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CONSIDERING THE POSSIBLE BENEFITS AND RISKS, IS BECOMING A VEGETARIAN A SMART DECISION?

Word Generation - Unit 3.10

Focus Words

export | symbolic | domestic | integrate | efficient

WEEKLY PASSAGE



After watching the movie, *Finding Nemo*, ten-year-old Alia made a big decision. She decided she would not eat meat any more. She did not want animals to be killed for food. Her story is not unique. Lately many children are choosing to be vegetarians.

Vegetarians do not eat any beef, pork, chicken, or fish. Some vegetarians choose their meat-free diet for health reasons. Some choose this diet because of their concern for animals, and others because of their concern for the environment.

There are many health benefits from adopting a vegetarian diet. Vegetarians can benefit from lower cholesterol levels, lower blood pressure, and lower rates of diabetes and colon cancer. By replacing meat with beans and nuts, vegetarians eat a diet lower in saturated fat and higher in fiber than meat-eaters.

Nonetheless, a vegetarian diet is not a very **efficient** way for people to get enough protein, iron, and vitamin B12. Meat contains all of these nutrients. So, it is important that vegetarians plan their meals so they do get enough protein and other vitamins and don't end up undernourished.

Some people note that eating meat is not only nutritious, but that it is part of the traditional American diet. Thus, they think that eating meat is part of the American way of life. A huge roasted turkey is **symbolic** of the first American Thanksgiving. Hamburgers and hot dogs are traditional foods for Fourth of July barbecues. For some Americans, eliminating meat would be like giving up their culture and traditions.

Could the American tradition of eating meat be hurting the earth? Thirty percent of usable land on earth is devoted to producing meat. Feeding cattle and transporting meat creates almost one-fifth of the earth's greenhouse gases. This amount is more than the amount of greenhouse gases produced by cars, trucks, trains, and airplanes combined.

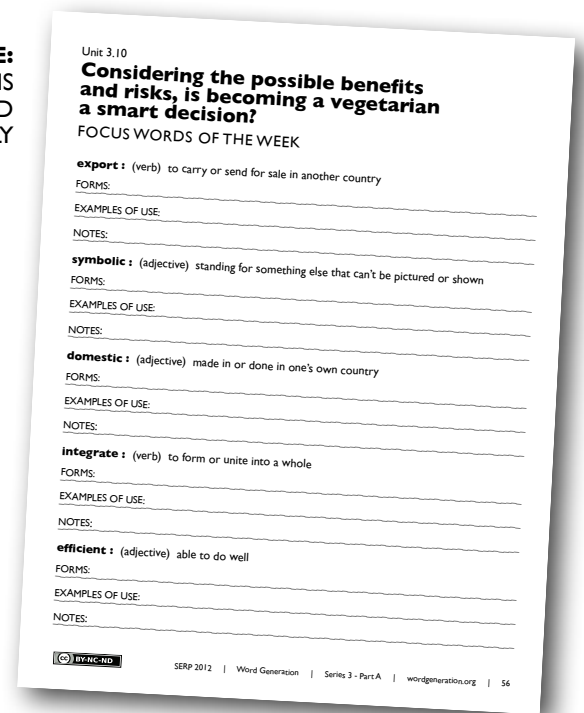
Most of the beef produced domestically is eaten by Americans. However, **exports** are also increasing as more countries are **integrating** meat into their daily diets. As a result, the beef and cattle industry is thriving. Reducing meat consumption could damage an important **domestic** industry.

With all of the environmental and health benefits of vegetarianism, should people continue to eat meat? Are tradition and industry more important than the environment and good health?

TEACHER: Discussion Questions

- ▶ What is a vegetarian?
- ▶ What does the author mean when she says that a vegetarian diet is not an efficient way to get protein and vitamin B12?
- ▶ Why do people choose to eat a vegetarian diet?
- ▶ Why do people choose to eat meat?
- ▶ What are some concerns about the meat industry?

