

**Earth Day Network
and the
Environmental Education Program**

Founded by the organizers of the first Earth Day in 1970, Earth Day Network's (EDN) mission is to broaden the environmental movement worldwide and to educate and mobilize people, governments, and corporations to take responsibility for a clean and healthy environment. EDN works in 174 countries with more than 12,000 network members helping to build alliances, and facilitating information exchange and collaboration. In addition, EDN supports a network of 85,000 K-12 environmental educators, providing them with supplemental materials, classroom and community activities, and opportunities for civic learning and participation.

For more information, please visit Earth Day Network's Web site at www.earthday.net. For additional information concerning EDN's Environmental Education Program and to download educational lessons and resources, visit the Teacher's Corner of EDN's homepage.



www.earthday.net

Environmental Jeopardy

What's in Your Food, What's in Your Body

Earth Day Network (EDN) is happy to present the second edition of *Environmental Jeopardy*. EDN's Environmental Education Program creates and promotes many valuable classroom resources and lessons, like *Environmental Jeopardy*, designed to encourage civic responsibility and environmental awareness in students of all ages. You can download this and future editions of *Environmental Jeopardy* by logging into your Educators Network account – located on the Teacher's Corner of the EDN Web site, www.earthday.net - just like the other educational materials we make available to members of the Network. If you are a teacher living in the United States and have not received the official, laminated *Environmental Jeopardy* game board with precut slots for the questions, please send a request to education@earthday.net. Supplies are limited and they will be mailed out on a first-come first-served basis, so put your request in early!

The theme for the second edition of *Environmental Jeopardy* is "What's in Your Food, What's in Your Body." The importance of a healthy diet and a healthy lifestyle cannot be overestimated, and Earth Day Network is working to make these issues meaningful and important to students. The questions included in this edition focus on important themes such as organic products, food production, choosing a healthy diet, agriculture and resource management, the different components necessary for a healthy lifestyle, and healthy environments for children.

Environmental Jeopardy is easy to implement in your classroom. Simply download and print out the questions most appropriate for the grade level you teach. You will need Adobe Acrobat Reader and we strongly suggest that you print the questions double-sided. This way the point value will show on one side of the card and the question and answer on the other. If you do not have the capability or are unsure how to print double-sided, you can save this document to a floppy disk and take it to the nearest copy store, which can do it for you. After printing, cut out the category and the question cards. Then fit the category cards into the top slots and the appropriate question cards below them from the lowest point value on top to the highest point value on the bottom of each column. If you do not have a game board, you can either create one on your blackboard or whiteboard and tape up the questions, or you can download it from the Teacher's Corner. Because the board itself requires paper larger than most printers are equipped for (24"x36"), we suggest saving it to a floppy disk and taking it to the nearest copy store, which should be able to print it out to the correct dimensions – 24 inches by 36 inches.

When setting up the board, make sure the point value side of the question card is visible. Preparing the board will take about 5-10 minutes, so try to set up the board before your class arrives. Once the board is ready, simply divide the class into small groups (between 3 and 5 students) so they may learn the value of collaboration. Each group will pick a question according to its point value in a specific category. The teacher will read the question from the back of the card and the group will have thirty seconds to agree on an answer. If they answer the question correctly, they can choose another question. Each group can answer up to three questions in a row before allowing another group to have a turn. If a group does not answer a question correctly, the next group will have a chance to answer the question and then continue with their turn. The team with the most points at the end of the game wins!

To help make the subject matter of this game more relevant to your students we have included "Did you know?" facts with some of the answers, a list of Web sites with additional information regarding different aspects of healthy living, and an additional lesson plan available at the end of this document.

We hope you and your students enjoy the second edition of *Environmental Jeopardy*. We thank you for making EDN and environmental education a regular part of your curriculum. We believe that environmental education can be an integral part of education in all subject areas and grade levels.

Further Research on the Web

Environmental Jeopardy questions are designed to pique your class's interest in environmental issues. In this edition, issues are related to your food and your health. This list of Web sites will serve as a good start for conducting research and learning more about what's in your food, what's in your body.

