**Background**

**Lab Activity: McMush**

Carbohydrates, proteins and fats provide your body with the energy necessary to carry on life functions. These compounds are present in the plants and animals you use as food. In this lab, you will test for specific compounds and then determine if those compounds are present in ordinary foods.

**Hypothesis**

If a happy meal from McDonalds is blended, which of the four macromolecule tests will turn up positive?

**Materials**

* Sample of emulsified happy meal
* Beakers
* Test Tubes (3)
* Biuret Solution
* Benedict’s Solution
* Iodine Solution
* Paper Towel
* Pipettes

**Procedure**

1. Watch as the Happy Meal is blended. Make any observations about what is being added to the Happy Meal in Data Table 1.
2. Obtain a strained sample of the McMush. Observe its qualities. Record its qualities in Data Table 2.
3. Predict if there will be lipids in the McMush and record your prediction in Data Table 3. Perform a test to see if there are lipids present in your McMush. Record your result and observations on data table 3.
4. Predict if there will be proteins in the McMush and record your prediction in Data Table 3. Perform a test to see if there are proteins present in your McMush. Record your result and observations on data table 3.
5. Predict if there will be simple sugars in the McMush and record your prediction in Data Table 3. Perform a test to see if there are simple sugars present in your McMush. Record your result and observations on data table 3.
6. Predict if there will be complex sugars in the McMush and record your prediction in Data Table 3. Perform a test to see if there are complex sugars present in your McMush. Record your result and observations on data table 3.
7. Clean up every bit of your lab. Any solids will go in the trash and any liquids will go in the sink. Wash, scrub and rinse all lab materials.

**Data**

Data Table 1

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Data Table 2

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**Conclusion**

**Analysis Questions**

1. What did your group learn about a McDonalds Happy Meal?
2. Did your predictions match your results?
3. Does this McDonalds meal provide a complete range of macromolecules to keep a person healthy?
4. If you had to recommend new items to include in a Happy Meal to make it a balanced meal, what foods would you recommend and why?