

Macromolecules Indicators Lab

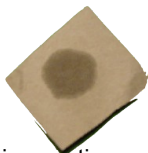
Paper Bag test

- Fold a piece of paper into small squares
- Label each square with the name of the food sample
- Rub a small amount of each solution on the paper
- **Let the paper dry**
- Hold the paper up to the light



Positive Paper Bag Test

- Positive result will cause the paper to become translucent
 - Light will pass through the paper
- Wet paper is not a positive test
- If paper stays opaque – the test is negative
 - Opaque means light does not pass through

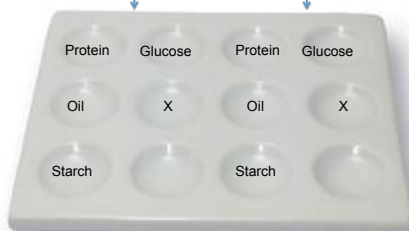


Paper Bag test

- Remember to throw the pieces of paper away in the trash cans when your group cleans up.
- Do not throw the paper around.

Biuret test

Iodine test



Iodine Test



- Place a small amount of each solution in a dimple plate
- Add 2 drops of iodine to each of the samples
- Observe the color of the iodine and record in the data table

Iodine Test

- If it is positive, the iodine will turn a purple/black
- If it is negative, the iodine stays yellowish



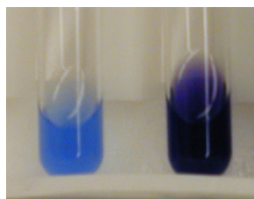
Biuret Test



- Place a small amount of each solution in the other part of the dimple plate.
- Add 2-3 drops of Biuret to each solution.
- Observe any color change and record results in data table

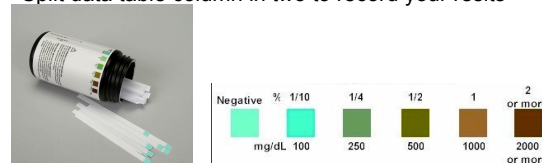
Biuret Test

- Biuret solution will change from blue to pink or purple for a positive test
- Negative will not change



Benedict's Changed to Test Strips

- Get 5 test strips, one for each solution
- **Use one set of solutions in the dimple plate BEFORE you do the iodine test**
- Dip green end of each test strip into Protein solution, then set aside and let dry.
- Repeat for each of the solutions.
- Split data table column in two to record your results



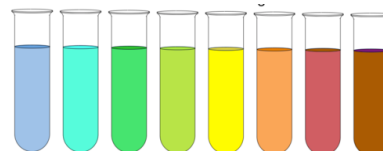
Benedict's Test- Class Demo

- Pour 5 mL Benedict's solution into numbered test tubes with a small amount of each solution
- Place the test tubes in a hot water bath, heat for 5 minutes and observe color changes
- Record results in data table



Benedict's Test

- Check the hot water bath to make sure that the temperature is between 40-50 °C
- Keep test tubes in the hot water bath for 5 minutes and then remove and record your results.



Positive Results for Benedict's

- Positive result changes from blue to green to orange or even red
- Negative does not change color

