Today we will be learning how to test different foods for the macromolecules that make up the foods that we eat. Be sure to check below for the procedures for each experiment.

**Lab: Testing for Macromolecules**

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| **Food Molecule Being Tested** | **Test for that Molecule** | **Results of a Positive Reaction for Food Molecule being tested** |
| Proteins | (15 drops) Biuret Solution in a test tube with the sample |  |
| Lipids - (Fats or oils) | Place one drop of sample on a paper towel and let it dry |  |
| Simple 6 carbon sugar -Glucose | (2 ml) Benedicts Solution; heat in boiling water |  |
| Complex Sugars -Starch | (3 drops) Lugols Iodine in a test tube with the sample |  |

Procedure for testing each food:

1. Take between 10 and 15 drops of the designated testing item and place it in the test tube.
2. Follow the above instructions in order to test for each molecule.
3. Record your results for each test on the data table.
4. Repeat steps 1-4 for each food you are assigned to.

Analysis Questions –

1. Which indicator detects the presence of glucose? Starch? Protein? Lipid?
2. Describe the color change of the indicators in the presence of glucose, starch, protein, and lipids.