**Vocabulary:** **Identifying Nutrients**



**Vocabulary**

* Carbohydrate – an organic molecule containing hydrogen, carbon, and oxygen.
	+ Carbohydrates are produced by plants during photosynthesis.
	+ Carbohydrates include monosaccharides, disaccharides, and polysaccharides.
	+ Carbohydrates are a major source of energy in the diet.
* Disaccharide – a sugar formed when two monosaccharide molecules are joined.
	+ Sucrose, or table sugar, is a disaccharide. Other examples are lactose (milk sugar) and maltose.
	+ Benedict’s test is positive for some disaccharides, such as lactose and maltose. Sucrose has a negative reaction to Benedict’s test.
* Lipid – a fat.
	+ A lipid molecule usually consists of three *fatty acids* bonded to a “backbone” of *glycerol*.
	+ Lipids are used as an energy source and as a building material for cells.
	+ In the presence of lipids, Sudan Red solution will show concentrated spots of color.
* Monosaccharide – a simple sugar such as glucose or fructose.
	+ A monosaccharide molecule usually consists of a ring of five or six carbon atoms that are bonded to hydrogen atoms and hydroxyl groups.
	+ In the presence of monosaccharides, Benedict solution will turn from blue to orange.
* Polysaccharide – a complex carbohydrate such as starch or cellulose.
	+ Polysaccharides are chains or branching structures composed of 40 or more monosaccharide molecules.
* Protein – a molecule composed of a chain of *amino acids*.
	+ Proteins are an essential building block of muscles, skin, bone, hair, and most other body structures.
	+ In the presence of proteins, Biuret solution will turn from blue to bright purple.
* Starch – a type of polysaccharide found in potatoes, rice, pasta, bread, and other plant-based foods.
	+ In the presence of starch, Lugol’s solution (iodine) will turn from yellow-brown to dark purple.