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Directions: Think about the three meals you had yesterday. List them out in as much detail as possible:

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<tr>
<th>Breakfast</th>
<th>Lunch</th>
<th>Dinner</th>
<th>Snacks</th>
</tr>
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</table>

Directions: Think about your favorite meal for each time of the day. If you got to choose any meal to have, which would you choose? Explain in detail.

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<th>Lunch</th>
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Directions: Read the following ingredients, and separate them into four different meals. They would all be considered dinners. Once you have separated your ingredients logically, give each meal a title. Hint: think about which foods you normally see served together (ex. Usually, peanut butter and jelly would go together with bread to make a PB&J sandwich).

- Cheeseburger
- BBQ Chicken
- Fries
- Roasted organic chicken
- Corn on the cob
- Wild east bay yeast levain
- Noodles
- Fulton street cherry tart
- Marinara Sauce
- Steamed organic asparagus
- White wine
- Fava bean toasts
- Milkshake
- Parmesan Cheese
- Chocolate Cake
- Garlic Bread
- Meatballs
- Egg fettuccine with power fire morels
- Organic Spring mix salad
- Coke
- Rocket Salad
- Braised leg of wild Sonoma pig
- Organic ice cream
- Organic Berries

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<th>Example: Spaghetti and Meatballs</th>
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<th>Meal 2:</th>
<th>Meal 3:</th>
<th>Meal 4:</th>
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<tr>
<td>Parmesan Cheese</td>
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a) What process did you use to sort the foods? Why did you group the foods that you did?
__________________________________________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________

b) What was the hardest part about sorting the different foods?
__________________________________________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________
**Quickwrite:** After reading part one of Omnivore’s Dilemma, do you think the author, Michael Pollan, is for or against the industrial food chain? Why?

<table>
<thead>
<tr>
<th>Pros</th>
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**Quickwrite:** After reading part one of Omnivore’s Dilemma, do you think the author, Michael Pollan, is for or against the industrial food chain? Why?
1. What is surprising about the way potatoes are grown?

2. What is the Omnivore’s Dilemma?

3. What is a food chain?

4. List the four different food chains and a description of each.
   a)
   b)
   c)
   d)
Directions: Below is a picture of empty grocery store aisles. First, draw in 15 different items that contain corn. Then, choose five different quotes that explain how there is corn in those items.
### Chapter 2

<table>
<thead>
<tr>
<th></th>
<th>Old way of Farming</th>
<th>New way of Farming</th>
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</thead>
<tbody>
<tr>
<td>1. Which crops were grown?</td>
<td></td>
<td></td>
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<tr>
<td>2. How many people were farmers?</td>
<td></td>
<td></td>
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<tr>
<td>3. How many people did each farmer feed?</td>
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<td></td>
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<tr>
<td>4. How do farmers get their seeds?</td>
<td></td>
<td></td>
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<tr>
<td>5. How many corn plants are planted per acre?</td>
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#### 6. Hybrid Corn:
Inside the corn cob, write down the qualities of hybrid corn.

#### 7. GMO Corn:
Inside the corn cob, write down the qualities of GMO corn.

#### 8. Go back through the Hybrid and GMO qualities. Put a “+” if it is a good thing, or a “−” if it is a bad thing.
Directions: As you read, keep track of the Pros and Cons to labeling GMOs in the chart at the end of the article

PRO/CON: Is it time to label GMO foods?

By Tribune News Service, adapted by Newsela staff
https://newsela.com/articles/foodlabel-procon/id/12799/
11.12.15

PRO: You won't have to worry about what's in your food

Health and food safety are scary subjects for millions of Americans — and rightly so.

Polls indicate alarm over the contamination of everyday foods. Americans are worried about pesticides, antibiotics, hormones and other unnatural things added to food. Americans are especially concerned about genetically modified organisms (GMOs).

GMOs are plant or animal products that have been re-engineered in a lab. Scientists use the DNA of bacteria, viruses or other plants and animals. The purpose is to make seeds yield more crops or make the crops heartier. GMOs also make them more tolerant of herbicides that kill weeds, and resistant to insects and drought.

Many Americans Want GMO Labels

A recent New York Times poll found that 93 percent of Americans want GMOs labeled. Already, 64 nations require such labels.

Two-thirds of Americans believe that GMOs are unsafe. Millions of consumers are switching over to non-GMO, organic foods. As a result, organics have moved from a niche market into a $40 billion powerhouse.

Indeed, Americans now spend more than 10 cents of every food dollar for items labeled “organic,” “non-GMO” or “natural.”

Possible GMO labeling laws made it onto voting ballots in California, Washington and Oregon. The big food companies like Coca-Cola and chemical companies like Monsanto, the world’s largest manufacturer of genetically modified seeds, spent vast sums of money to sway voters. They were successful in stopping these labeling laws from passing.

Vermont, Maine and Connecticut have passed popular laws requiring the labeling of GMOs. In addition, eight counties in California, Washington, Oregon and Hawaii have banned GMO crops altogether.

Vermont’s GMO labeling law goes into effect in July 2016, already causing panic among major food brands. They know they’re in a predicament. One option they have is to remove all GMO ingredients from their products — which is what happened in the European Union after GMO food labeling became required in 1998. Otherwise, they can add a GMO label on the front of their packages and bottles.

Banned In Europe But Not In U.S.

Eighty percent of supermarket foods now contain GMOs and the toxic chemicals sprayed on GMOs.
In March 2015, the International Agency for Research on Cancer of the United Nations World Health Organization (WHO) declared Monsanto’s Roundup glyphosate herbicide a “probable carcinogen.”

That prompted the banning of all GMO cultivation in several dozen nations, including much of Europe.

In the United States, the glyphosate herbicide currently is sprayed heavily on 84 percent of all GMO crops. Corn, soybeans, canola, sugar beets, cotton, wheat, beans and rice are all sprayed with it.

In California, authorities announced that Monsanto’s glyphosate would be added to its list of cancer-causing chemicals.

The U.S. Environmental Protection Agency (EPA) previously acknowledged that long-term exposure to glyphosate can cause kidney and reproductive damage. And a report by a researcher at the Massachusetts Institute of Technology last year connected glyphosate to damage done to the human gut and digestive system.

Glyphosate use has also resulted in uncontrollable, herbicide-resistant superweeds on the majority of U.S. farmland. Meanwhile, the EPA, U.S. Department of Agriculture (USDA) and the Food and Drug Administration (FDA) have given the green light to a controversial new generation of GMO crops. These crops are allowed to be sprayed with strong toxicides including 2,4-D — a component of Agent Orange. A herbicide, Agent Orange, was used to destroy crops and forests during the Vietnam War.

A Bad Bill In Congress

Billions of pounds of glyphosate, atrazine, 2,4-D and other toxic pesticides are now being sprayed on our food to prevent pests from ruining crops. In addition, billions of pounds of highly polluting chemical fertilizers are added to help crops grow.

This GMO chemical onslaught is destroying our health and contaminating our soil, water and air.

Americans want GMO labeling. Unfortunately, Monsanto, other big food companies and the members of Congress who receive political donations from them have decided that you, the consumer, have no right to know what’s in your food.

In July, the U.S. House of Representatives passed a highly unpopular bill, the Safe and Accurate Food Labeling Act of 2015. It would take away states’ and consumers’ rights to require labels on GMO foods.

The bill also makes it legal to fraudulently label GMO and chemical tainted foods as “natural.” Now this bill, dubbed the DARK (Deny Americans the Right to Know) Act, goes to the Senate.

Americans can help stop passage of the DARK Act. Tell the House and Senate you want mandatory labels on GMOs.

CON: No need to worry, GMOs are safe

It’s been estimated that 70 to 80 percent of foods eaten in the United States contain ingredients that have been genetically modified. They are called genetically modified organisms (GMOs).

But labeling these foods is certainly not a food safety issue. There has never been a case of harm to people from GMO products — ever. And it’s also not something that the U.S. Food and Drug Administration (FDA) can legally do right now. It can’t because there is no scientific difference between GMO foods and regular foods.
By the year 2025, the World Wildlife Fund (WWF) estimates that two-thirds of the world’s population will confront a water shortage. Ecosystems will also suffer.

One way to make this scenario less dangerous to our food supply is to use GMO foods. They reduce the need for plowing fields. This allows the soil to stay moist and helps plants retain water.

In some cases, this will make the difference between a harvest or crop failure. Some results show crop yields increasing by 4 to 8 percent in dry weather. Other results suggest gains as much as 21 percent.

With nearly 1 person in every 9 not having enough to eat on this planet, that’s a promising start.

**Pesticides No Cause For Fear**

Another way that GMO foods help us is that they use less pesticide. One study found that it reduced the quantity of pesticides by 37 percent and the cost by 39 percent. Although pesticides get a bad rap, the truth is that the trace amounts of pesticides that you find in the average diet are totally safe.

As one toxicologist put it, there are more carcinogens in a single cup of coffee than there are in all of the pesticide residue you consume in a year. That doesn’t mean that coffee will give you cancer. All it means is that human exposure to pesticides is extremely low.

An increase in yield and a decrease in pesticide costs will lower the price of food. That’s a good thing, particularly if you’re not well off.

It’s amazing that, after 20 years of GMO crops, there is still a debate about them. In fact, the manipulation of food genes is nothing new. It’s just a newer version of natural plant breeding that began between 8,000 and 10,000 years ago. Back then, farmers bred plants by choosing the best ones to retain for planting in the following year.

The corn we eat today, for example, is the result of genetically modified plantings from thousands of years ago. Within the last few hundred years, farmers began artificially mating or cross-pollinating plants to increase yields. GMO foods are a scientific extension of this process. Modern technology just allows the process to be done to greater effect and to tackle specific problems.

**Labels Would Discourage Innovation**

Thanks to technology, we can produce crops that keep better and are easier to process. These crops produce foods that spoil less from mold, have fewer allergens and, ultimately, grow medicines in them.

We have already seen that with Golden Rice, a GMO food that contains beta carotene (Vitamin A) which helps to reduce blindness. It even prevents up to 2 million deaths annually in poor countries.

