

## 1 Exercise 2

### 1.1 Procedure 1

### 1.2 Procedure 2

### 1.3 Procedure 3

Molecular Test	Materials Tested	Positive Result	Negative Result
Protein	Egg white	Light purple	Transparent
Starch	Starch solution	Darker brown	Lighter brown
Sugar	Glucose solution	Orange	Blue
Lipid	Vegetable oil	Stained	Dry

### 1.4 Procedure 4

	Protein test	Sugar test	Starch test	Lipid test
Food	Slightly purple	Murky orange	Black	Stained

#### QUESTION

What organic molecules are found in the food?

#### HYPOTHESIS

Based on my intuition after looking at the food sample, I believe all of the steps will prove positive.

#### EXPERIMENT TO TEST HYPOTHESIS (SUMMARY)

In order to test our group's hypothesis, we performed each of the chemical tests to the food sample in sample tubes (similarly to the previous procedure) and observed any changes after 5 minutes.

#### RESULTS

The protein test resulted in a very faint shade of purple, while slightly visually foggy.

The sugar test turned from an initially blue, to murky orange color.

The starch test led to the food to become of a darker black color.

The lipid test resulted in the paper being stained.

#### CONCLUSION

Based on the results found after procedure three, it can be found that the food sample proved positive for the sugar, starch, and lipid test, whilst negative for the protein test. When compared with my initial hypothesis, I was incorrect for the protein test.

## 2 Exercise 3

### 2.1 Procedure 1

Tube	Bubble Columnn (cm)
+	10cm
-	0cm

### 2.2 Procedure 2

Tube	Bubble Column (cm)
4° C	10cm
37° C	7cm
100° C	0cm

### QUESTIONS

- a) 4° C
  - b) 100° C
  - c) Temperature
- 1) The type and size of tube
  - 2) The amount of potato juice
  - 3) The time spent for each tube from start to end of experimentation
- The lowest temperature tube allowed the most work based on our experiment displaying the most amount of foam.
- The highest temperature tube inactivated the enzyme which is based on our experiment displaying the tube with the least amount of foam.
- As the liver contains more catalase, the reaction speed is faster compared to the potato.