Youth Giving Voice to the Obesity Epidemic: A Need That Rises Out of Food Consumption

Rosa Dubisette
Paul Robeson High School

Overview
Rationale
Objectives
Strategies
Classroom Activities
Annotated Standards

Overview

Food that the public consumes is not as private a matter as we may think it is because of the colonization of food. Colonization is a process by which powerful interests including intellectuals, government, big business, and the media adopt persuasive tools to rationalize and bring routine to the world around them. Each of these influencers gives voice to the way food reaches America’s table and represents a number of agencies, each with its own voice that speaks about its own concerns. At times their voices blend, and other times their voices clash. Each voice, at times, has its own agenda. A prime example is the Cheeseburger Bill or Consumption Act - which is a bill that is largely responsible for shaping thought surrounding Americans taking responsibility for the effects of food consumption vs. blaming big business. “Today, big food industries aggressively lobby government officials and sponsor academic journals, research, and conferences which lead to a confused readership“(Gard and Wright,2005). For many reasons, the consumer’s voice can not begin to compete with the influence of big businesses. There is a certain amount of irony that exists in big business’ shifting the onus on the consumer for the consequences of the food they consume. If the blame of the effects of bad food choices rests with the consumer, then the consumer must know the truth and the consequences of his decisions. These are the pre-requisites needed prior to the consumer giving voice to the epidemic. Voice here is used as a message that speaks the consumers’ concerns and demands with an ultimate goal of helping to shape what reaches and the way food reaches the American table.

Consequently, this unit of study will delve into students developing a voice about this subject of the obesity epidemic and will provide students with handles for understanding what influences the why and what they eat in the “privacy” of their homes. Students will explore how big business, government and media give voice to what and how food reaches their tables. Finally, they will be challenged to develop a voice that speaks to
some commitments they have made about their own eating habits in light of the research they will have done.

Since the obesity epidemic directly affects the health and mortality of youth, this unit purposes to inform, prepare, and provide them with the tools to form an opinion about their generation’s food choices and allow them to research the data which will be followed by a chance to give voice (share their opinion with classmates) to an issue that directly affects their lives. Among the academic tools to be used are selections from literature that range from the Middle Ages to Modern Times. Consequently, the educational goal is for the student to use literature to research the data surrounding food consumption during different time periods and to formulate an opinion about the effects of food consumption and its relationship to obesity. They will discover the diets and the lifestyles of those represented in literature and deduce why obesity did not become an epidemic until the later part of the twentieth century. Opportunity will be given to compare and contrast the diet of earlier generations as represented in literature with the modern day diet.

Additionally, there will be hands-on interactive activities involving the internet that will require students to research and record data on the food consumption of their peers and family members. These assignments should help them to formulate an opinion about their eating habits and the health consequences to their generation. Finally they will share their opinions on what they have learned about the epidemic and discuss what changes they intend to make in their own eating habits. Graphs will be compiled and data compared to reflect their findings. From this information, students will summarize their findings to write a persuasive essay that gives voice to their concerns. In particular, students will write a 1,000 word persuasive essay that speaks to this epidemic that plagues them, their peers, and their families.

This unit intends to engage students over a three week period whereby they will gather and analyze data and apply their attained knowledge from the research. This academic venture is parallel to the required standards of the core curriculum for 12th grade English which requires students to read, analyze, and interpret literature, and to organize, summarize, and present the main ideas from research.

**Rationale**

Paul Robeson High School for Human Services is a 9th-12th grade school located in the Southwest region of Philadelphia, Pennsylvania. The student body consists primarily of African American students, many of whom are impoverished. Because economics plays a major part in the types of foods that are consumed, these students by default join the ranks of others throughout America who have become prime candidates for the problems associated with food choices and eating habits that very well could lead to becoming overweight.
Daily I observe students, especially in the morning, as they eat snacks (mostly sugar and salt) and gulp down sugar drinks for their first meal of the day. Like many Americans, they frequently feast on fast food, which is also laden with sugar, salt, and fat. As I observed these eating habits, a question surfaced to mind. How aware are these students about the link to what they eat and to this epidemic, and what duty do I as an educator have to expose them to these startling facts?