Labeling GMO products would be expensive. It could also discourage innovation in this necessary technology.

While labels may seem like a good way to share information, the costs on manufacturers will force them to raise food prices. Many people simply cannot afford that.

For those who wish to buy non-GMO foods, there is the option to buy organic. However, it’s important to keep in mind that if you buy organic, you are actually putting yourself more at risk.
Organic foods are four to eight times more likely to be recalled for microbial contamination. And for that, you are paying a lot more.

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
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Quickwrite: Should companies be required to label GMOs? Why or why not?

A ____________________________________________________________

C ____________________________________________________________

E ____________________________________________________________

C ____________________________________________________________

E ____________________________________________________________

S ____________________________________________________________
Which seeds should American Farmers use: regular, hybrid, or GMO? Why?
Quickwrite: What type of corn should American farmers grow: regular seeds, hybrid seeds, or GMO seeds? Support your choice with evidence.

"Remember to use the ACES strategy to format your paragraph

- Answer the Question
- Cite evidence
- Explain (repeat C and E)
- Summarize

A

C

E

C

E

S
Directions: As you read Chapter 5, write down the process cows go through on a feed lot.
Grass-fed cattle take slower path to market, filling small consumer niche

By Orlando Sentinel, adapted by Newsela staff
11.12.15

DELEON SPRINGS, Fla. — Cow No. 150, her pregnant belly bulging, nosed around rancher David Strawn’s pickup. She was hoping to find something good to eat in the bed of the truck.

For decades, Strawn’s family raised cows, lambs and pigs on this lakeside property about 40 miles north of Orlando, Florida.

But when his father died in 2002, Strawn shifted the family business to grass-fed cattle, eventually eliminating the other animals. Strawn loves a good steak, but he insists on knowing that the creature it came from led the best life possible.

No Antibiotics Or Hormones Used

That means no antibiotics or hormones to help cattle grow bigger, faster and with more muscle and protein. It also means no grain and no confinement.

“These guys enjoy our pastures, the lakes,” Strawn, 79, said recently as he gave a tour of his Deep Creek Ranch. “They get gentle treatment. Their bad moments are very short — at the end.”

Advocates of grass-fed meat say it is leaner and contains a higher percentage of healthful fats, vitamins, minerals and antioxidants. It also has fewer calories. The American Grassfed Association, which was formed in 2003, says the meat is better for the environment, provides jobs in rural communities and is kinder to the cattle, goats, sheep and bison destined to wind up on a dinner plate.

“These animals that are raised in a pen are the cow equivalent of a couch potato,” said Strawn, a retired judge.

Beef Producers Defend Feedlots

Not everyone agrees. The National Cattlemen’s Beef Association represents beef producers. The group defends the use of feedlots, where cattle are fattened on grain in their final months after an initial diet of grass.
The animals receive individual attention from veterinarians and nutritionists and are protected from predators, spokesman Daren Williams said. The association and a meat scientist at the University of Florida also say the supposedly superior nutritional benefits of grass-fed beef are overblown.

“There’s little definitive data to suggest grass-fed beef is healthier for you,” said Chad Carr, a professor in the university’s department of animal sciences. “Both are an excellent source of dietary protein.”

**Grass-Fed Meat More Expensive**

One thing is clear: Grass-fed meat usually is more expensive — sometimes twice as much per pound. That’s because small producers need more pasture land. They also have higher operating costs than large commercial farms, because as farms scale up, they can buy equipment and food at cheaper prices and reduce both their cost per cow and the number of workers needed per cow.

Grass-fed cattle also grow to slaughter weight more slowly and yield less meat, requiring higher prices to make a profit, according to the U.S. Department of Agriculture.

It takes at least two and sometimes more than three years for grass-fed cattle to fatten. That’s compared to 15 to 18 months for commercial cattle, said Marilyn Noble, a spokeswoman for the American Grassfed Association.

At Strawn’s 700-acre ranch, each of the 150 or so animals eats about 25 pounds a day of pesticide-free grass, sorghum, millet and clover. In winter, hay and alfalfa are added to their diet.

**Standards Not Well-Defined**

No one is sure what percentage of the market grass-fed has captured, partly because it has no universally accepted definition. Estimates range from less than 2 percent to 5 percent.

Not all brands are certified by the American Grassfed Association, which has strict requirements. Deep Creek Ranch is not. In past years, before the grass-fed certification was available, the ranch was Certified Humane, Strawn said. The operation would qualify for both certifications, he said, but in semi-retirement he wants to avoid the complications of paperwork.

To qualify, animals must be fed only grass and graze for food from the time they are weaned from their mothers until they are slaughtered. They must never be confined to feedlots, or be given antibiotics or growth hormones. They must be born and raised on U.S. family farms. The USDA’s definition is less strict.

Grass-fed meat has grown more popular in the past few years among consumers concerned about health, animal welfare and farm-to-table eating, said Emily Rankin, owner of Local Roots farm store in Orlando.

**Farmers Sell Directly to Consumers**

Elementary-school teacher Erika Maier has been buying grass-fed beef from Deep Creek Ranch for several years and said it’s worth the long trip from her home. This month she split a 935-pound cow with several other families who shared the $2,571 cost.
Maier freezes her portion and makes dog food out of the tongue, liver and heart for her German shepherd mix, Buddy. She picks up her meat, already packaged, at a small slaughterhouse.

Strawn used to sell to restaurants in South Florida, but he decided to scale back and deal directly with private parties only, getting to know his customers and advising them on cuts of meat. Strawn’s love of the business extends to preserving the pine, oak and palmetto trees and the deer, wild turkeys and fox squirrels that share the land with the cows, steers and bulls.

“I really like growing things,” said Strawn, whose boyhood jobs on the ranch were to drive mules and wagons and slaughter cattle. “I like caring for things.”

It takes some people a while to get used to the firmer texture and reduced fat that grass-fed beef often has, but Maier said it is delicious and she feels healthier since she and her family have been eating it.

“We need to keep our money in the community,” said Maier, a mother of a 10-year-old and a 12-year-old. “We need to help the local farmer, and we need to do what’s right for the animals.”

**Quickwrite:** Are grass-fed cows worth the extra cost? Why or why not?

ASKIP

CSKIP

ESKIP

CSKIP

ESKIP

SSKIP
**Directions:** For each section in chapter 6, summarize the main idea and draw a picture to help you remember what the section was about.

**Chapter 6: Processed Food**

<table>
<thead>
<tr>
<th>Splitting the Kernel</th>
<th>Industrial Digestion</th>
<th>Starch into Sugar</th>
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<th>Cereal Secrets</th>
<th>Can You Eat More, Please?</th>
<th>Food that Doesn’t Feed</th>
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Chapter 7

1. List the costs and consequences associated with obesity.

2. What are the causes of obesity in the United States?

3. Why were larger portions created?

4. What is the difference between the early Hunter/Gatherer humans and people today?

5. When it comes to food and health, what challenges do poor people face?
In the U.S., an obesity gap between rich and poor

By Los Angeles Times,
https://newsela.com/articles/obesity-economics/id/2428/
01.15.14

For several years, there’s been a campaign to get kids to eat better and exercise more. The goal is to stop the relentless weight gain among American children and reduce obesity rates. Being obese can lead to a number of diseases and health problems.

Recent years have brought encouraging news. There’s been improvement in many corners of the United States, from Los Angeles to Philadelphia to Mississippi.

The diet and exercise campaign has been successful. Several years into it, child obesity rates have appeared to stabilize and might even start to reverse.

But a study published this week suggests that obesity has continued to rise in adolescents from poorer, less well-educated families. The progress has been made mostly by teens from better-educated, more well-off families.

Getting Enough Exercise?

Why do you think there are more obese kids who are poor?

Nationally, rates of obesity among adolescents ages 12 to 19 did not rise over several years. From 2003-2004 to 2009-2010 rates were unchanged. But during those years, obesity rates among adolescents whose parents have just high-school educations or less went up. They rose from about 20 percent to 25 percent. At the same time, the obesity rates for teens whose parents finished college, or got advanced degrees, fell. They dropped from 14 percent to about 7 percent.

Youth obesity had been trending downward. But that hid "a significant and growing" gap between youth from richer and poorer backgrounds, says the latest study. Differences between rich and poor in obesity rates are not new. And, they are only one of many health gaps that make poor patients sicker and more likely to die early than richer ones.

But the new report suggests that the public health message on obesity has not spread "evenly across the population." If true, this difference
could hold back efforts to reduce it. And in the years ahead it could lead to a rise in diseases related to obesity.

Researchers from Harvard University surveyed youth about their eating and exercise patterns. They found that physical activity may be the major reason for the difference in obesity between rich and poor.

They surveyed adolescents with parents who had college degrees. In 2003, 87 percent of them said that they had exercised or played a sport for at least 20 minutes continuously sometime in the last seven days. By 2011, 90 percent said they had done so.

They also surveyed adolescent children with parents who did not go beyond high school. In contrast, 80 percent said in 2003 that they had exercised or played a sport for at least 20 minutes in the past week. By 2011, still only 80 percent said they had done so.

They were then asked whether they had done at least 10 minutes of continuous physical activity in the last month. Of adolescents with college-educated parents, 95 percent said yes. But among teens with parents with high school educations or less, only 82 percent of teens had done that much.

**Taking In Less Calories**

Kids from every type of background have gotten the message that they should reduce their intake of calories from eating and drinking. And kids from poorer families took in fewer calories to begin with.

From 1998 to 2010, the teenage children of parents with college degrees reduced their average calorie intake. They lowered it from 2,487 calories per day to 2,150. In the same period, poorer adolescents went from averaging 2,271 calories per day down to 2,105.

Many factors influence our weight. Genetics, how fast we each burn calories, our culture and our environment all play a role. But, the biggest reason is simple: If we take in more in calories than we burn energy through physical activity, we gain weight.

But in the poorer group of adolescents, almost 1 in 5 is completely inactive. For them, obesity is just more likely. Since both poor and well-off kids take in about the same amount of calories, poor kids are likelier to be obese.