1. Earth Day Network: EDN has valuable information throughout its website regarding this version of Environmental Jeopardy, including lesson plans. Here are some places to start:
 - a. Earth Day Network homepage: www.earthday.net
 - b. Teachers Corner: <http://www.earthday.net/involved/teachers/join-Network.aspx>
 - c. Ecological Footprint: <http://www.earthday.net/Footprint/index.asp>
 - d. Water for Life campaign: <http://www.earthday.net/programs/currentcampaigns/waterforlife/default.aspx>
2. Organic Trade Association: <http://www.ota.com/index.html> - A collection of wide-ranging organic businesses with links to members' sites and information about organics for consumers and producers.
3. National Organic Program: <http://www.ams.usda.gov/nop/indexIE.htm> - Run by the Department of Agriculture, it is the official site for organics information.
4. The Sustainable Table: <http://www.sustainabletable.com/home/> - A user-friendly guide to healthy, environmentally conscious eating. It has a wide range of information on food and making conscientious choices while shopping.
5. The Department of Agriculture: <http://www.usda.gov/wps/portal/usdahome> - The official site of the government agency responsible for ensuring that food on the market is safe for consumption and for guiding and enforcing organics standards.
6. The Food and Drug Administration: <http://www.fda.gov/> - A branch of the Department of Health and Human Services, the FDA regulates a wide range of products from prescription and over-the-counter drugs, to toothpaste and Tupperware containers, in order to ensure they are not hazardous to the public.
7. The Environmental Protection Agency: <http://www.epa.gov> - The EPA is the US government agency mainly responsible for environmental issues. Among other topics, it has information on clean air and water, and land contaminants.
 - a. EPA Kid's Club: <http://www.epa.gov/kids/>
 - b. EPA High School Web site: <http://www.epa.gov/highschool/index.htm>
8. The World Health Organization: <http://www.who.int/en/> - Part of the United Nations, the WHO is in charge of human health on a world-wide scale.
9. Healthy Environments for Children Alliance: <http://www.who.int/heca/en/> - A branch of the World Health Organization, HECA is dedicated to improving the environmental health of children around the world. It has information on children's environmental health and what it is doing to improve the situation in many countries.
10. Greenpack: http://greenpack.rec.org/flash_wheel/index.html - A site with information about a host of environmental issues related to the questions in Environmental Jeopardy. It is very interactive and great for students.

The Categories

What's In Your Food, What's In Your Body

Below is a brief description of the five categories in this edition contain.

What Are Organics? – Questions in this category will help students understand what is meant by “organic products.” Questions outline the differences between organic and non-organic products and farming methods, and helps paint a fuller picture of why organics are healthy and environmentally friendly.

Choosing a Healthy Diet – This category will generally include questions describing healthy food and healthy products. Questions will help students understand why certain foods are healthy and why others are not, as well as indicate what to look for when comparing foods

Food and Your Footprint – In this category students will learn how producing food affects the environment. Questions will stress that environmentally friendly foods and products have a smaller negative impact on the environment than other foods and products.

Leading a Healthy Lifestyle – In this category, students will answer questions about their lifestyles and daily choices. Questions will help students understand how to live in a healthy manner through means other than their diet.

Healthy Environments for Children – Questions in this section pertain to the theme of Earth Day 2005, “Protecting Our Children and Our Future.” Questions deal with the biggest issues facing children’s health worldwide and what to do about them.

Category

**CHOOSING A HEALTHY
DIET**

**What Are Organics?
10 Points**

Give two ways animals and produce on organic farms and non-organic farms are treated differently.

Answers to this question could include: animals on organic farms are not given hormones, they must be given access to the outdoors, pesticides and chemical fertilizers are not sprayed on organic produce, organic farms are more environmentally friendly.

**What Are Organics?
20 Points**

Is it possible to survive eating only organic foods?

