**Blood Glucose Regulation Lab Report Grading – updated Jan 20, 2021**

- In general, ½ pt off for every spelling error and major grammatical error.
- ½ pt off for not labelling the sections as Abstract, Introduction, Methods, Results, Discussion (or Conclusion is fine), and Literature Cited.

**Title = 1pt**
- ½ pt for actual title of paper (that it’s there)
- ½ pt for name and “Department of Biology, Francis Marion University, Florence SC” (as per the lab report guidelines)

**Abstract = 2 pts**
- 1 pt for summarizing what was done (examined changes in blood glucose at time 0, 30, and 60 min after drinking either a sugar-free or full sugar beverage).
- 1 pt for summarizing findings (found that blood glucose increased at time 30, but decreased at time 60 for full-sugar beverage drinkers, while blood glucose did not change over time for sugar-free beverage drinkers).

**Intro = 8 pts**
- 5 pts - MUST have background on negative feedback of how blood glucose regulated. (2.5 pts for what happens when stimulus of blood glucose is too low (what is the sensor, integrating center, and effector, what is secreted, and what it does to increase blood glucose) and 2.5 pts for what happens when the stimulus is blood glucose is too high (what is the sensor, integrating center, and effector, what is secreted, and what it does to decrease blood glucose.)
- 1 pts for including purpose of experiment
- 1 pts for including hypothesis of experiment
- 1 pts for including a properly cited reference (as numerical superscript) for the background. As a bare minimum, you must cite from the Wiki textbook.

**Methods = 8 pts**
- 1 pts for including the total number of people in each group of the experiment.
- 5 pts total for including the experimental design: Measured blood glucose (in mg/dl) using a 28 gauge lancet in a lancet holder, glucose test strip, and a blood glucose meter. Blood glucose measured at 0, 30, and 60 min.
- 1 pts for including the beverages, and volume consumed, for each group.
- 1 pts for stating that data was entered into and summarized using Excel, and was data was analyzed using t-tests.

**Results = 8 pts**
- 1 pts for reporting the average blood glucose at time 0 for water and lemonade drinkers
- 1 pts for reporting average blood glucose at time 30 for water and lemonade drinkers
- 1 pts for reporting average blood glucose at time 60 for water and lemonade drinkers
- 2 pts for reporting P-value for blood glucose t-test for water drinkers between time 0 & 30, and between 30 & 60 min.
- 1 pts for reporting P-value for blood glucose t-test for lemonade drinkers between time 0 & 30, and between 30 & 60 min.
- 1.5 pts for stating that blood glucose increased at time 30 but decreased at time 60 for lemonade drinkers, and blood glucose did not change over time for water drinkers.
- 0.5 pts for including data sheet (this can be embedded within Results or simply stapled at the end of report)

**Discussion = 6 pts**
- 4 pts for explaining WHY blood glucose increased at time 30 but decreased at time 60 for lemonade drinkers, and WHY blood glucose did not change for water drinkers over time.
- 2 pts for giving a possible source of experimental error.

**Lit Cite = 1 pts**
A numerical list of your citations. A citation from the Wiki textbook is required. You can have supplemental sources, but if they are online you must cite the http address. Sources must be listed in numerical order in which they were found in the introduction.