Childhood obesity leads to future obesity among adults. Public health experts want to prevent this. But, they’ll have to figure out why poorer kids don’t get as much exercise, the authors of the latest study say. Lack of recreation centers, playgrounds, and streets and sidewalks are a problem. All of those encourage walking, biking and playing and are important in keeping active, they wrote. But, they added, “this is not the whole story.” The same researchers also found that among children with parents who are well-off, participation in high school sports has increased. But among kids from poorer, less well-educated families, such participation has gone down.
Navajo Nation plans tax on junk food to encourage healthier eating habits

https://newsela.com/articles/navajo-junkfood/id/8359/
By Los Angeles Times, adapted by Newsela staff
04.09.15

On a weekday shopping trip to the only real grocery store within 30 miles of her home, Ann Neagle paused before a bag of Red Delicious apples that cost $7 per dozen. But the apples were discounted. The Navajo Nation, which governs the Navajo Indian tribe, had lifted the 5 percent sales tax on fresh fruits and vegetables.

It's part of the tribe’s attempt to help people eat healthier food. Too many Navajo are overweight, and diabetes and heart disease are big problems. The tribe also plans to put a 2 percent tax on junk food.

Living In A "Food Desert"

That tax, the first of its kind nationwide, will hit one of the most economically depressed areas of the country, where more than 40 percent of people are unemployed. Neagle is worried.

"Less money for fruits is nice, but it doesn’t even out," she said. "For people on a fixed income, we can’t afford things to get more expensive."

Neagle is not alone. About 42 percent of the Navajo Nation lives below the federal poverty line. The U.S. government has declared parts of the vast reservation a "food desert," which means it’s difficult to find affordable or good quality fresh food. For many in the tribe, a limited budget and few stores to choose from mean gas stations and convenience stores are their primary grocers.

For the $7 she could spend on a dozen apples, Neagle, 54, could stretch her money further by purchasing prepared and processed foods. Seven dollars would buy
more than 30 boxes of ramen noodles or seven frozen dinners — one of which carried 480 calories and one-third of the daily dietary recommendations for sodium and fat.

What Exactly Is Junk Food?

Many people across the country — college students, the working poor and those, like Neagle, whose access to fresh produce is limited — face similar problems. But a health epidemic among the Navajo reservation’s 175,000 residents moved lawmakers here to give the junk food tax a try.

The tribe hasn’t set a date for the tax to go into effect. A tribal tax commission still has to give its final approval, but no one expects that to be a problem.

It has not been easy to nail down what is junk food and what is not. Tribal council members said the soft drink industry urged them to keep soda and sports drinks out of the legislation.

They resisted, and now those drinks are known as "minimal-to-no nutritional value food." Other items on the list include frozen desserts, fried food, potato chips and candy.

"It's not going to do anything except make it more expensive," said Preston Yazzie, 20. "I'll still buy chips or whatever. But maybe it'll help some people."

"Crazy For Those Hot Cheetos"

One mile from where Navajo government leaders work, Bashas’ Grocery sits on tribal land. Most of the items in the front of the store, and the items that are advertised in a weekly newspaper, would be subject to the new tax.

Racks of canned Vienna sausage and corned beef hash greeted shoppers. Behind them was a huge selection of sodas, such as Coke and Pepsi, and discount brands like Fiesta, which would all be taxed. The rest of the store was similar to a typical grocery layout, though processed items such as chicken nuggets appeared in the meat aisle.

Shoppers “go crazy for those hot Cheetos,” a grocery clerk said. The store’s arrangement and selection concerned community health advocate Denisa Livingston. She decided to give tribal government officials tours to show them how few healthy products were available.

But local residents do seem to understand what's going on. A Navajo Nation survey found 74 percent of people on the reservation think health problems are caused by the lack of healthy food.

Health Is "A Long Haul"
Legislator Jonathan Nez knows firsthand about the power of healthy eating. Four years ago, he weighed 300 pounds and ate a junk-filled diet. He started eating healthy and lost weight. He also rides his bike and runs, two activities almost unimaginable to him in 2010.

"If they put this tax in front of me then, I probably would have opposed it," Nez said with a laugh. "I know I would have." He added, "It's a long haul. But we'll get there."

To understand how the Navajo Nation found itself in a health crisis, it’s important to understand its relationship with food. Navajo society used to depend on farming, a fact reflected in the story of the tribe's beginning: A starving people from another world were met by a turkey, who shook out four corn kernels from beneath its wings, saving the population from hunger.

**A Turning Point?**

Navajo society relied on sheep and cattle, as well as corn. Then, in the 1920s and '30s, the U.S. government began setting limits on livestock, explained at the time as a way to preserve eroding and overgrazed soil.

On the reservation, just 7 percent of residents have a college degree, making it significantly harder for them to get a job.

Supporters of the junk food tax hope it will mark a turning point for the country’s largest tribe. Money will go into a community health fund to pay for physical improvements on the reservation and educational programming.

Livingston said the money could also be spent on farmers markets and vegetable gardens, exercise equipment, community food cooperatives and youth health and sports clubs.

**Quickwrite:** Is the junk food tax fair? Why or why not? Do you think it will work? Why or why not?

A

C

E

C

E

S
**Directions:** You will be assigned a meal. Your job is to research what the cost would be if a family of four ate this meal at a fast food restaurant, a sit down restaurant, bought it pre-made, or cooked it at home. Then, you will compare the cost and figure out which is the best deal.

### Your Meal:

#### Fast food: Go through the drive-thru

<table>
<thead>
<tr>
<th>a) Cost per meal if ordered at a fast food place (Taco Bell, McDonald's, Wendy's, KFC, etc.)</th>
<th>b) How many total servings do you end up with?</th>
<th>c) Total cost for a family of four:</th>
<th>d) Calories per serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$___________</td>
<td>_______ servings</td>
<td>$___________</td>
<td>_______ calories per serving</td>
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</table>

#### Restaurant: Go out to eat at a sit-down restaurant

<table>
<thead>
<tr>
<th>a) Cost per meal if ordered at a sit-down place (Red Robin, Olive Garden, Buffalo Wild Wings, etc.)</th>
<th>b) How many total servings do you end up with?</th>
<th>c) Total cost for a family of four:</th>
<th>d) Calories per serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$___________</td>
<td>_______ servings</td>
<td>$___________</td>
<td>_______ calories per serving</td>
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</table>

#### Pre-made: Buy it frozen or pre-made from a grocery store

<table>
<thead>
<tr>
<th>a) Total cost from Walmart:</th>
<th>b) How many total servings do you end up with?</th>
<th>c) Cost per serving:</th>
<th>d) Calories per serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$___________</td>
<td>_______ servings</td>
<td>$___________</td>
<td>_______ calories per serving</td>
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</table>

#### Home Made: Look up a recipe and make it from scratch

List the ingredients and the cost for each item:

<table>
<thead>
<tr>
<th>a) Total cost:</th>
<th>b) How many total servings do you end up with?</th>
<th>c) Cost per serving:</th>
<th>d) Calories per serving:</th>
</tr>
</thead>
<tbody>
<tr>
<td>$___________</td>
<td>_______ servings</td>
<td>$___________</td>
<td>_______ calories per serving</td>
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</table>
Reflection Questions

1. What did you learn about the three different ways to purchase the same meal?

__________________________________________________________________________________________________
__________________________________________________________________________________________________
__________________________________________________________________________________________________

2. Which is the cheapest option? Which is the most expensive?

__________________________________________________________________________________________________
__________________________________________________________________________________________________

3. Which meal is the easiest to get? Which would take the most time to get?

__________________________________________________________________________________________________
__________________________________________________________________________________________________

4. What is the most important factor when deciding what to feed a family: cost, calories, ease of access, or taste? Why do you think that?

__________________________________________________________________________________________________
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5. Quickwrite: Which option is the BEST way to feed a family of four? Think about if you had a family of four, which option would you choose to feed them and why?

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Many poor people must make the best of bad food

By The Philadelphia Inquirer, adapted by Newsela staff
08.24.14
https://newsela.com/articles/food-danger/id/4932/

PHILADELPHIA — For the poor, food is not only scarce — often, it also can be rotting and covered in germs.

Corner stores and small supermarkets that feed many poor people who live in Philadelphia, Pennsylvania, offer bacteria-laced foods in unhealthy conditions, a new study shows. Eating such foods can lead to foodborne illness, or food poisoning.

Customers agree with the study.

"Potatoes and baby food are moldy, lettuce is rotten, and the mice are having a good time in boxes of noodles," said Rodney Jenkins, 47. "I ate bad fruit from a corner store and got sick."

Jenkins worries about feeding his children with so few worthwhile food choices.

"It's horrible," he said. "When we get food up here, it's like we get the end of all food, the last batch of it."

Not Enough Grocery Stores

For years, there have been attempts to get fruits, vegetables and other main foods into so-called food deserts like North Philadelphia.

"Food desert" is a term for places where there is not a lot of access to good, fresh produce. They aren't real deserts and can be anywhere from rural small towns to poor parts of big cities. Often, a food desert will have fast-food restaurants and corner stores, but very few places for people to buy groceries.

Until now, there has never been an investigation of food safety risks that desert-dwellers face.

The new study is being conducted by scientist Jennifer Quinlan.

Quinlan studies the bacteria in food. She and her team visited nearly 400 corner stores and small supermarkets between 2008 and 2010. The goal was to study small organisms that live in milk, eggs, lunch meat, sandwiches and ready-to-eat fresh fruits and greens.

The results of the study were scary.
"We found milk likely to have more bacteria," Quinlan said. "And when we could find fresh produce, it had a lot of contamination on it."

**Food Poisoning Has Many Symptoms**

Foodborne illness is tricky to detect. Some might not know they have it, since symptoms — cramps, diarrhea, vomiting — can be caused by many factors.

Fortunately, food poisoning is rarely deadly. Recent estimates show that of 9.4 million cases of foodborne illness in the United States in a year, there were fewer than 1,500 deaths.

Much of the damage done by foods gone bad in corner stores is to poor people's wallets.

