

Carbohydrate Digestion Lab:

Expected Results

Contents before Incubation	Starch Presence with Iodine indicator.	Maltose Presence with Benedicts indicator.
1. Starch + Distilled water	positive	Blue / -
2. Starch + Saliva	negative	Orange / +++
3. Starch + Saliva + HCl	positive	Green / +
4. Starch + Boiled Saliva	positive	Blue / -

Take Home Message: Enzymes work best in conditions with a neutral pH, with lots of substrate (Starch) available, and at a temperature that is closest to the human body.

Carbohydrate Analysis and Conclusion:

1. Restate results from the experiment. Order the trials from best to worst digestion. Relate this to the starch content in each tube.
2. Compare your results with the expected results.
3. If the expected and actual results (from your group) do not agree, how can you account for this. In other words, what procedural errors might have led to this variation.
4. From the expected results, explain to me on a trial by trial basis why we would expect conditions to be favorable or unfavorable based on based on the environmental conditions.
5. Write a final statement or thesis that sums up what should be learned from the lab.
6. Propose another experiment that you could perform that could provide more information about digestion or enzyme activity.