Yes. Nearly every conventional food you find at the supermarket has an organic alternative, giving you lots of choices, so be sure to read the package labels to find the best option for you.

Category

WHAT ARE ORGANICS?

**What Are Organics?
30 Points**

Can organic foods be packaged and frozen like TV dinners?

Yes. Although frozen, packaged foods are not usually a healthy choice, this is not always true. Companies also make frozen foods using organic ingredients and production methods.

What Are Organics?
10 Points

What Are Organics?
20 Points

What Are Organics?
30 Points

Environmental Jeopardy, Primary Level Questions
Category: Choosing a Healthy Diet

Category

**LEADING A HEALTHY
LIFESTYLE**

**Choosing a Healthy Diet
10 Points**

Which is healthier: organic carrots or frozen pizza?

Organic carrots are healthier: they have no fat, while containing fiber and important nutrients including vitamin A. Frozen pizza has lots of fat and other ingredients, such as preservatives, to avoid in a healthy diet.

**Choosing a Healthy Diet
20 Points**

What drink comes from an animal we eat and is a good source of calcium?

Milk, which comes from cows. Calcium helps children grow and keeps our bones strong.

Did you know...?

Organic milk has just as much calcium as regular milk but is free from hormones and antibiotics, which may affect your growth and keep you from fighting off some diseases. Cows that produce organic milk are also guaranteed a better life than factory-raised cows.

Category

**FOOD AND YOUR
FOOTPRINT**

**Choosing a Healthy Diet
30 Points**

Name two things you can do everyday to improve your health.

Answers to this question will vary. Possibilities include: eating more healthy foods, especially fruits and vegetables, whole grain, and dairy products; getting at least an hour of exercise everyday; reading instead of watching TV (which can improve mental health); and drinking lots of water.

Choosing a Healthy Diet
10 Points

Choosing a Healthy Diet
20 Points

Choosing a Healthy Diet
30 Points

Environmental Jeopardy, Primary Level Questions
Category: Food and Your Footprint

Food and Your Footprint
10 Points

On average, do vegetarians have a greater or lesser impact on the environment than people who eat meat?

Most vegetarians have a lesser impact on the environment (but not all of them!) because a lot of land and resources (especially water, coal and oil, and sometimes forest area) are required to raise and distribute meat products.

Food and Your Footprint
20 Points

How far do the ingredients in the average meal travel before ending up on your plate: 1 mile, 10 miles, 100 miles, over 1000 miles?

In fact, most food travels about 1500 miles, or about half way across the United States. This means it is more likely to contain preservatives in order to survive the long journey than foods which are grown near where you live. Additionally, the transportation involved requires many resources, like fossil fuels.

Did you know...?

Food sold at farmers markets is almost always locally grown, and therefore usually tastier and healthier for you.

Food and Your Footprint
30 Points

On average, organic farms use how much less energy than conventional farms: 25%, 50%, 75%?

Organic farms have been shown to use 50% less energy than conventional farms.

Did you know...?

There are many reasons why organic farms use less energy. Some include: more natural farming methods, using crop rotation (where crops are planted in different places each year, which helps keep topsoil in place), and often a greater than average attention to conserving resources.

Category

**HEALTHY ENVIRONMENTS
FOR CHILDREN**

Food and Your Footprint
10 Points

Food and Your Footprint
20 Points

Food and Your Footprint
30 Points

Environmental Jeopardy, Primary Level Questions
Category: Leading a Healthy Lifestyle

Leading a Healthy Lifestyle
10 Points

Which is a healthier activity: playing soccer or watching it on TV?

Playing soccer is much healthier than watching TV. Not only do you get fresh air and sunlight, but outdoor activities are a lot of fun and allow you to get lots of exercise, which helps your body operate better.

Leading a Healthy Lifestyle
20 Points

Which of the following products can be made using ingredients that came from organic farms: 1) soap; 2) deodorant; 3) toothpaste; 4) mattresses; none of the above; all of the above?

