**Macromolecule Menu – Biochemistry Assessment, part 1**

*Purpose*: To apply knowledge of macromolecule types and function by creating a menu that appropriately meets the dietary needs of individuals with a specific nutritional illness.

*Directions*:

* Front cover
  + Include a title, student name, date, and illustration.
  + Create an illustration that depicts the information that is discussed in the menu.
  + The title and illustration should both entice the consumer to read the menu but also indicate what information will be found in the menu.
* “About the Menu”
  + Write a paragraph on the first page of the menu that introduces the consumer to the information and purpose of the menu. Include the following information in this section:
    - Purpose of menu.
    - Nutritional concerns associated with the illness for which the menu is designed.
    - Types and functions of the macromolecules.
* Menu Items
  + Identify several (4 or more) food items that can be consumed by an individual with the specific nutritional illness.
  + Description of each menu item. Descriptions should include the following:
    - Main ingredients found in the menu item.
    - Macromolecules that will be found in each food.
    - Explanation of how the food will be used in the body.
* Back cover
  + Identify the sources you used to find information included in the menu. A minimum of three sources are required.
  + Include another picture that relates to the contents of the menu.

**NOTE: Plagiarism = Zero Credit**

*Rubric*:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **5** | **3** | **1** | **0** |
| Title, student name, date |  | Meets expectations | Insufficient | Not included. |
| Illustration | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Purpose of menu | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Information about nutritional illness (x2) | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Types/functions of macromolecules (x2) | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Menu item ingredients | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Macromolecules in each food. (x2) | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Purpose of menu item in body. | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Citations | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Back cover graphic | Exceeds expectations | Meets expectations | Insufficient | Not included. |
| Rubric |  | Included |  | Not included. |
| Sample of food item | Exceeds expectations (optional) |  |  | Not included. |
| Total |  |  |  |  |

**Macromolecule Menu Worksheet**

1. Identify the name of nutritional concern in which your nutritional menu specializes.
2. Describe the objective of creating this menu for your nutritional concern.
3. Explain the causes, symptoms, and dietary implications associated with your nutritional concern.

*Causes:*

*Symptoms:*

*Dietary implications:*

1. Describe the four macromolecules and their respective functions in the body.

Macromolecule Functions

1. Select four food items to be included in your menu that are appropriate for meeting the needs of your nutritional concern. For each menu item, state its ingredients, macromolecules found in the food, reason(s) why they are appropriate for your nutritional concern, and impacts on maintaining a healthy body.

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| **Menu Item** | **Ingredients** | **Macromolecules** | **Appropriateness for nutritional concern** | **Impact on the body** |
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