For example, many corner-store owners get milk from larger stores, and transport it in their own cars. Milk spoils faster under such conditions when it is not kept cold.

Similarly, Quinlan found that newly delivered milk will often stand outside refrigerators for long periods. In many cases, there are too few employees to put it away quickly.

A customer then finds the milk goes bad much sooner than expiration dates show. Because the smell of spoiled milk keeps anyone from drinking it, the result is not foodborne illness but wasted dollars, Quinlan said.

**Even Salad In Bags Has Germs**

In corner stores, she found a high amount of microbes in bagged salad, strawberries and cucumbers, indicating that the food was close to spoiling. Many times the items rotted soon after purchase, another waste.

It was not uncommon to see mice in stores, Quinlan said. As a result, many corner stores keep cats, who carry their own germs.

Additionally, Quinlan found evidence of fecal coliforms in foods.

Fecal coliform is a group of bacteria that was possibly contaminated from human or animal waste. E. coli is a fecal coliform.

People can eat fecal coliform without harm — but it may mean other disease-causing bacteria are in the food.

When Quinlan and her researchers tested ready-to-eat salad greens, they found fecal coliforms in every single batch.

Similarly, eggs in corner stores were often found to be unrefrigerated, making them a possible source of salmonella poisoning. Salmonella comes from contaminated water or food and can attack the intestines.

Along with corner stores, Quinlan also studied food handling in private homes, many of them poor.

More than 42 percent of the refrigerators were too warm, and several homes had no refrigerators at all. A few lacked hot water. More than two-thirds were infested with pests, including mice.

Poor people realize that they have few options in protecting themselves from bad food.
“If you’re living on the edge and not getting enough to eat, you make riskier choices in order to eat,” food microbiologist Donald Schaffner said.

**Making The Best Of Bad Food**

Nutritionist Debra Palmer works on food-related issues with poor New Jersey residents.

When they are stuck with bad food, those people make the best of it, Palmer said. They wash slime off lunch meats, cut mold from cheese and bread, slice off rotten parts of fruit, then simply eat what's left.

Palmer said that people will buy warm, discounted meat from old trucks that drive through poor neighborhoods. Many report getting food from dumpsters outside restaurants. Quinlan said she recognized the need to get impoverished people in food deserts to eat more fruits and vegetables. However, from a microbiologist’s viewpoint, “if people can’t store and keep food safely, you’re not doing them any favors getting them that food,” she said.

“There are good frozen, canned and dried food options” that may be safer, she added. Ultimately, in the choice between eating and food safety, it’s no contest. “This population is more concerned about access to food than food safety,” said Benjamin Chapman, an expert on food safety. “The first step is just getting food, whatever the means.”

He added, “The biggest risk is not eating at all.”

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1. What are some examples of the bad food that is served in the store?

2. What is a “food desert”?

3. Why might there be so many fast food restaurants in food deserts?

4. What was the goal of Jennifer Quinlan’s study?

5. Are corner-stores really saving poor people money? Why or why not?

6. How do people make the best of bad food?

7. Why do you think their “first concern is just getting food?” Would you be willing to eat food like that? Why or why not?
Chapter 9

Directions: After reading chapter 9, create a ten-question quiz about the chapter. Make sure to have at least one question from each section.

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**INDUSTRIAL-ORGANIC VS. INDUSTRIAL**

*Directions:* Compare and contrast the two food chains we have read about so far. What is similar about them? What is different?

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<th>Similarities (Compare)</th>
<th>Differences (Contrast)</th>
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**Quickwrite:** Why would Michael Pollan call this food chain “Industrial-Organic” and not just “Organic”?

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Tip of the Day: A New Food Pyramid

June 17th, 2010 | Published in Being Green, Rose Thornton posts | 3099 Comments

Does anyone know if Jamie Oliver’s Food Revolution will be launching a second season? I know season one left me with a lot of (ahem) food for thought. One of the most surprising things I learned was how school districts defined “healthy food” and “vegetables” for their school lunch programs. And I’ll say this without any reserve: if our EDUCATION system qualifies french fries as a suitable vegetable, we need to send the entire system back to school.

Here I’ve included two food pyramids. First is the food pyramid that I grew up with.

The second is the food pyramid designed by Harvard.

Take just a few minutes to acknowledge the differences. This week’s tip of the day is to reframe your idea of the food pyramid around this second option share it with your kids to start a food revolution at home.
Rose Thornton is the co-creator and producer of Mission: Sustainable
Nutrition Plate Unveiled, Replacing Food Pyramid

By WILLIAM NEUMAN

The first lady, Michelle Obama, on Thursday relegated the government’s well-known food pyramid to the sands of history, unveiling a new, simpler image of a plate divided into basic food groups. The new design, called MyPlate, was conceived as a crucial part of Mrs. Obama’s campaign against obesity, designed to remind consumers about the basics of a healthful diet.

The plate is split into four sections, for fruit, vegetables, grains and protein. A smaller circle sits beside it for dairy products. Mrs. Obama, Agriculture Secretary Tom Vilsack and Dr. Regina M. Benjamin, the surgeon general, unveiled the new healthful eating icon at a news conference in Washington.

“This is a quick, simple reminder for all of us to be more mindful of the foods that we’re eating,” Mrs. Obama said. “We’re all bombarded with so many dietary messages that it’s hard to find time to sort through all this information, but we do have time to take a look at our kids’ plates.”

If the filled plate looks like the symbol, with lots of fruits and vegetables, she said, “then we’re good, it’s as simple as that.”

The Agriculture Department has created a Web site, ChooseMyPlate.com, that elaborates on the guidance reflected in the plate’s design. It includes tip sheets with recommendations like eating fish twice a week and avoiding high-fat, salty foods like salami and bologna.

Officials said they planned to use the plate in a campaign to communicate essential dietary guidelines to consumers, emphasizing one message at a time for the best effect. The first part of the campaign will encourage people to make half their plate fruit and vegetables. Later phases will urge consumers to avoid oversize portions, enjoy their food but eat less of it and drink water instead of sugary drinks. Nutritionists often criticized the food pyramid, which was first advanced in 1992, for being misleading or hard to understand. Some gave the plate cautious praise on Thursday. “It’s better than the pyramid, but that’s not saying a lot,” said Marion Nestle, a professor of nutrition at New York University.
Dr. Nestle praised the plate for being generally easy to understand, but she said that labeling a large section of the plate “protein” was confusing and unnecessary, because grains and dairy products also are important sources of protein and most Americans get far more protein than they need.

But she said the emphasis on fruits and vegetables was a significant step. “Americans aren’t used to eating this way, so this is a big change,” Dr. Nestle said.

The plate was created by the Agriculture Department with advice from the first lady’s anti-obesity team and federal health officials. The Agriculture Department said that it had conducted focus groups with about 4,500 people, including children, as it developed the plate.

The project, with the Web site and related educational materials, cost about $2 million. That money will also help pay for an educational campaign about the plate over the next year, officials said.

**Quickwrite:** Compare and contrast the three images: The old food pyramid, new food pyramid, and my plate. What do they have in common? How are they different? Which do you think is the best? Why?
Directions: After reading the two chapters about the industrial organic food chain, draw a comic that summarizes what the food chain is about.

TITLE:
Quickwrite: Does it seem like Michael Pollan likes the Industrial-Organic Food Chain more than the Industrial food chain? Why/why not? Does he like it in general? How do you know?

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PRO/CON: Are our school lunches healthy enough?

By McClatchy-Tribune News Service, adapted by Newsela staff
09.29.14

PRO: New rules will make kids healthier and happier

WASHINGTON — As a new school year begins, American parents should enthusiastically join first lady Michelle Obama’s campaign for healthier school lunches. It is based on sound nutritional science. Her goal is to make our kids healthier and happier.

The first lady has made improving childhood health through better eating and more exercise the issue she is known for. That’s a wise choice, since childhood obesity has become a national problem: In 2012, 1 in 3 American children were overweight or obese. Overweight children are at higher risk of developing a variety of diseases, including heart disease and diabetes. Living with these diseases makes their lives worse and costs our nation hundreds of billions of dollars a year.

One part of Obama’s overall program is the Healthy, Hunger-Free Kids Act. It’s an update to the national school lunch program, which has helped pay for school meals since 1946. More than 30 million students now participate, but the program hadn’t changed much in 15 years.

Less Fat, More Veggies

The Institute of Medicine has pushed for healthier school meals. It recommends meals containing fewer calories, less fat and salt, and more fruit, vegetables and whole grains. Most parents would agree these are excellent goals.

Besides the menu changes, the new law makes it easier for low-income and foster kids to have school meals.

It’s important to note that the government only sets guidelines — local school systems create their own menus. And contrary to ridiculous rumors, nothing in the law prohibits bake sales or birthday cakes in the classroom.

Still, as should be expected when making big changes to a national program, there have been glitches. For instance, it turned out many high school athletes needed more protein than the guidelines allowed. The government responded by amending the regulations.

The vast majority of school systems are working with Washington to go along with the changes. More than 90 percent are now meeting the new guidelines. Studies show most kids have grown to like the new, healthier options. But, just as with health care reform, there are those who, because of their beliefs or politics, prefer attacking the law to improving it. There
have been efforts in Congress to hold off on the new nutritional standards for a year. Some supporters of healthy nutrition say junk-food sellers are trying to influence Congress to stall or roll back the new standards.

**Good For Kids, Good For Education**

It should be no surprise to any parent that kids resist healthy food. But, just like home-cooked food, with sufficient time and encouragement, children can be persuaded to try new foods. Eventually, they come to enjoy them. School systems that phased the changes in slowly found students more ready to accept them.

Organizations that work to promote good nutrition, such as the Food Research and Action Center, completely support the new meal standards. They are also fighting efforts to weaken them.

A congressional study from earlier this year found that the new standards were achieving the goal of better nutrition for kids. It blamed the problems of putting them in place on the speed and size of the changes.

The government has been contributing food and money to our schools to improve student nutrition for years. Such aid is good for the kids, good for education and good for our country. Over the years, assistance has been extended to cover breakfast as well as lunch — and improved, such as in the mid-90s, the last time school meals were updated.

