BIOL 121: Experiment 2 Notes & Data

## **1. What is your research question?**

## Can chemical indicators be used to predict the glycemic scores of unknown food items?

## **2. Conduct background research.** Some background research has already done for you and the data made available.

## **3. Construct a hypothesis.**

## What is your hypothesis? Positive results on which tests might indicate higher or lower glycemic index scores? Do we need an H0?

## Why do think this may be the case? What is the rationale for this hypothesis?

## **4. Design & implement your experiment**

## List the steps you will use to test an unknown food sample

## What controls do you need? Why?

**Results:** Design a results table for you to fill in as you conduct your experiment and get class data. You will need room for the results of 8 food items.

Get approval on your design before beginning your experiment.

#### Stop here and get approval----------------------------------------------------------------------------------------------------------------------------

## **5. Analyze Data and Draw Conclusions.**

Using your data, predict the GI score of each food item. You should decide on a single number, and a range, and you should order the unknowns from highest to lowest predicted score.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Item | Predicted | | | Actual | | |
| GI Score | GI Range | Order 1-5  (1 = lowest) | GI Score | GI Range | Order 1-5  (1 = lowest) |
| 1 |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |

Conclusions & Discussion: Were you right/wrong in your predictions? Why? Which food items are likely the best and worst for diabetics? Which macromolecules are of the most concern?

**6. Communicate Results.** This document will be uploaded into your Post-Lab