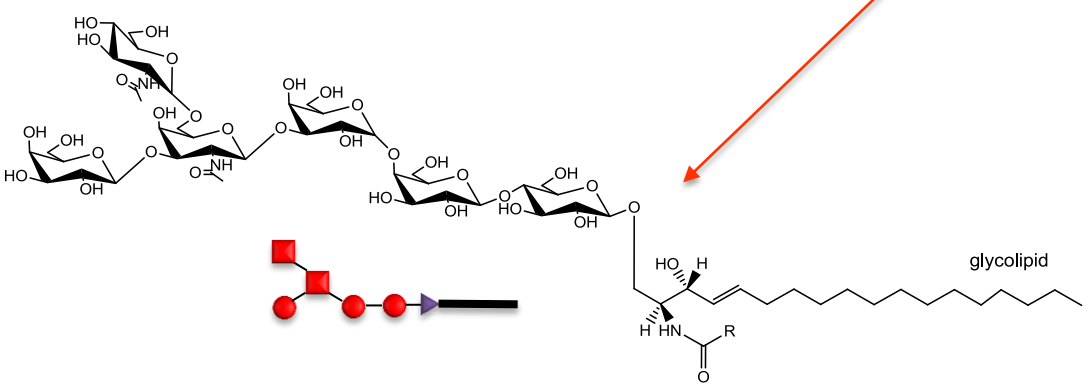
- Glycogen and starch polymers of glucose
- Glycogen in granules in cytoplasm in muscle and liver cells



Monosaccharides

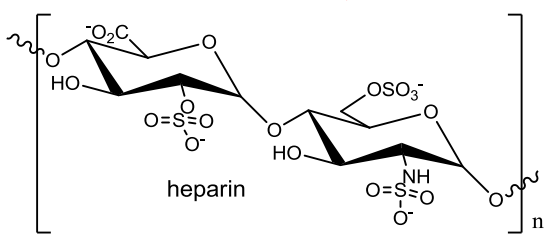
- Found in the cytosol and in organelles
- Use for energy production and in biosynthesis





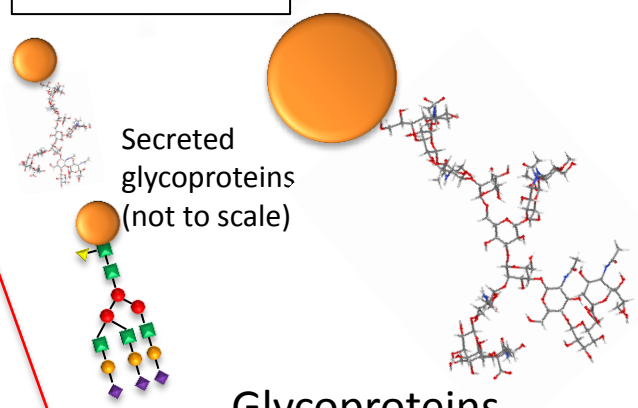
Glycolipids

- Found in cell membrane
- Involved in signaling across the membrane
- Recognition sites for ligands



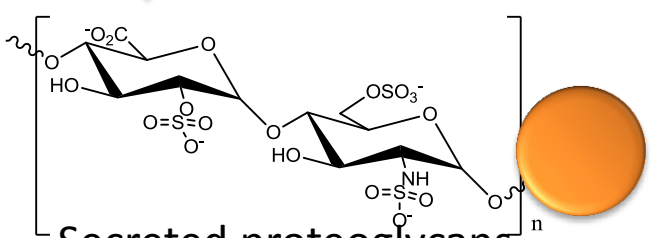
Glycosoaminoglycans GAGs

- Linear, unbranched polysaccharide with dissacharide repeat of a hexose and hexosamine monsacharide
- Highly charge with carboxyl and sulfate groups
- Properties (high viscosity, low compressibility) useful for joints



Glycoproteins

- Recognition sites for binding other biomolecules
- Minimizes protein misfolding of protein part
- Increases stability of protein



Secreted proteoglycans

- GAGS covalently attached to protein core
- components of the extracellular matrix
- Involved in cell signaling and cell binding