

The Importance of a Balanced Nutritional Intake (The Digestive System)

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Seventh Grade Life Science

Alabama COS #3

Relate major tissues and organs of the skeletal, circulatory, reproductive, muscular, respiratory, nervous, and digestive systems to their functions.

- Arranging in order the organizational levels of the human body from the cell through organ systems

ARMT+ Content Standard #3

Relate major tissues and organs of the skeletal, circulatory, reproductive, muscular, respiratory, nervous, and digestive systems to their functions.

Overview:

Today we will discuss a proper diet and the effects it will have on the function of the human body. Students will compare their nutritional intake to their nutritional needs. We will explore the government's recommended daily suggestions for the food groups: fruits, vegetables, grains, protein, dairy, and oils and their effects on the human body.

Duration:

2 Days

Before Activity:

Students will bring to class a written recorded history of their meal intake from previous day. They will choose one meal and enter it into the [SuperTracker](#) on ChooseMyPlate.gov. This will give the caloric value of the meal so we can compare it to other nutritional values and allow them to think of healthy alternatives.

During Activity:

Students will take notes and read from projector as I discuss The Health Benefits and Nutrients from the website. The notes will include the amount of food group needed, the health benefits, and nutrients received from the proper diet.

Example:

Fruit-

Amount- 1.5 cups for ages 9-13

Health Benefits- reduce risk for heart disease, including heart attack and stroke, may protect against certain types of cancers, may reduce the risk of heart disease, obesity, and type 2 diabetes, may lower blood pressure, and may also reduce the risk of developing kidney stones and help to decrease bone loss, and contain fewer calories than other snacks.

Nutritional Benefits- low in fat, sodium, and calories. Do not contain cholesterol. Contain potassium, dietary fiber, and vitamin C. Fiber is important for proper bowel function. It helps reduce constipation and diverticulosis. Vitamin C is important for growth and repair of all body tissues, helps heal cuts and wounds, and keeps teeth and gums healthy. Folate (folic acid) helps the body form red blood cells.

Women of childbearing age who may become pregnant should consume adequate folate this reduces the risk of neural tube defects, spina bifida, and anencephaly during fetal development.

Students will continue this process for the remaining food groups.

After Activity:

Students will list alternative nutritional ideas that they could have incorporated into their meal the prior day to increase the nutritional value. We will then enter the alternate meal into the [SuperTracker](#). Compared to their previous meal history they brought in as homework and compare the caloric value.

Following day:

Before:

Students will take a quiz comparing caloric intake at [Portion Distortion I](#) [Portion Distortion II](#).

During:

Students will take notes from lecture and visuals from projector we will discuss high blood pressure, heart disease, diabetes, high cholesterol, stroke, and heart attacks. We will have a better understanding of the causes and methods of prevention (including a proper diet) in dealing with the health issues listed above.

After:

Students will Design a healthy meal which they can consume and list some of the benefits to their organ systems as their body uses the nutrients in the food.

Homework:

Students will be given two day to complete this task so they can have access to a computer, scales, and measure their height. They will enter their information in the [BMI index](#) so they can better assess their current health status.