All of the above. With a little research and attention at the grocery store and mall you might be amazed by the variety of products made using healthy and environmentally friendly organic products.

Leading a Healthy Lifestyle
30 Points

The United States Department of Agriculture (USDA) is responsible for which of the following: making sure the food we eat is safe; certifying farmers and producers as "organic"; both of these; neither of these?

The USDA performs both of these tasks. If you want to choose organic products, be sure to look for the USDA label.

Did you know...?

There are different levels of USDA certified organic products. Some are "100 percent organic" while others are "certified organic", which means that 95% of the ingredients must be organic. Any product with between 70% and 95% organic ingredients may be listed as "made with organic ingredients".

Leading a Healthy Lifestyle
10 Points

Leading a Healthy Lifestyle
20 Points

Leading a Healthy Lifestyle
30 Points

Environmental Jeopardy, Primary Level Questions
Category: Healthy Environments for Children

Healthy Environments for Children
10 Points

For their size, do children need more or less food than adults?

Growing children need to eat more food for their size than adults. During adolescence, people do the most growing, so children need lots of healthy foods to keep up with their active bodies.

Did you know...?

It is also more important for children to eat foods free of pesticides and hormones because their bodies absorb a greater percentage of them. This means organic produce is particularly healthy for children.

Healthy Environments for Children
20 Points

Worldwide, around 700 million children are exposed to a certain harmful product; many people use this product to calm themselves down. It mainly causes lung problems; what is it?

Secondhand smoke from cigarettes. Exposure to secondhand smoke can cause heart disease, lung cancer, asthma and other breathing problems, and complications in childbirth.

Healthy Environments for Children
30 Points

True or false: eating healthy food helps students concentrate.

True. Studies have shown that students who eat healthy, unprocessed meals have a longer attention span, better concentration, and are more likely to be calm in class. Have you ever missed breakfast? How did you feel that day at school?

**Healthy Environments
for Children
10 Points**

**Healthy Environments
for Children
20 Points**

**Healthy Environments
for Children
30 Points**

Environmental Jeopardy, Secondary Level Questions
Category: What Are Organics?

What Are Organics?
100 Points

What percentage of the US food supply is organic: 2%, 20%, 40%?

Organic foods make up two percent of the total US food supply.

Did you know...?

This may not sound like much, but consider that the organic industry is the fastest growing division of the agricultural sector with an estimated growth rate of 20% each year.

What Are Organics?
20 Points

Which of the following are allowed on traditional farms but are not allowed on organic farms: 1) chemical pesticides; 2) antibiotics; 3) hormones; 4) chemical fertilizers; 5) unfiltered water; 1, 2, 3, and 4 only; none of the above; all of the above?

The first four are prohibited on organic farms. Organic farms need to follow lots of rules that don't apply to traditional farms, which give them many environmental and nutritional benefits.

What Are Organics?
40 Points

Animals grown by non-organic methods are given antibiotics during their lifetimes. How do these antibiotics affect people?

The more antibiotics given to animals, the greater the chance that bacteria will become resistant to these drugs. This increases the possibility of humans contracting diseases that are very hard to cure.

Did you know...?

Non-organic milk and other dairy products are particularly likely to contain antibiotics, which is why organic dairy products can have such important health benefits.

What Are Organics?
80 Points

Are there any agricultural products that cannot be organically grown?

No. As long as it meets the United States Department of Agriculture (USDA) organic requirements, any agricultural product can be organic. Organic products that may surprise you could include chocolate, beer and wine, cotton for t-shirts, wool, lotions, diapers, plant seeds, and personal hygiene products.

What Are Organics?
60 Points

Which are more productive: organic farms or conventional farms?

Trick question! Recent studies have shown that organic farms and non-organic farms are equally productive.

Did you know...?

Organic farms have also been shown to be more profitable than conventional farms for a variety of reasons, including: increased demand for organic products, energy-saving farming techniques, the ability to farm the same land for longer (because organic farms tend to produce topsoil rather than washing it away), and generally longer lifespans for animals.

