**Biomolecules Honors Project**

***Part 1: Choosing Your Ingredients***

For this project, you will be researching food options, planning and preparing a meal. To complete part 1, research the nutritional value of canned and frozen food. Based on your research determine which food is healthier, and write a one page summary using evidence to support your opinion. You will need to include at least three pieces of evidence in support of your argument (read the labels, and use data obtained during your research).

***Part 2: What is Healthy?***

Identify at least three healthy food guidelines for the following individuals. Be sure to explain why those guidelines are most important for these individuals. Fill in the data table below to summarize your findings.

1. 56 year old diabetic male
2. 23 year old Crohn’s female
3. 40 year old vegetarian (no meat/fish) male
4. 30 year old pregnant female

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Healthy Food Guidelines**  **(at least 3)** | **Why are the guidelines important for specific scenario?** |
| 56 y/o Diabetic male |  |  |
| 23 y/o Krohn’s female |  |  |
| 40 y/o Vegetarian male |  |  |
| 30 y/o Pregnant female |  |  |

***Part 3: How Should I Cook It?***

Define each of the cooking methods below, and research one advantage and one disadvantage to using each method. Fill in the data table below to summarize your findings.

1. Frying
2. Baking
3. Steaming
4. Boiling
5. Grilling

|  |  |  |  |
| --- | --- | --- | --- |
| **Cooking Method** | **Advantage** | **Disadvantage** | **Which scenario from Part 2 should utilize it?** |
| Frying |  |  |  |
| Baking |  |  |  |
| Steaming |  |  |  |
| Boiling |  |  |  |
| Grilling |  |  |  |

***Part 4: Grab a Fork….Time to Eat!***

Based on the research you have done for this project, plan a healthy meal that meets the individual needs of your family. Specify how the food will be cooked and what spices or seasonings are used to flavor the food during cooking. Refer to your data chart for Part 3 to explain how you chose your ingredients, the cooking method, and any special needs your family members have that you may have to cater to. Complete the following data table below, and then cook your meal! Attach a photo of your family enjoying your healthy dish!

|  |  |  |  |
| --- | --- | --- | --- |
| **Ingredients**  **(specify canned, fresh, frozen)** | **Cooking Method** | **Seasoning/Butter/Oil Used to Cook? If so, specify** | **Reasons why you chose this ingredient** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

***Extra Credit***

Many families are still experiencing economic hardship even though some economists claim the recession is improving. For 5 points extra credit, when you complete Part 4 cooking your family’s meal, use ***ONLY*** canned or frozen food, no fresh ingredients. Is it possible to still eat healthy by consuming mostly canned or frozen foods?