Obama’s campaign is just the latest effort to make sure our kids eat right at school. It deserves every parent’s support.

**CON: The new rules are restrictive and ignore parents**

WASHINGTON — The main focus of the national school meal programs should be meeting students’ needs. But for that to happen, there must be recognition that parents know what’s best for their children. Neither first lady Michelle Obama nor Congress should think they do.

Unfortunately, the school meal standards that started to go into effect two years ago under the Healthy, Hunger-Free Kids Act of 2010 ignore parents. Instead, the standards favor a federal government that thinks it knows everything.

Those who dare to speak against these standards have quickly felt the wrath of Obama and her supporters.

It’s not just politicians who have felt the anger of the first lady. The School Nutrition Association, representing more than 55,000 school nutrition experts, sent a letter to the first lady expressing “disappointment.” The group said some of her comments put down school nutrition professionals.

**Too Much Government Control**

The new meal standards try to control everything about what’s served to children. They place severe restrictions on calories, nutritional content and portion sizes. Some schools have left the program. They’d rather sacrifice the massive amounts of money it offers in exchange for freedom from its excessive restrictions.

Our federal government believes it must control nutritional policy in the schools. It assumes parents can’t be trusted to teach their children how to make dietary choices that meet their unique needs.

People who support Obama’s food policy claim that parents need help because they can’t ensure their kids are eating properly at school. Of course, parents can’t know every single thing that their children eat at school. Yet this doesn’t mean
parents haven’t taught their children how to make the right choices. But even assuming that schools need to limit food choices, this doesn’t make government control right.

Parents concerned about the food provided to their children at school are much better off going to local officials to address these issues. They will generally get the chance to meet with the officials and have their voices heard.

Parents aren’t going to get very far trying to convince D.C. politicians about their concerns. Officials have their hands tied with these new standards because they don’t have the flexibility to address many concerns.

**Greater Flexibility Needed**

If the new standards provided greater flexibility to states and local governments, it would help officials better meet the needs of their students. Not only that, but it would also give parents a greater say in the food provided through meal programs.

The federal standards have faced criticism from nutrition officials as well as students. The independent Government Accountability Office surveyed state nutrition officials. It found that local school food authorities had real concerns about the lunch standards, ranging from uneaten food to the costs of meeting the new standards.

The School Nutrition Association has echoed these concerns. The National School Board Association cautioned, “School boards cannot ignore the higher costs and operational issues created by the rigid mandates of the Healthy, Hunger-Free Kids Act.” Some schools have reportedly even taken money away from teacher pay to cover the extra costs.

Worse, students are disgusted by the food provided to them. According to the GAO report, students in one district held a three-week boycott, refusing to eat school lunches. Students are posting their anger over the program using Twitter at “#ThanksMichelle.”

The first lady and other proponents of the standards haven't listened to complaints. They've even opposed giving some poorer schools a one-year break from obeying the standards. Nothing, it seems, will be allowed to slow it from taking effect.

And that's a shame. Washington always hungers for power, but these federal meal standards aren’t fit for public consumption. They need to be scrapped.

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<th><strong>PROS</strong></th>
<th><strong>CONS</strong></th>
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How much food do you throw away each day? Think specifically about school lunches. Why do you throw it away?

Schools look for ways to stop students from tossing their lunches

By Los Angeles Times, adapted by Newsela staff

04.13.14

LOS ANGELES — It’s lunchtime, but high school junior Parrish Jackson has barely touched her turkey burger and apricots.

She’s dumping them into the trash can.

The apricots are “sour,” says the 16-year-old student at Washington Preparatory High School in Los Angeles. And the meat is “nasty.” If it were up to Jackson, she would just have taken the potato wedges — they’re close enough to fries — then headed to the student store to fuel up on hot Cheetos and juice.

And so it goes in hundreds of schools in Los Angeles Unified, the nation’s second-largest school system, which serves 650,000 meals a day. Students throw out at least $100,000 worth of food a day — and probably far more, according to estimates by David Binkle, the district’s food services director. That comes to $18 million a year — based on a conservative estimate that 10 percent of the food is wasted.

"What Can We Do About This?"

The money, Binkle says, would be far better spent on higher quality items, such as strawberries or watermelons.

But under federal school meals rules, Jackson and other students must take at least three items — including one fruit or vegetable — even if they don’t want them. Otherwise, the federal government won’t pay back school districts for the meals.
“What can we do about this?” Binkle says, “We can stop forcing children to take food they don’t like and throw in the garbage.”

Many nutrition and health experts disagree. They point to studies that show repeated exposure to fruits and vegetables eventually leads children to eat more of them. That, in turn, will help prevent obesity and related health problems, says William J. McCarthy, a UCLA professor of health policy and management.

McCarthy called the cost a small investment to get kids to eat foods "most likely to prolong their lives" and lower the risk for major diseases.

The different views reflect the national debate over how to improve child nutrition without the massive food waste and climbing costs. The $11.6 billion federal school lunch program feeds 31 million students daily. The rules are part of the 2010 Healthy, Hunger-Free Kids Act championed by first lady Michelle Obama.

The act imposed a dizzying array of requirements on calories, portion sizes, even the color of fruits and vegetables. The law increased the amount of fruits, vegetables and whole grains that must be offered, and this costs school districts more money.

**Tossed In The Trash**

For Binkle and many other school food managers, the hardest change has been the requirement to offer both a fruit and vegetable. Previously schools had to offer one or the other, but now students take both in order for schools to receive federal money for the meal.

The extra produce costs school districts $5.4 million a day. But about $3.8 million of that is being tossed in the trash, according to national estimates.

Other studies also have found significant waste. A study discovered that a total of 40 percent of all the lunches served in four Boston schools are thrown out. In the LA Unified District, another study found that many students don’t even want to choose a fruit or a vegetable in the first place, according to McCarthy, who co-wrote it.

Nationally, the cost of wasted food overall — including milk, meats and grains — is estimated at more than $1 billion annually. A federal survey found that 48 of 50 states reported that food waste and higher costs have been their top challenges.

In response, the School Nutrition Association is trying to change the child nutrition law, which is up for renewal next year.

Among other things, the group wants to remove the requirement forcing students to take a fruit or vegetable. The group wants to end rules requiring lower sodium and also drop a planned shift from half grain to full whole grain in food products.
“We’re not opposed to healthy changes,” said Julia Bauscher, the group’s president-elect. “We just want changes that don’t unnecessarily increase cost and force students to take foods they have no intention of eating.”

Making Meals Tastier

Other nutrition experts are pushing back. Juliana Cohen, a Harvard University nutrition research fellow, said the rules have helped children eat healthier food. That’s particularly important, she said, for inner-city, low-income students who get up to half their daily calories from school meals. She co-wrote a study, which found that students in four Boston schools ate more fruits and vegetables after the new rules took effect — although they still threw away much of them.

The solution to waste, Cohen and others say, isn’t to end the rules but to find other ways to get children to eat their vegetables. They include working with professional chefs to make meals tastier, planting school gardens and scheduling recess before lunch.

Rewards such as raffle tickets and small amounts of money got students to eat more produce with far less waste than set servings.

At LA Unified, celebrity chefs, such as Jamie Oliver, have helped develop menus. More than 270 schools offer “harvest of the month” lessons about produce, and 450 schools have started campus gardens.

Still the food piles up in school trash cans.

Back at Washington Prep, a few students said they ate their entire lunches. Daniel Ofa, a hulking sophomore, said he doesn’t really enjoy the spaghetti or enchiladas but downs them anyway.

“Since we’re football players, we eat all of it, bad or good,” he said.

“If the food was good food, we’d have no problems,” said senior A’lea Rendey, who pulled a hair from her turkey burger. She then dumped her food and headed off to the school store for a Pop-Tart.
What do you think about school lunches? Think about the following factors: food quality, healthy options, price, choice, and food waste.

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<td>Food Waste</td>
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### LOCAL-SUSTAINABLE FOOD CHAIN

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**Quickwrite:** After reading part three of Omnivore’s Dilemma, do you think the author, Michael Pollan, is for or against the local sustainable food chain? Why?

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**Directions:** For each section in chapter 12, summarize the main idea and draw a picture to help you remember what the section was about.

**Chapter 12: Polyface Farm**

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<th>Green Acres</th>
<th>Time Travel?</th>
<th>The Grass Farmer</th>
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<th>Pastures of Plenty</th>
<th>Grass and Humans—BFF?</th>
<th>Industrial vs. Organic</th>
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<th>Organic vs. Beyond Organic</th>
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**Directions:** In chapters 13-17, Pollan walks through his week-long experience at the local farm. Your job is to create a calendar recording his experience. Each day, record what he does, important information, etc. on the calendar. Then, in the box above the calendar, draw a picture (a cover for your calendar) that represents a local-sustainable farm.

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</table>
Quickwrite: After reading part four of Omnivore’s Dilemma, do you think the author, Michael Pollan, is for or against the hunter/gatherer food chain? Why?

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Directions: Your job is to plan a meal from the hunter-gatherer food chain using the rules Michael Pollan outlined in chapter 22. You must choose an appetizer, meat and a side for the main course, a dessert, and a drink. Research the animals, plants, and minerals that are in your town, and use that information to plan an appropriate meal (ex. if you live in Caldwell, ID, you could not serve crocodile as your main course. There are no crocodiles here). In each box, write what you are serving, the ingredients, and where you got each ingredient.
AMA calls obesity a disease in a move that affects millions of Americans

By Los Angeles Times, adapted by Newsela staff
06.20.13
https://newsela.com/articles/obesity-disease/id/370/

WASHINGTON — Almost 36 percent of adults and 12 percent of children in the United States are obese, or greatly overweight. On Tuesday, the top U.S. medical organization voted to label obesity as a disease. The move affects 78 million American adults and 12 million children. They will now be seen as patients having a medical condition that requires treatment.

The American Medical Association is the nation’s leading group of doctors. The AMA took the vote after much debate. They argued whether the action would do more to help overweight patients get treatment, or would add more shame to the complex condition.

The AMA’s own experts had cautioned against the move. But in the end, AMA decided to extend the new disease status.

