



Dietary guidelines – part 2

Basic Disease Knowledge and the Relationship to Poor Nutrition

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NASAFACS 9

9.4 Apply basic concepts of nutrition and nutrition therapy in a variety of settings, considering social, geographical, cultural, and global influences

Materials list

- Resources and Internet access so students can gather information about diseases
- Disease Mind Map handout (included)
- Large newsprint or tag board for each group to draw a group mind map and take notes

Optional materials:

- Interactive White Board for mind mapping

Introduction

Have class discussion about common diseases, how they might be linked to poor nutrition, and how the therapy involves nutrition choices and changes. After heart surgery for example, a patient would eat low-fat and low-sodium dishes. A kidney dialysis patient would have to alter the things they eat and drink. People who are overweight are more prone to these diseases than those who are not overweight and exercise regularly.

Have students do research in groups about one of the diseases listed for the Day 1 Activity and report back to the class on what they learned about the disease. Use the Disease Mind Map handout as a way to gather and report information.

Objectives

Students will...

- Have a basic understanding of common nutrition-related diseases and how to plan a healthier lifestyle to avoid them
- Understand that a change in lifestyle cannot be made at 50 years old for avoidance
- Learn good health is a lifetime habit

Career Clusters (Pathways)

- Health Sciences
- Education and Training
- Human Services

Set Up

Supply big sheets of paper for students to record information in their groups, reference books or information from a doctor or medical clinic, and Internet access.

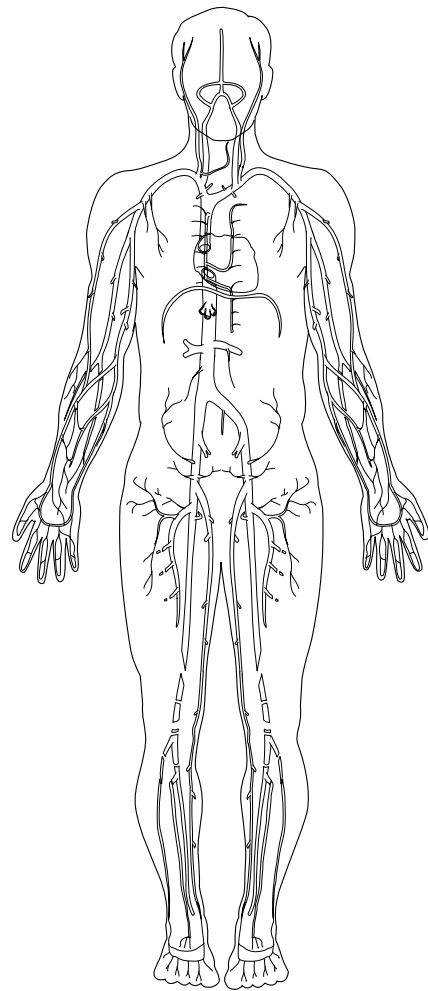
Day 1 Activity

Have a class discussion about diseases that are possibly related to nutrition. Break into groups and develop a Disease Mind Map for the following diseases (included with download):

- High Blood Pressure
- Diabetes
- Kidney Failure
- Heart Disease
- Obesity

Possible categories to map include:

- Symptoms/Characteristics
- Causes
- Who gets it? (young, old, is it contagious, etc.)
- Lifestyle changes
- Dietary changes
- Treatments
- Possible complications



Day 2 Activity

Have each group present their Disease Mind Map and what they learned to the rest of the students. Encourage students to make some conclusions about similarities in various diseases. What are the differences? Does good nutrition and exercise come up often? What does that tell us?

Summation

How important is good nutrition to good health?

Enhancement

The students could interview someone who has one of these diseases to verify their Disease Mind Map, possibly over the telephone.

Possible questions might include: How did you first know you had this disease? How long have you had it? How has it affected what you do in your life? How expensive is it to manage your disease? Is there anything you would have done differently? What do you think I can do to stay healthy myself?

Another option is to find an article about an individual who has a disease. Maybe an athlete or famous person students respect who has diabetes or heart disease.

Extended Activity Ideas

Have students...

1. Share appropriate intake with others. This could involve handing out the MyPlate Dietary Guidelines sheet or bookmarks with the information in the lunch area at lunch time and before or after school, or they could place posters in several locations at school.
2. Share appropriate intake levels with younger students by mentoring an elementary school class or a group of students.
3. Interview someone who has one of the diseases and see if the information gathered in class is consistent with what the person tells them.

Suggested websites with helpful information

diabetes.org/diabetes-basics/symptoms/
kidney.org/kidneydisease
NascoHealthcare.com/nutrition
ncbi.nlm.nih.gov
webmd.com/obesity/what-obesity-is

Disease Mind Map

Volume 57

Name: _____ Date: _____

A mind map diagram for a disease. A central circle is labeled with a blank line followed by "(Disease)". Six rectangular boxes are connected to this central circle by lines. Each box has a header and a list of five numbered blanks for notes.

- Symptoms/Characteristics**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Causes**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Who Gets It?**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Treatments**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Possible Complications**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Dietary Changes**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.
- Lifestyle Changes**
 - 1.
 - 2.
 - 3.
 - 4.
 - 5.