**What Are Organics?
20 Points**

**What Are Organics?
100 Points**

**What Are Organics?
40 Points**

**What Are Organics?
80 Points**

**What Are Organics?
60 Points**

Choosing a Healthy Diet

100 Points

Are you or any of your friends allergic to dairy? What can people with dairy allergies use to pour in their cereal, mix in their pancake batter, and make chocolate milk: orange juice, water, soy, vinegar, oil?

Soy. More and more people with dairy sensitivities and health concerns are using soy products instead of milk so they can still enjoy cereal, pancakes, chocolate milk, and even milkshakes and ice cream.

Choosing a Healthy Diet

80 Points

Mercury, a toxic heavy metal often present in polluted waters, is found most regularly in which common source of protein?

Fish, especially fatty fish like Tuna. In most instances mercury levels are too small to be significant, but industrial production has increased mercury levels in fish over the past few decades. Some medical associations recommend that children and pregnant women not eat fish likely to have higher levels of mercury more than once a week.

Did you know....?

Organic fish is not yet available in the United States because industry officials have not agreed on what the guidelines should be. In other areas, such as Europe, organic standards for seafood are in place and some companies are looking to sell their products in the United States based on European standards.

Environmental Jeopardy, Secondary Level Questions Category: Choosing a Healthy Diet

Choosing a Healthy Diet 20 Points

Which common medical condition, largely a consequence of poor diet and low physical activity, costs the US \$117 billion dollars per year in medical expenses?

Obesity. An estimated 50 million Americans are obese, which may contribute to a wide variety of diseases including diabetes and heart disease.

Did you know...?

Exercising, eating more fruits and vegetables, and cutting down on foods high in fat are obvious ways to reduce your chances of becoming obese, but you can also help yourself by eating less unnatural processed foods, which have been shown to be consistently higher in fat than their natural and organic counterparts.

Choosing a Healthy Diet 40 Points

Which is your healthiest and most environmentally friendly choice for dinner: non-organic TV dinner, frozen organic pizza, fast food hamburger?

Although it is prepackaged and frozen, the organic pizza is by far the healthiest choice. Fast food and non-organic frozen foods are often made with preservatives and processed ingredients, and are usually higher in cholesterol and saturated fat. Frozen meals using organic ingredients and production methods are available in most supermarkets – take the time to read labels to find the best choices for your needs.

Choosing a Healthy Diet 60 Points

What government agency is responsible for making sure the food we eat is safe and certifies producers as organic?

The United States Department of Agriculture (USDA). Look for the “USDA Certified Organic” label which means the product meets or exceeds government standards defining organic farming and production. The USDA is a government agency.

Did you know...?

Displaying the “USDA Certified Organic” label is optional and some organic products do not display it. Try looking at the ingredients to see if something is organic or is made with organic ingredients.

Choosing a Healthy Diet

100 Points

Choosing a Healthy Diet
20 Points

Choosing a Healthy Diet

80 Points

Choosing a Healthy Diet
40 Points

Choosing a Healthy Diet
60 Points

Environmental Jeopardy, Secondary Level Questions
Category: Food and Your Footprint

Food and Your Footprint
100 Points

There are two major reasons why organic farming may help to slow the effects of climate change – the first being that it uses less energy to produce crops, thus cutting down on fossil fuel use. What is the other?

Organic systems have been shown to absorb and retain more carbon than conventional systems, thus taking more carbon dioxide out of the air before it reaches the atmosphere.

Food and Your Footprint
20 Points

On its own, nature can produce six inches of topsoil in 3,000 years. Organic farming can create the same amount of topsoil in how many years: 50, 100, 1000?

It takes only fifty years for organic farmers to create six inches of topsoil. Conversely, conventional farming methods result in the loss of one inch of topsoil every 28 years.

Did you know...?

The highest layer of earth, topsoil is essential for those who wish to grow crops because it contains the nutrients plants need. When it is washed away, those nutrients are washed away as well and the land becomes infertile and barren. Crop rotation, moving crops to different places each year, is one of the best ways of maintaining topsoil.