Pressure On Health Insurers

Dr. Patrice Harris is an AMA board member. He said labeling obesity as a disease will help change the way the doctors tackle the issue. Tuesday’s vote will put pressure on health insurance companies. There is demand for insurers to reimburse physicians for the time-consuming task of discussing obesity’s health risks with patients. It should make doctors more likely to recommend weight-loss programs and monitor their patients’ progress.

Anyone with a body mass index greater than 30 is considered obese. The body mass index is a measurement of body fat based on weight and height. A person 5 feet 4 inches tall weighing 175 pounds has a BMI of 30. For a person 6 feet tall, a weight of 221 pounds equals a BMI of 30.

Medicare already covers the costs of some behavioral treatments for obese patients. It also pays for surgery for those with additional health conditions. Medicare is a government-sponsored program. It insures an estimated 13 million obese Americans who are over 65 or disabled. But not all private insurers cover such obesity treatments.

Insurers in the California Association of Health Plans cover many services to treat symptoms of obesity, said chief executive Patrick Johnston. Those services include bariatric surgery, an operation to reduce the size of the stomach.
Making Doctors Diagnose And Discuss

The AMA’s decision means physicians now have an obligation to diagnose obesity and recommend treatment. As such, it should encourage primary care physicians to talk about weight with their patients. Studies have found that more than half of obese patients have never been told by a doctor that they need to lose weight.

Doctors are reluctant to have the conversation. Not only do they not want to offend their patients, but they may also be unwilling to start a long discussion for which they won’t be paid. Past AMA documents have called obesity an “urgent chronic condition,” a “major health concern” and a “complex disorder.” The vote now lifts obesity above the status of a health condition or disorder.

“Primary care physicians tend to look at obesity as a behavior problem,” said Dr. Rexford Ahima of the University of Pennsylvania. “This will force primary care physicians to address it, even if we don’t have a cure for it.”

Americans have been gaining weight at a fast pace for 30 years. All those extra pounds have resulted in a tidal wave of expensive health problems. Type 2 diabetes and cardiovascular disease are rising public concerns. Treatment for obesity-related diseases is costing the U.S. $150 billion a year, the Centers for Disease Control and Prevention reports. That figure could rise by an additional $550 billion over the next 20

The AMA argued that calling obesity a disease could bring new treatments. The Food and Drug Administration has approved just two new prescription weight-loss medications since 1999. Making obesity a disease could pressure the FDA to approve new obesity drugs. That could spur new drug development and get doctors to prescribe them more, the council noted.

Giving A Boost To Exercise

Labeling obesity a disease also might boost support for prevention programs like physical education and reforms to school lunch, the AMA added. It could also lead to employers covering obesity treatments for their employees. Companies could be less able to discriminate on the basis of body weight, the AMA suggested. But the AMA also said that making obesity a disease has risks. It could deepen the stigma attached to being overweight. Some patients could be doomed to endless nagging — even if they were otherwise healthy or had lost enough weight to improve their health.

It might also shift focus toward expensive drugs and surgeries. The AMA does not want these to overshadow other measures like healthy diets and regular exercise. Dr. Daniel H. Bessesen is an obesity expert at the University of Colorado. He called the AMA’s shift “a double-edged sword.” While the label change may reflect “a growing awareness that obesity is not someone’s fault,” he worried that the term disease may make people feel ashamed. People who are obese don’t need to feel any more shame, he added.
**Healthy vs. Unhealthy Living: What is the Cost?**

**Directions:** You will be doing a research project about the cost of healthy living. This project is based on the cost of ONE person. First, you will look up the cost of eating healthy vs. eating unhealthy. You will decide which method of eating is cheaper. Then, you will look up the costs associated with a healthy vs. unhealthy lifestyle. Finally, you will compare the long-term costs of eating healthy vs. eating unhealthy.

a) Do you think you live a healthy lifestyle? How do you know?
__________________________________________________________________________________________________________________________________________

b) Does your family live a healthy lifestyle? How do you know?
__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

c) Which do you think is cheaper: Living a healthy lifestyle or living an unhealthy lifestyle? Why?
__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

__________________________________________________________________________________________________________________________________________

1. Look up the cost of groceries.

<table>
<thead>
<tr>
<th>Processed/Fast-food Meals</th>
<th>Organic Veggies/Meat Meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast Meal:</td>
<td>Breakfast Meal:</td>
</tr>
<tr>
<td>Cost of Breakfast:</td>
<td>Cost of Breakfast:</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Lunch Meal:</td>
<td>Lunch Meal:</td>
</tr>
<tr>
<td>Cost of Lunch:</td>
<td>Cost of Lunch:</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Dinner Meal:</td>
<td>Dinner Meal:</td>
</tr>
<tr>
<td>Cost of Dinner:</td>
<td>Cost of Dinner:</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Cost per day:</td>
<td>Cost per day:</td>
</tr>
<tr>
<td>(breakfast + lunch + dinner)</td>
<td>(breakfast + lunch + dinner)</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>x 365 days per year</td>
<td>x 365 days per year</td>
</tr>
<tr>
<td><strong>Average Yearly Cost:</strong></td>
<td><strong>Average Yearly Cost:</strong></td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

- $ denotes the cost of each meal category.
2. Look up the cost of a membership at three different gyms

<table>
<thead>
<tr>
<th>Gym Name</th>
<th>Monthly Cost</th>
<th>( \times 12 ) Months</th>
<th>Yearly Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>( \times 12 = )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>( \times 12 = )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$</td>
<td>( \times 12 = )</td>
<td></td>
</tr>
</tbody>
</table>

*Average cost of gym membership:* $  

3. Research the health issues that come from obesity. List three of them, and then look up the financial cost of having one of these diseases.

<table>
<thead>
<tr>
<th>Health Issue:</th>
<th>Cost to Treat the Issue</th>
<th>Medicine:</th>
<th>Supplies:</th>
<th>Surgery:</th>
<th>Yearly Cost:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

*Average cost of health issues:* $
4. Put all of your information together:

<table>
<thead>
<tr>
<th>Cost of an unhealthy lifestyle</th>
<th>Cost of a healthy lifestyle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average yearly cost of groceries:</td>
<td>$</td>
</tr>
<tr>
<td>Average yearly health costs:</td>
<td>$</td>
</tr>
</tbody>
</table>

**Total Cost:** $ 

**Total Cost:** $ 

**Reflection Questions:**

a) Which lifestyle is cheaper? Does this surprise you? Why or why not?

__________________________________________________________________________________________________

__________________________________________________________________________________________________

Quickwrite: Which lifestyle is a better way to live? Why?

A

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C

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E

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C

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E

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S

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Almost 10 Percent of U.S. Medical Costs Tied to Obesity

BY STEVEN REINBERG; HEALTHDAY REPORTER
July 28, 2015

MONDAY, July 27 (HealthDay News) -- Obesity in the United States now carries the hefty price tag of $147 billion per year in direct medical costs, just over 9 percent of all medical spending, experts report.

In fact, people who are obese spend almost $1,500 more each year on health care -- about 41 percent more than an average-weight person. Beyond those costs are the disability and early deaths caused by obesity, Dr. Thomas R. Frieden, director of the U.S. Centers for Disease Control and Prevention, said during a press conference Monday.

"Obesity, and with it diabetes, are the only major health problems that are getting worse in this country, and they are getting worse rapidly," Frieden said. "The average American is now 23 pounds overweight."

Frieden's comments were made at the CDC's "Weight of the Nation" conference, held this week in Washington, D.C.

Between 1998 and 2006, obesity rates in the United States increased 37 percent and now one in three adults in the country are obese. Experts have long known the toll overweight takes on health, but the new report, published in the July 27 online edition of Health Affairs, outlines the financial cost of obesity.

"A normal-weight individual will spend about $3,400 per year in medical expenditures and that number rises to about $4,870 if that individual is obese," study author Eric Finkelstein, director, RTI Public Health Economics Program in Research Triangle Park, N.C., said during the press conference.

For people on Medicare, average expenses for a normal-weight person average about $4,700 a year, while costs for an obese person range about $6,400 annually, Finkelstein said.

The biggest driver of these excess costs are prescription drugs, Finkelstein said. Among the normal-weight population, prescription drug costs average about $700 a year, but among those who are obese the cost rises to about $1,300 a year, an 80 percent increase, he said.

"For Medicare, the costs of obesity are about 72 percent greater just for prescription drugs," Finkelstein said. An obese person on Medicare is going to pay $1,400 in drug costs more a year than a normal-weight person, he said.

"Today's report demonstrating the clear link between rising rates of obesity and increasing medical costs is alarming, but not unexpected," Risa Lavizzo-Mourey, president and CEO of the Robert Wood Johnson Foundation said in a statement. "Obesity is the driver of so many chronic conditions -- heart disease, diabetes, cancer -- that generate the exorbitant costs that are crushing our health-care system," she said.
"The only way to show real savings in health expenditures in the future is through efforts to reduce the prevalence of obesity and related health conditions," Finkelstein said.

Hoping to turn the tide of the obesity epidemic, the CDC is taking several steps it hopes will alert people to the problem and get Americans to make the changes need to reduce obesity.

Among the strategies the CDC is promoting are making healthy food more available, promoting more choices of healthy foods, promoting breast-feeding, encouraging physical activity and creating sites in communities that support physical activity, Dr. William H. Dietz, director of CDC's Division of Nutrition, Physical Activity, and Obesity, said during the press conference.

"These recommendations, I believe, set the foundation for the community interventions necessary to reverse this problem in the United States," Dietz said.

One of the biggest problems facing Americans is soaring consumption of soda and other sugar-sweetened drinks, which add almost 150 calories to the daily diet, Frieden said.

Frieden believes that taxing sodas and other sugar-sweetened drinks will help cut down on consumption and raise revenues that can be used to fight the obesity epidemic.

The upshot of Monday's meeting is that stemming the obesity epidemic is going to take a societal effort.