PLEASE NOTE:
THE STUDENT VERSION OF THIS
PAGE IS FORMATTED
DIFFERENTLY



Unit 3.10

WORD CHART FOR TEACHERS

This chart is not in the student book. It is a resource for teachers to support students in the use of the focus words each. Students are provided one page in each unit immediately following the weekly passage with a basic definition printed and space for taking notes.

Word	Meaning	Forms			Related Words
		Inflectional	Basic Word Classes	Prefixes/Suffixes	
export	(v.) - to carry or send for sale in another country	exports exported exporting	port	exportation exportable exportability	portable import deport report
symbolic	(adj.) - standing for something else that can't be pictured or shown		symbol	symbolize nonsymbolic symbolical symbolically	
domestic	(adj.) - made in or done in one's own country			domesticate undomestic	domicile
integrate	(v.) - to form or unite into a whole	integrates integrated integrating		disintegration disintegrate integration	integral
efficient	(adj.) - able to do well			efficiency efficiently	efficacy efficacious effective sufficient

Considering the possible benefits and risks, is becoming a vegetarian a smart decision?



PROBLEM OF THE WEEK

Option 1: Many Americans believe that a healthy diet **integrates** meat. After all, meat is an **efficient** way to get calories and protein. Meat can also be a powerful **symbol**. For many Americans, a thick steak represents success, and hot dogs represent summertime baseball.

For many farmers and ranchers, meat production is also a way to earn a living. The U.S. **exports** millions of pounds of meat a year. Many millions of pounds are eaten **domestically**, as well. The table shows the number of pounds of meat eaten by the average American during 5 different years.

Year	Average Meat Consumption
1985	200.4 lbs
1990	200.7 lbs
1995	207.7 lbs
2000	213.9 lbs
2005	220.2 lbs

How much more meat per year did the average American eat in 2005 than in 1985?

- A) .2 pounds
- B) 0.8 pounds
- C) 19.2 pounds
- D) 19.8 pounds**

Option 2: For vegetarians, meat can be **symbolic** of cruelty to animals. While meat is an **efficient** way to take in calories, most people get enough calories anyway. A vegetarian diet that **integrates** beans, nuts, and vitamin supplements can be just as healthy as a diet with meat. **Domestically**, about 3% of young people ages 8-18 are vegetarian.

If two young Americans ages 8-18 are selected at random, what are the chances that *both of them* are vegetarian?

Answer: .0009

Discussion Question: The U.S. produces millions of pounds of meat each year: some for export, and some to be eaten **domestically**. Most Americans have a diet that **integrates** over half a pound of meat a day. What will happen if more Americans become vegetarian? Which people might lose money and which people might earn more money? In order to feed people **efficiently**, how should the food industry change if meat loses its **symbolic** appeal?

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THINKING SCIENTIFICALLY

Sasha, a student in Ms. Kahn's class, is vegetarian. "I can **integrate** all the nutrients I need into my diet without eating meat," she says, "so why should any animals be harmed?"

Jamal is not vegetarian, but has decided to eat less meat. Jamal claims, "Raising livestock for food is not an **efficient** use of our resources. Over 50% of the corn and soybeans grown in the world are fed to animals instead of hungry people! The United States does not just **export** products to other countries, we export our ideas too. We should set a good example by trying to eat less meat."

Anthony disagrees with the other students. "The way we eat is a **symbol** of being American!" he says. "Eating meat has always been an important tradition in this country."

Sasha says, "I don't think that's right. I heard that Americans used to eat much less meat than they do today."

Is Sasha correct? Has the amount of meat eaten **domestically** increased over time?

→ Anthony found this topic very interesting and decided to investigate this question.

Question:

Has the amount of meat that each person in the United States eats gone up over time?

Hypothesis:

The amount of meat eaten per person in the United States has stayed about the same from 1950 to 2000.

Procedure:

1. From the data, find the total number of animals used for food in the United States in 1950, 1960, 1970, 1980, 1990, and 2000.
2. Find the total population of the United States for each year listed.
3. For each year listed, calculate the amount of meat eaten per person.

