

Student Name: _____

Class: _____

Due Date: _____

Introduction

The importance of a balanced diet in maintaining overall health and well-being is a crucial concept in biology, particularly in the context of life processes. This homework sheet is designed to support classroom learning objectives by encouraging students to think critically about the role of nutrition in human health.

Section 1: Multiple Choice Questions

1. What is the main function of the digestive system in the human body?

1. a) To breathe in oxygen
2. b) To circulate blood
3. c) To break down food into nutrients
4. d) To filter waste

2. Which of the following is an example of a macronutrient?

1. a) Vitamin C
2. b) Carbohydrates
3. c) Fiber
4. d) Water

3. What is the recommended daily intake of fruits and vegetables?

1. a) 2-3 servings
2. b) 5-7 servings
3. c) 8-10 servings
4. d) 10-12 servings

Section 2: Short-Answer Questions

1. What are the six essential nutrients, and what are their functions in the human body?

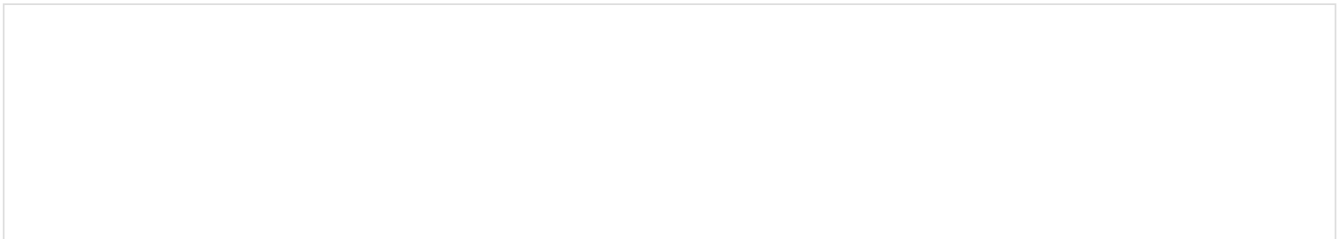
2. What is the difference between a macronutrient and a micronutrient?

3. How does a balanced diet contribute to maintaining overall health and well-being?

Section 3: Diagram of the Human Body Systems

Create a labeled diagram of the human body systems, highlighting the digestive system and its role in nutrition. Include the following components:

- Mouth
- Esophagus
- Stomach
- Small intestine
- Large intestine
- Liver
- Pancreas



Section 4: Case Study

Read the following case study:

"Emily, a 14-year-old student, has been experiencing fatigue and weakness. She eats a diet consisting mainly of processed foods and sugary snacks. Analyze Emily's diet and suggest ways she can improve her nutrition to maintain overall health and well-being."

Write a short report (approx. 150-200 words) addressing the following points:

1. Identify the potential nutritional deficiencies in Emily's diet.
2. Suggest ways Emily can improve her diet to maintain overall health and well-being.
3. Explain the importance of a balanced diet in preventing chronic diseases.

Section 5: Design a Healthy Meal Plan

Design a healthy meal plan for a day, including breakfast, lunch, dinner, and snacks. Ensure the meal plan includes a variety of foods from all food groups.

Breakfast

- _____
- _____
- _____

Lunch

- _____
- _____
- _____

Dinner

- _____
- _____
- _____

Snacks

- _____
- _____
- _____

Section 6: Research a Nutritional Disorder

Research a nutritional disorder, such as celiac disease or lactose intolerance. Write a short report (approx. 200-250 words) on the causes, symptoms, and treatment options for the disorder.

Conclusion

In conclusion, a balanced diet is essential for maintaining overall health and well-being. By understanding the importance of nutrition and making informed food choices, individuals can reduce their risk of chronic diseases and maintain optimal health.

Self-Assessment

Use the following criteria to evaluate your work:

1. Did I complete all sections of the homework sheet?
2. Did I provide detailed and accurate answers to the questions?
3. Did I include all required components in the diagram?
4. Did I meet the word count requirements for each activity?

Parent/Guardian Notes

To support your child in completing this homework sheet, please:

1. Encourage them to research and gather information from credible sources.
2. Assist them in understanding the concepts and activities.
3. Provide guidance on time management and organization.
4. Encourage them to review and edit their work before submission.

Time Management Guidelines

To complete this homework sheet within the estimated time of 30-40 minutes, please allocate your time as follows:

1. Reading and research: 10 minutes
2. Diagram: 10 minutes
3. Short-answer questions: 10 minutes
4. Case study: 10 minutes
5. Review and editing: 5 minutes