"Reversing obesity is not going to be done successfully with individual effort," Frieden said. "We did not get to this situation over the past three decades because of any change in our genetics or any change in our food preferences. We got to this stage of the epidemic because of a change in our environment and only a change in our environment again will allow us to get back to a healthier place," he said.

Quickwrite: Compare and contrast the findings in this article to your own research.

A

________________________________________________________________________________________

C

________________________________________________________________________________________

E

________________________________________________________________________________________

C

________________________________________________________________________________________

E

________________________________________________________________________________________

S

________________________________________________________________________________________
**Directions:** Using everything we have studied so far, create a brochure offering tips to affording healthy living. This is your rough draft.

**Healthy Recipe**
- Ingredients needed
- Best or Cheapest store to get each ingredient
- Directions on how to cook the meal
- Picture of the finished meal

**Interesting Facts**
- Healthy living
- Obesity
- Exercise
- Where food comes from

**Fun and Free ways to stay in shape**
Cost Analysis

- Cost of healthy living
- Cost of unhealthy living
- An argument/explanation of your numbers

Sources

- Websites where you got your information
- Article Titles
- Author’s Names

Cover Page

- Title of your Brochure
- Picture
- Name
<table>
<thead>
<tr>
<th>Section</th>
<th>4- Excellent</th>
<th>3- Good</th>
<th>2- Needs Improvement</th>
<th>1- Incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Analysis</strong></td>
<td>I have answered the question. I used the entire ACEs strategy with sentence starters.</td>
<td>I have answered the question. I used the entire ACEs strategy.</td>
<td>I have answered the question, but not provided any evidence.</td>
<td>I did not answer the question</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>I cited my sources</td>
<td>I cited most of my sources</td>
<td>I did not cite my sources</td>
<td></td>
</tr>
<tr>
<td><strong>Title Page</strong></td>
<td>I have a title, picture, and my name on the cover. I have gone above and beyond the required elements.</td>
<td>I have a title, picture, and my name on the cover.</td>
<td>I have 1 of the three necessary elements</td>
<td>I do not have any of the necessary elements.</td>
</tr>
<tr>
<td><strong>Healthy Recipe</strong></td>
<td>I have provided a nutritious recipe with directions on how to make it.</td>
<td>I have provided a healthy recipe, but I forgot to include the directions on how to make it.</td>
<td>I have provided a recipe, but it is not healthy and there are no instructions.</td>
<td>I did not provide a recipe.</td>
</tr>
<tr>
<td><strong>Interesting Facts</strong></td>
<td>I have 4 interesting facts with pictures</td>
<td>I have 3 interesting facts with pictures</td>
<td>I have 1 interesting fact with a picture.</td>
<td>I have no pictures and no facts.</td>
</tr>
<tr>
<td><strong>Fun and Free ways to stay in shape.</strong></td>
<td>I have 5 fun and free ways to stay in shape with a picture.</td>
<td>I have 4 fun and free ways to stay in shape with a picture.</td>
<td>I have 3 fun and free ways to stay in shape with a picture.</td>
<td>I have 2 or fewer fun and free way to stay in shape with a picture.</td>
</tr>
</tbody>
</table>

**TOTAL SCORE:** _________/36
**Final Essay/Video:** Of the three food chains: Industrial, Industrial-Organic, Local Sustainable, or Hunter-Gatherer, which would be the best to sustain a school lunch program? Make sure to consider all the factors we have discussed in class: health, cost, prep-time, practicality, etc.

### OUTLINE: ESSAY AND VIDEO

<table>
<thead>
<tr>
<th>A</th>
<th>Thesis Statement:</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Topic Sentence 1:</td>
</tr>
<tr>
<td>C</td>
<td>Evidence (Quote)</td>
</tr>
<tr>
<td></td>
<td>Analysis (Explain)</td>
</tr>
<tr>
<td>D</td>
<td>Evidence (Quote)</td>
</tr>
<tr>
<td></td>
<td>Analysis (Explain)</td>
</tr>
<tr>
<td>E</td>
<td>Conclusion:</td>
</tr>
</tbody>
</table>
### HOW WILL I BE GRADED?

<table>
<thead>
<tr>
<th>Focus/Claim</th>
<th>5-Advanced 😊</th>
<th>4-Proficient 😊</th>
<th>3-Basic 😊</th>
<th>2-Below Basic 😞</th>
<th>1-Far Below Basic 😞</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I answered every part of the prompt, and my answer provided new information</td>
<td>- I answered each part of the prompt</td>
<td>- I answered most of the prompt</td>
<td>- I left out some of the prompt</td>
<td>- I didn’t really answer the prompt</td>
<td>- I do not have a thesis statement</td>
</tr>
<tr>
<td>- My thesis statement is well-written, clear, relevant, and specific</td>
<td>- My thesis statement is clear</td>
<td>- My thesis statement is there</td>
<td>- My thesis statement is unclear or irrelevant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization/Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- My introduction catches readers’ attention and fully introduces my topic</td>
<td>- My introduction introduces the topic</td>
<td>- My introduction introduces some of the topic</td>
<td>- My introduction doesn’t really introduce the topic</td>
<td>- My introduction does not make sense</td>
<td></td>
</tr>
<tr>
<td>- I have strong topic sentences, relevant quotes, and my analysis adds to my argument</td>
<td>- I have topic sentences, quotes, and analysis</td>
<td>- My topic sentences, quotes, and analysis are there most of the time, but sometimes don’t make sense</td>
<td>- I left out parts of my paragraph that I needed</td>
<td>- I do not have the parts I need in a paragraph</td>
<td></td>
</tr>
<tr>
<td>- I have every paragraph, and each one adds to my argument</td>
<td>- I have all the paragraphs I need</td>
<td>- I am missing one paragraph</td>
<td>- I left out two paragraphs</td>
<td>- I am missing more than two paragraphs</td>
<td></td>
</tr>
<tr>
<td>- My conclusion connects directly to my thesis statement, and successfully wraps up all aspects of my paper</td>
<td>- My conclusion supports my thesis</td>
<td>- My conclusion only restates my thesis</td>
<td>- My conclusion does not wrap up my paper</td>
<td>- I do not have a conclusion</td>
<td></td>
</tr>
<tr>
<td>- I used varied transitions so my paper flows nicely</td>
<td>- I used transition words</td>
<td>- I used transitions most of the time, but my paper is choppy</td>
<td>- My paragraphs are out of order</td>
<td>- I used very few or no transition words</td>
<td></td>
</tr>
<tr>
<td>- The order of my paper makes my argument stronger</td>
<td>- The order of my paper makes sense</td>
<td>- For the most part, the order of my paper makes sense</td>
<td>- I only had one quote per paragraph and it could have been stronger OR I had one strong quote in each paragraph</td>
<td>- The order of my paper makes my argument weaker</td>
<td></td>
</tr>
<tr>
<td>Evidence/Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I have two or more very strong and relevant quotes in each body paragraph</td>
<td>- I had two good quotes in each paragraph</td>
<td>- I had two quotes that could have been stronger OR I had one strong quote in each paragraph</td>
<td>- I only had one quote per paragraph and it could have been stronger</td>
<td>- I did not have any quotes, or the quotes I had were not relevant</td>
<td></td>
</tr>
<tr>
<td>- I cited all of my sources correctly</td>
<td>- I cited my sources</td>
<td>- I cited most of my sources</td>
<td>- I did not cite very many of my sources</td>
<td>- I did not cite my sources</td>
<td></td>
</tr>
<tr>
<td>- I had a counter-claim and successfully argued against it</td>
<td>- I had a counter-claim and argued against it</td>
<td>- I had a counter-claim, and tried to argue against it</td>
<td>- I did not argue against a counter-claim</td>
<td>- I did not have a counter-claim</td>
<td></td>
</tr>
<tr>
<td>Analysis/Explanation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- My analysis shows that I fully understand the text</td>
<td>- My analysis shows that I understand the text</td>
<td>- My analysis shows that I understand most of the text</td>
<td>- My analysis shows that I didn’t understand the text very well</td>
<td>- My analysis proves that I either did not understand the text or did not actually read it</td>
<td></td>
</tr>
<tr>
<td>- I use reasoning to explain every quote</td>
<td>- I explain every quote</td>
<td>- I explain most of my quotes</td>
<td>- I don’t explain very many of my quotes</td>
<td>- I did not explain my quotes</td>
<td></td>
</tr>
<tr>
<td>- My analysis is logical and persuasive</td>
<td>- My analysis makes sense and is pretty convincing</td>
<td>- My analysis sometimes makes sense but is not very convincing</td>
<td>- My analysis does not make sense and is not convincing</td>
<td>- I did not do an analysis</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I used complete sentences, and varied my sentence structure</td>
<td>- I used complete sentences</td>
<td>- I use complete sentences, but many of them are about the same length</td>
<td>- My sentences are all simple or incomplete</td>
<td>- My sentences are incomplete</td>
<td></td>
</tr>
<tr>
<td>- I have very few grammar, spelling, or punctuation errors</td>
<td>- I have a few minor grammar errors, but they don’t distract the reader</td>
<td>- I have some grammar errors and it may confuse the readers</td>
<td>- I have many distracting grammar errors</td>
<td>- I have serious grammar issues that make my paper hard to read</td>
<td></td>
</tr>
<tr>
<td>- I used academic vocabulary correctly throughout my whole paper</td>
<td>- I used academic vocabulary once or twice</td>
<td>- I tried to use academic vocabulary</td>
<td>- I used academic vocabulary incorrectly</td>
<td>- I did not use academic vocabulary</td>
<td></td>
</tr>
</tbody>
</table>
ESSAY DRAFT:

INTRODUCTION:

- Hook to get reader’s attention
- Introduce the four food chains
- Thesis statement—the food chain you are choosing to sustain a family of four.
BODY PARAGRAPH 1 (FIRST REASON)

- A- Answer the question: Topic Sentence
- C- Cite evidence: Quote
- E- Explain your evidence: Analysis (repeat C and E)
- S- Summary sentence: wrap up your argument

A

_______________________________________________________________________________________________
_______________________________________________________________________________________________

C

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_______________________________________________________________________________________________
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_______________________________________________________________________________________________

