

## Unit 4: Nutrition and Physical Activity

### Introduction

The American Cancer Society (ACS) works to eliminate cancer as a major health problem by preventing cancer, saving lives, and diminishing suffering. The organization raises funds for research into the causes and cures of cancer and also funds education programs that help people learn how they can reduce their risk for this disease.

(Go online) To learn more about the ACS, go to the Unit Web Project at [glencoe.com](http://glencoe.com).

(Get involved.) Do research to learn about organizations in your community that raise funds to fight cancer. Contact one of these organizations to find out how teens can volunteer. Share your findings with your classmates.

### Links to Explore:

#### American Cancer Society

<http://www.cancer.org/>

### Directions:

- Follow this link [http://www.cancer.org/docroot/CRI/CRI\\_2\\_5x.asp?dt=72](http://www.cancer.org/docroot/CRI/CRI_2_5x.asp?dt=72) and read the article “The History of Cancer.”
  - Follow this link [http://www.cancer.org/docroot/PED/ped\\_3\\_1x\\_ACS\\_Guidelines.asp?sitearea=PED](http://www.cancer.org/docroot/PED/ped_3_1x_ACS_Guidelines.asp?sitearea=PED) and read the article “At a Glance – Nutrition and Physical Activities.”
  - Answer the following questions:
1. What is the second leading cause of death in the United States?
  2. What are two ways that DNA can become damaged, causing cancerous cells to develop and multiply in the body?
  3. What is a carcinogen, what is the most destructive carcinogen known to man?
  4. Which cancer treatment has been known to cause cancer as well as cure it, and what advancements have been made to avoid this outcome?
  5. How can you adjust your diet and physical activity to lower your risk of getting cancer?

### Answers:

1. Cancer is the second leading cause of death in the United States.
2. Cancerous cells develop because of damaged DNA. People can inherit damaged DNA, or their DNA can be damaged by environmental factors, such as tobacco smoke.
3. A carcinogen is a substance known to cause cancer, and tobacco is the most destructive carcinogen known to man.

4. Radiation therapy has been known to cause cancer as well as cure it, because the radiation can harm the normal cells surrounding the cancerous cells. Advancements in technology have allowed doctors to aim radiation more precisely, avoiding damage to non-cancerous cells.
5. The ACS recommends maintaining a healthy weight, being physically active, eating nutritious foods, and limiting alcohol consumption as ways to prevent cancer.

**Additional Links to Explore:**

Use the links below to gather additional information on the activity topic. When appropriate, have students extend their research to include important concepts contained in these Web sites.

**National Cancer Institute**

The National Cancer Institute (NCI) was created by the Federal government in 1937. NCI conducts and supports research, training, education, and other programs with respect to the cause, diagnosis, prevention, and treatment of cancer, rehabilitation from cancer, and the continuing care of cancer patients and the families of cancer patients.  
<http://www.cancer.gov/>

**The Great American Health Challenge**

This yearlong program created by the American Cancer Society encourages Americans to lower their risk of cancer through early screenings, physical activity, a well balanced diet, and a commitment to a smoke-free lifestyle.  
[http://www.cancer.org/docroot/subsite/greatamericans/Eat\\_Right.asp](http://www.cancer.org/docroot/subsite/greatamericans/Eat_Right.asp)

**Relay for Life**

Relay for Life is an overnight event created by the American Cancer Society, designed to bring communities together to celebrate the lives of cancer survivors, remember those lost to the disease, and fight back against cancer.  
<http://www.relayforlife.org>

**Campaign for Tobacco-Free Kids**

The Campaign for Tobacco-Free Kids is an organization designed to educate the public about the tobacco problem, advocate for solutions to reduce tobacco use, and empower children and teens to become advocates for a smoke-free world.  
<http://www.tobaccofreekids.org/>

**Generation Fit**

Through this program, run by the American Cancer Society, students ages 11 to 18 take part in community service projects to promote physical activity and healthier eating.  
[http://www.cancer.org/docroot/PED/content/PED\\_1\\_5X\\_Generation\\_Fit.asp](http://www.cancer.org/docroot/PED/content/PED_1_5X_Generation_Fit.asp)