Here are the data that Anthony found:

Year	Total Number of Animals Used for Food in One Year in the U.S.	Total United States Population	Number of Animals Used for Food in One Year, Per Person
1950	21 billion	151 million	about 139
1960	28 billion	179 million	
1970	38 billion	203 million	
1980	43 billion	226 million	
1990	48 billion	248 million	
2000	59 billion	281 million	

last column
1960 – 156
1970 – 187
1980 – 190
1990 – 193
2000 – 209

Can you complete Anthony's table?

Do you notice a trend? If so, what is this trend?

The trend shows that the annual number of animals used for food per person has increased dramatically.

The year 2010 is not listed on the table. What would you predict the data to be? Do you have ideas about how you could find that data?

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DEBATING THE ISSUE

Get ready...

Pick one of these positions (or create your own).

A Everyone should be vegetarian because eliminating meat from our diets is better for the environment and better for people's health.

B No one should be a vegetarian because, without eating meat, it is difficult to get all of the necessary nutrients. In addition, meat is delicious, and eating it is symbolic of U.S. culture and traditions.

C People should have the freedom to choose to eat meat, but the meat industry must change. The meat industry must find a way to reduce their output of greenhouse gases.

D Whereas no one should regulate anyone else's diet, schools and doctors should encourage people to eat less meat. Eliminating meat consumption is healthy and good for the environment.

E _____

TEACHER

Whatever debate format you use in your class, ask students to use academically productive talk in arguing their positions. In particular, students should provide reasons and evidence to back up their assertions. It may be helpful to read these sample positions to illustrate some possibilities, but students should also be encouraged to take their own positions on the issue at hand.

Get set...

Be ready to provide evidence to back up your position during your class discussion or debate. Jot down a few quick notes:

GO!

Be a strong participant by using phrases like these.

What makes you think that?

In my experience...

That's similar to what I think.

When I reread the text, it reminded me...

Considering the possible benefits and risks, is becoming a vegetarian a smart decision?



WRITE ABOUT IT

Support your position with clear reasons and specific examples.
Try to use relevant words from the Word Generation list in your response.

Focus Words

export | symbolic | domestic | integrate | efficient

TEACHER

Ask students to write a response in which they argue a position on the weekly topic.

Put the writing prompt on the overhead projector (or the board) so that everyone can see it. Remind students to refer to the word lists in their Word Generation notebooks as needed.

Source References:

American Dietetic Association. (2003, June). Vegetarian diets [Abstract]. ADA Reports, 103(6). Retrieved from http://www.eatright.org/cps/rde/xchg/ada/hs.xsl/advocacy_933_ENU_HTML.htm.

Bittman, M. (2008, January 27). Rethinking the meat-guzzler. The New York Times. Retrieved from <http://www.nytimes.com>.

United States Department of Agriculture Economic Research Service. (2008, April 28). U.S. beef and cattle industry: Background statistics and information. Retrieved July 9, 2008, from <http://www.ers.usda.gov/news/BSECoverage.htm>

Other Resources:

Connect this passage to the issue of genetically modified foods:

Corliss, R. (2002, July 15). Should we all be vegetarian? <http://www.time.com/time/magazine/article/0,9171,1002888,00.html>

- This article that outlines both sides of the argument

Revkin, A. C. (2008, April 11). Can people have meat and a plane, too? Message posted to <http://dotearth.blogs.nytimes.com/2008/04/11/can-people-have-meat-and-a-planet-too/?scp=1-b&sq=meat&st=nyt>

- New York Times Blog: Opinion piece on manufactured meat (good connection to genetically modified foods)

Sayre, C. (2006). Low-carb really can be heart healthy. Time. November 12, 2006. Retrieved July 9, 2008, from <http://www.time.com/time/magazine/article/0,9171,1558294,00.html>

- This is a short article that links lower risks of heart disease with vegetarianism in women:

Extra Info for Teachers: Eating meat is a very efficient way to get nutrients. Most Americans eat about 75 grams of animal protein per day. This is twice as much meat as people in other countries. It is also more than twice the government recommendation for animal protein.