E

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E

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_______________________________________________________________________________________________

S

_______________________________________________________________________________________________
_______________________________________________________________________________________________
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BODY PARAGRAPH 2 (SECOND REASON)

- A- Answer the question: Topic Sentence
- C- Cite evidence: Quote
- E- Explain your evidence: Analysis (repeat C and E)
- S- Summary sentence: wrap up your argument

A
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Page 72
BODY PARAGRAPH 3—COUNTER ARGUMENT

- A- Answer the question: Topic Sentence
- C- Cite evidence: Quote
- E- Explain your evidence: Analysis (repeat C and E)
- S- Summary sentence: wrap up your argument

A

C

E

C

E

S
CONCLUSION:

- Why are the different food chains important? Why is it important to know where food comes from?
- What practical changes will you and your family make in your diets?
- What are some simple changes your readers can make in their diets?
- Remind reader of your argument
# Video Rubric

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4- Excellent</th>
<th>3- Good</th>
<th>2- Needs Improvement</th>
<th>1- Incomplete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>Video is well-edited with smooth delivery, pace, and imagery that holds audience attention.</td>
<td>Video is edited with fairly smooth delivery that holds audience attention most of the time.</td>
<td>Video is not smooth, but able to maintain interest of the audience most of the time.</td>
<td>Video is not smooth and audience attention often lost.</td>
</tr>
<tr>
<td>____/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Originality</td>
<td>Product shows a large amount of original thought. Ideas are creative and inventive.</td>
<td>Product shows some original thought. Work shows new ideas and insights.</td>
<td>Uses other people's ideas (giving them credit), but there is little evidence of original thinking.</td>
<td>Uses other people's ideas, but does not give them credit.</td>
</tr>
<tr>
<td>____/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attractiveness</td>
<td>Makes excellent use of font, color, graphics, effects, etc. to enhance the presentation.</td>
<td>Makes good use of font, color, graphics, effects, etc. to enhance the presentation.</td>
<td>Makes use of font, color, graphics, effects, etc. but occasionally these detract from the presentation content.</td>
<td>Use of font, color, graphics, effects etc. but these often distract from the presentation content.</td>
</tr>
<tr>
<td>____/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics</td>
<td>No misspellings or grammatical errors.</td>
<td>Three or fewer misspellings and/or mechanical errors.</td>
<td>Four misspellings and/or grammatical errors.</td>
<td>More than 4 errors in spelling or grammar.</td>
</tr>
<tr>
<td>____/10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>Covers topic in-depth with clear thesis statement, convincing evidence, logical and persuasive analysis, and clear argument.</td>
<td>Includes thesis, evidence, analysis, and an argument that is effective.</td>
<td>The essential elements are present, but are not strong enough to be effective</td>
<td>Is missing one or more essential pieces of the argument</td>
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<td>____/60</td>
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**Total Score: ____/100**
**VIDEO DRAFT:**

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<thead>
<tr>
<th>Slide 1: Information:</th>
<th>Slide 2: Information:</th>
<th>Slide 3: Information:</th>
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<tbody>
<tr>
<td>Pictures:</td>
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<td>Purpose:</td>
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<th>Slide 4: Information:</th>
<th>Slide 5: Information:</th>
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<th>Slide 7: Information:</th>
<th>Slide 8: Information:</th>
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<td>Pictures:</td>
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<td>Purpose:</td>
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</table>
**Vocab Chart:** As you read the book, keep track of vocabulary words. Write down the word, the sentence the word was found in, the definition of the word, and draw a picture to help you remember the word.

<table>
<thead>
<tr>
<th>WORD</th>
<th>CONTEXT</th>
<th>DEFINITION</th>
<th>PICTURE</th>
</tr>
</thead>
<tbody>
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**Food, Inc. Questions:**

1. Why do the main growers like Tyson not allow filmmakers in their chicken factories? Why are the growers increasingly required to close up windows at their facilities?

2. How did McDonald’s change the American food industry?

3. Michael Pollan contends that the cornucopia of products in our grocery store is “an illusion of diversity,” that it’s a “clever rearrangement of corn.” Explain what he means by this.

4. Comment on the CAFU’s (Concentrated Animal Feeding Operations). Why are they controversial? Is there a reason to be concerned with the practice of feeding corn to cows, which are evolved to eat grass?

5. The food industry is said to “push the evolutionary buttons” of the desire for salt, fat, and sugar -- ingredients previously rare to acquire and unhealthy in large quantities. Are the industries to blame for the health problems now arising as consequence of their abundant presence in the current system?

6. What is the issue with the industry growing a lot of food, on a small amount of land, at a low price?

7. The food industry has a highly developed technology for developing seed, growing crops and food, and addressing problems like e coli contamination. Why do the filmmakers take issue with this marriage of science & technology and the food industry? Why do they see it as approaching food in the wrong way?

8. What are the “Veggie Libel Laws?”

9. What role do consumers have in changing which foods are offered inexpensively at the market? Consider the case of Walmart and the changes made in recent years. What is the point of the claim at the end of the film that consumers get to vote three times a day?
King Corn Documentary

1. In the movie King Corn, how were the farmers able to spray Liberty herbicide on their corn (to kill the weeds) without harming the corn?

2. The corn that Ian and Curt grew was referred to as "commodity corn." What does that mean?

3. What did corn replace as the principle feed for cattle?

4. What industry developed from the excess corn grown in the United States?

5. By the late 1980's, what proportion of the market for sweeteners in the United States was dominated by corn syrup?

6. In the movie, King Corn, what were the three main steps in the basic process by which Ian and Curt made corn syrup?
   a)
   b)
   c)

7. What did Walter Millett, the Harvard professor interviewed in King Corn, say about the effect of drinking calories on the metabolic process?

8. What disease, as described in King Corn, is strongly linked to food and exercise, and the risk for which is doubled with one can of soda per day?

9. In the movie, King Corn, what was the difference between the cost of growing 1 acre of corn and the price that would be received from the grain elevator for 200 bushels? How did Ian and Curt make a profit?
Fed Up Discussion Questions

1. Why don’t low-fat food items help you lose weight?

2. Why is sugar so bad for you?

3. What is wrong with switching to a sugar-free diet?

4. Why is it so hard to avoid sugar?

5. Why doesn’t the calorie balance idea work?

6. What should you do to be healthy?

7. Why don’t they think it’s fair to blame parents and eaters for the problem of obesity?

8. How is the food industry to blame for the obesity epidemic?

9. How is the government to blame for the obesity epidemic?

10. How are consumers to blame for the obesity epidemic?
<table>
<thead>
<tr>
<th>Dilemma</th>
<th>Organic</th>
<th>Controversy</th>
<th>Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>GMO</td>
<td>Omnivore</td>
<td>Industrial</td>
</tr>
<tr>
<td>Resistant</td>
<td>Processed</td>
<td>Irrigation</td>
<td>CAFO</td>
</tr>
<tr>
<td>Hybrid</td>
<td>Saturated</td>
<td>Feedlot</td>
<td>Poverty</td>
</tr>
</tbody>
</table>
VOCAB WORD SEARCH

Directions: Choose at least ten words to include in the word search. For your word-bank, write down a definition or description of the word that is in your word search. Use the dots below to help you space out your words correctly. Make sure your letters are neat and definitions are correct, as you will be trading with a partner who will complete your word search.

Definitions of Words:

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10.
**VOCAB STORY**

**Directions:** Write a one-page story using at least ten of the following words in the correct context. Your story can be about anything, so use your imagination and be creative! As you are writing, underline the vocabulary words.

- Omnivore
- Industrial
- Genetically Modified Organisms
- Hybrid Seeds
- Monsanto
- Feedlot
- Sustainable
- Processed
- Irrigation
- CAFO
- Dilemma
- Organic
- Controversy
- Bias
- Patent
- Resistant
- Saturated
- Obesity
- Poverty
- Epidemic

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EXTENSION OPPORTUNITIES FOR ADVANCED STUDENTS

1. **Board Game:** Design and create your own board game. The game should be titled *Omnivore’s Dilemma*, and it should be representative of the book. You are responsible for creating the game, writing out an instructions sheet, and creating a box for the game to go in.

2. **Children’s Book:** Turn *Omnivore’s Dilemma* into a children’s book that teaches kids how to eat healthier. Your children’s book should be at least ten pages in length. Make sure to include drawings, color, and descriptions that would make sense to a child.

3. **Theme Collage:** For this project, you will choose one major theme from the book and create a collage representing that theme. You can select pictures from magazines, drawings, newspapers, the internet, or pictures you have taken. Arrange the pictures in a shape that represents your theme, and make sure the theme is clearly displayed. Then, write one paragraph explaining the theme you chose as well as the pictures you selected.

4. **Snapchat Project:** Create a Snap Story of your reaction to *Omnivore’s Dilemma* as you read the book. What was your reaction? What would you have posted on social media about what you have learned? You must create at least eight snaps—two from each section of the book. Then, on the lines below, explain your snap. Why was your reaction what it was? What was the lesson you learned?
### Board Game Rough Draft

<table>
<thead>
<tr>
<th>Instructions—How do you play?</th>
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</thead>
<tbody>
<tr>
<td>Object—What is the goal/How do you win?</td>
<td></td>
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<tr>
<td>Connection to the book—What does the game have to do with <em>Omnivore’s Dilemma</em>?</td>
<td></td>
</tr>
<tr>
<td>Supplies: What do you need in order to complete the project?</td>
<td></td>
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</tbody>
</table>

Use the box below to draw a draft of what your gameboard will look like. Make sure to label what supplies you will need to create it.
Children’s Book Rough Draft

Main Characters: ____________________________________________________________

Plot (basic description of what happens): ____________________________________________

Moral (lesson) of the story: ________________________________________________________

Each box is a page. What words and pictures will go in each page?

1

2

3

4

5

6

7

8

9

10

11

12
**Theme Collage Rough Draft**

Below, identify what theme you will be representing. Then, sketch out the shape you will create with your pictures. This sketch should take up the entire page. Finally, describe what types of pictures you will be looking for and how they relate to your theme.

Theme: ________________________________