Food and Your Footprint
40 Points

On average, organic farms use how much less energy than conventional farms: 25%, 50%, 75%?

Organic farms have been shown to use 50% less energy than conventional farms.

Did you know...?

The United States uses more energy than any nation on Earth, and small reductions in energy usage can lead to big results. A one percent decrease in industrial energy usage would save the US 55 million barrels of oil each year.

Food and Your Footprint
60 Points

17% of all fossil fuel consumption in the United States is used to produce something we all need to survive. What is it?

Food. Fossil fuels are used in transportation, operating farm machines, refrigeration, and in manufacturing fertilizers.

Food and Your Footprint
80 Points

One of the major causes of rainforest logging is to raise which animal we commonly eat?

Beef cattle. Cattle ranching, oil excavation, and logging for profit are the three biggest contributors to rainforest destruction.

Did you know...?

Each year 78 million acres of rainforest are cut down - a larger area than Poland.

Food and Your Footprint
20 Points

Food and Your Footprint
40 Points

Food and Your Footprint
60 Points

Food and Your Footprint
100 Points

Food and Your Footprint
80 Points

Leading a Healthy Lifestyle
100 Points

"You must be the change you wish to see in the world". To whom is this quote attributed: Abraham Lincoln, William Shakespeare, Mahatma Gandhi, Jessica Simpson?

Gandhi.

Did you know...?

Gandhi, a social activist and advocate of nonviolent protest, was a leading figure in India's successful movement to free itself from British colonialism in the 1940s. Some other sayings attributed to him include, "Live as if you were to die tomorrow. Learn as if you were to live forever", and "In a gentle way, you can shake the world".

Leading a Healthy Lifestyle
20 Points

Which of the following products can be made using ingredients grown on organic farms: 1) soap; 2) deodorant; 3) toothpaste; 4) mattresses; 1, 2, and 3 only; none of the above; all of the above?

All of the above. With a little research and attention at the grocery store and mall you might be amazed at how much is made using healthy and environmentally friendly organic ingredients instead of other materials which are far less environmentally friendly.

Leading a Healthy Lifestyle
40 Points

What crop is treated with the most insecticides?

Coffee. Cotton is second and tobacco third.

Did you know...?

Twenty-five percent of the world's insecticides are sprayed on cotton alone. Both coffee and cotton can be grown organically without the use of insecticides.

Leading a Healthy Lifestyle
80 Points

What component of water, endorsed by the American Dental Association (ADA) as contributing to healthy teeth, has been frequently found to be lacking in bottled water?

Fluoride, which the ADA says plays a role in strengthening teeth - much like calcium is understood to strengthen bones. Not all organizations endorse water fluoridation, and some consider it unsafe.

Leading a Healthy Lifestyle
60 Points

Each year, 1.4 billion cotton t-shirts are sold in the US. We would save 2,215 billion gallons of water if we replaced the cotton with what product? It is sometimes made into necklaces and bracelets.

Hemp. Making clothing from hemp also reduces land use because it is more productive per acre, and many hemp manufacturers use far fewer pesticides than conventional cotton growers, which means it is healthier for you and healthier for the environment.

Leading a Healthy Lifestyle
20 Points

Leading a Healthy Lifestyle
40 Points

Leading a Healthy Lifestyle
60 Points

Leading a Healthy Lifestyle
100 Points

Leading a Healthy Lifestyle
80 Points

Environmental Jeopardy, Secondary Level Questions
Category: Healthy Environments for Children

Healthy Environments for Children

100 Points

How many children around the world under 14 years of age work at least part-time jobs: 1 million, 25 million, over 200 million?

Over 200 million children under the age of 14 work - this is close to the number of people living in the United States! Half of these children work at least full-time and do not attend school at all. Many are exposed to dangerous pesticides, operate dangerous machines, and are treated with brutal disregard on a daily basis. International laws prohibit children under the age of 15 from working in dangerous environments.

Healthy Environments for Children
20 Points

How many children around the world die each year from illnesses resulting from their surrounding environments: 500,000; 1 million; 5 million; 10 million?

5 million. Some of the most common causes of childhood death, especially in developing countries, are respiratory infections, diarrhea, and malaria.

Healthy Environments for Children
40 Points

True or false: eating healthy food helps students concentrate.

True. Studies have shown that students who eat healthy, unprocessed meals have a longer attention span, better concentration, and are more likely to be calm in class. Think about how your choices for breakfast and lunch affect your school day.

Healthy Environments for Children

80 Points

What percentage of people in the US lives in an area that does not meet national air quality standards: 15%, 25%, 45%?

Forty-five percent of the US population lives in areas where the air quality is lower than national standards.

Healthy Environments for Children
60 Points

Asthma affects young people more than any other age group. Name one of the two leading causes of asthma.

Air quality and food allergies. Asthma is a breathing disorder that constricts the lungs and makes it difficult for people to get enough air.

About 15 million people suffer from asthma in the US.

Did you know...?

Many believe asthma is inherited, but while it is true that you can become predisposed to asthma through your genes, the actual development of it is mainly due to your diet and the quality of your surrounding environment.

**Healthy Environments
for Children
20 Points**

**Healthy Environments
for Children
100 Points**

**Healthy Environments
for Children
40 Points**

**Healthy Environments
for Children
80 Points**

**Healthy Environments
for Children
60 Points**

Healthy Bodies and Healthy Environments

In the second edition of Environmental Jeopardy, *What's In Your Food, What's In Your Body*, students learn about healthy lifestyles and eating habits as well as environmentally friendly production methods. Every day you make choices about what you eat and how you spend your time. These decisions affect your health and the environment. Choosing healthy, environmentally friendly foods and activities help you AND the Earth grow strong and healthy.

In the following activities, you will analyze the choices you make every day and how they affect your health and the health of the environment. Answer honestly and consider if YOUR answer is the BEST answer – for you and the environment!

Healthy Activities = Healthy Bodies and Healthy Environments

Think of five activities that are not healthy for your body or your environment. Give specific reasons why these activities are not healthy. Now think of five activities you can do instead, which are healthy for you and your environment. Be prepared to explain why these activities are healthy for you and your environment.

Some activities have a negative affect on your health and the environment.

<u>Activity</u>	<u>Affect on health or the environment</u>
Example: watching TV after school	Uses electricity, don't get exercise
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Other activities are healthy for your body and for the environment.

<u>Activity</u>	<u>Affect on health or the environment</u>
Example: playing outside with friends	Get lots of fresh air and exercise
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

Healthy Foods = Healthy Bodies and Healthy Environments

As you learned while playing *What’s In Your Body, What’s In Your Food*, there is a lot to think about when choosing environmentally friendly, healthy, AND TASTY foods to eat! In addition to choosing foods that are healthy for your body, the way your foods are produced and transported affects your environment as well.

1. Think of healthy and environmentally friendly options for the following foods:

Unhealthy	Healthy	Healthier
Ex) <u>Potato Chips</u>	<u>apple</u>	<u>organic apple</u>
<u>Frozen TV Dinner</u>	_____	_____
<u>Candy Bar</u>	_____	_____
<u>Sugar Cereal</u>	_____	_____
<u>Soda</u>	_____	_____
<u>Fast Food Hamburger</u>	_____	_____

Follow up Discussion: Why are some of the items listed under the “Unhealthy” column unhealthy for the environment and for your body? Why are the “Healthier” choices healthier than the “Healthy” choices? Describe why organic foods and produce might be healthier for your body and the environment than non-organic foods and produce. Why is it good for the environment to choose produce that is grown locally and in season?

2. ***What’s In a Label?*** Every package of food you eat has a label with information about that product’s ingredients and nutrition. Learn what to look for in these labels to determine how healthy the product is for you and your environment. Does the item contain many ingredients you have never heard of? Look these up on the internet to see what they are and if they are harmful to you. Does the item contain organically produced ingredients? Is the item “certified organic?” If so, you know that the product was produced using environmentally friendly methods.

What about the nutritional value of the item? How many calories are in one serving? How much fat, cholesterol, sodium, carbohydrates, and protein does the item contain? Research how this information affects your body.

You may find the following Web sites useful in your research:

www.nutrition.gov

www.usda.gov – US Department of Agriculture

<http://www.ams.usda.gov/nop/indexIE.htm> - USDA’s National Organics Program

a) Compare the ingredients and nutritional value of a serving of pretzels with a serving of tortilla chips.

Pretzel ingredients: unbleached wheat flour, water, salt, yeast, natural flavor, vitamin E (mixed tocopherols) added to preserve freshness, soda.

Nutrition Facts:

Calories: 120	Cholesterol: 0
Calories from fat: 0	Sodium: 200 mg
Total Fat: 0	Total Carbohydrates: 25g
Saturated Fat: 0	Protein: 3g
Trans Fat: 0	

Tortilla chips ingredients: corn, vegetable oil, cheddar cheese, salt, buttermilk solids, wheat flour, whey protein concentrate, Romano cheese from cow's milk, tomato powder, monosodium glutamate, onion powder, partially hydrogenated soybean oil, whey, garlic powder, dextrose, sugar, disodium phosphate, lactic acid, natural flavor, spices, citric acid, parmesan cheese, artificial colors (including yellow 6 and red 40), disodium inosinate, and disodium guanylate.

Nutrition Facts:

Calories: 260	Cholesterol: less than 5mg
Calories from fat: 120	Sodium: 350
Total Fat: 13	Total Carbohydrates: 31g
Saturated Fat: 2g	Protein: 4g
Trans Fat: 0	

Do you recognize all the ingredients? If not, you may need to research some of the ingredients using the internet. Are any of the ingredients harmful to your health? Based on the ingredients and nutritional facts, which choice do you think is better for you? Why?

b) Compare the ingredients and nutritional value of a frozen burrito with a macaroni and cheese frozen dinner. Keep in mind that neither option is organic or dietary, but their nutritional values are quite different.

Traditional frozen burrito ingredients: filling: water, pinto beans, modified food starch, cheddar cheese, green chilies, shortening, rolled oats, spices, cheddar cheese powder/cheddar flavors, whey powder, buttermilk powder, salt, flavorings. Tortilla: enriched bleached wheat flour, water, partially hydrogenated soybean oil, salt, sweet dairy whey, and baking powder.

Nutritional Facts:

Calories: 280	Cholesterol: 10 mg
Calories from fat: 70	Sodium: 550 mg
Total Fat: 7g	Total Carbohydrates: 45g
Saturated Fat: 2g	Protein: 8g

Macaroni and cheese frozen dinner ingredients: skim milk, blanched macaroni, cheddar cheese, cheddar club cheese, bleached wheat flour, margarine (partially hydrogenated soybean oil, water, salt, whey, soy lecithin, vegetable mono and diglycerides, artificially flavor, vitamin A palmitate added, colored with beta carotene), soybean oil, salt, and xanthan gum.

Nutritional Facts:

Calories: 320	Cholesterol: 25
Calories from fat: 140	Sodium: 950
Total Fat: 15	Total Carbohydrates: 32
Saturated Fat: 7	Protein: 14

Do you recognize all the ingredients? If not, you may need to research some of the ingredients using the internet. Are any of the ingredients harmful to your health? Based on the ingredients and nutritional facts, which choice do you think is better for you? How might an organic version of either option be better for the environment? Why?

c) Extension – Ask students to bring in labels of something they consider healthy or unhealthy. Students should be prepared to explain why their choice is healthy or unhealthy for people and the environment. Conduct a class discussion based on the information provided in the labels. Consider having the students work in groups (make sure each group has labels for both healthy and unhealthy products) and participating in a group or class discussion.