Ethnicity: A Factor

“Nearly 9 million children, aged 6 years and older, from all socioeconomic and ethnic groups are obese” (Kretsch, 2006). A disproportionate number of these children are Afro-Americans, Hispanic, and American Indians. According to the World Health Organization (WHO), obesity is now replacing traditional public health concerns including malnutrition and infectious diseases.

Knowing this caused me to ask some other questions. How and when did obesity become such a major concern in public health; how does the increased consumption of certain foods affect becoming obese; and what will be the long range health effects of the eating habits practiced by this generation? Some final queries include why do we (Americans) eat this way, and what’s the criteria for food selection?

A Growing Problem

“The seriousness of the problem is the enormous suffering and even untimely deaths that will occur as a result of this epidemic if changes in eating habits do not occur. Endocrinologist Robert Lustig projects that its effects (obesity) will be greater than that of SARS and AIDS”. (Lautenschlager, 2006). To bring this problem even closer to home, Kretsch cited some experts’ opinions that “today’s childhood obesity rates may make our kids’ life spans shorter than our own.”

Changes in Eating Habits

Simply put, the decision to eat out or eat at home has a tremendous impact on daily caloric-intake. A USDA Survey (1994-1996) showed that 32% of food consumption is from the food-away-from-home sector. Another way to look at this is if you eat three meals a day, one out of every three meals is consumed away from home. When eating out, what America consumes is dictated by the menus provided by restaurants and fast food chains. A close-up of our eating habits as revealed by a USDA survey indicates the following:

Milk
With the decline of milk consumption comes the increase of soft drink offerings, fruit
drinks, and ades. From 1950 to 2000, milk consumption decreased from 36 to 32 gallons per person yearly. How often will consumers even have milk available to them when they are eating out?

**Cheese**
Cheese consumption increased by a whooping 287% from 1950 to 2000. That is roughly up to 30 pounds annually per person. New food packaging helped to boost consumption i.e., packaged snack foods, tacos, fast food sandwiches, cheese blends used in Mexican and Italian recipes, and other fast foods.

**Fat and oils**
According to the *New Product News*, by 1995, over 5,400 new fat-free products were in supermarkets all across America. Surprisingly, Americans successfully deceased fat intake by 36.4% of caloric intake by 1988. However, even with the heightened awareness of the need to cut fat, America’s taste buds got the best of her. Not impressed with the taste of these fat-free products, eventually America settled for one-third less than full fat products. It was clear that the consumer was hooked on the flavor that fat provided. Even now, the top ten foods containing fat that America consumes include cakes, margarine, mayonnaise, high fat snack foods, salad dressings, and other sweet baked foods and oils.

**Sweeteners**
The average consumption of sweeteners has increased to 32 teaspoons per day, whereas, the USDA recommends only 10 teaspoons daily. Sugar is the number one additive in other foods. For example, hotdogs, yogurt, ketchup, soda, and even peanut butter and bread all contain sugar.

**Flour**
Flour consumption rose to 200 pounds in the year 2000 from 1950. The fast food industry provides buns, tortillas, grain based snacks, and dough for consumption. According to the *Continuing Survey of Food Intake by Individuals*, it is recommended that at least 3 servings of grain be consumed daily. Only 7% of all Americans actually eat 3+ servings of grain daily.

**Objectives**
If the obesity epidemic will have the kind of devastating effects on this generation as posited, then in light of this reality, this generation of students must be made aware of this epidemic and be given the tools to make wise food choices as they move forward. Understanding the factors that influence this epidemic is crucial to future wellbeing in light of the dramatic health consequences to this generation. Therefore, students will first familiarize themselves with how people ate in earlier times as well as develop an awareness of the conflict of the bad food choices that they make. They will then be
challenged to give voice to influence how this obesity epidemic directly affects them and how it should be addressed.

Students will begin by learning about calories and how to gauge caloric values. The amount of energy supplied by food was set by Carroll D. Wright, Chief of Massachusetts Bureau of Labor. After being introduced to the importance of caloric values, students will be given an assignment to compare the calorie-intake of meals consumed by them, their peers, their families and people from past generations; students will begin to trace food consumption in literature that spans from the Middle Ages to Modern Times as represented throughout literature and to compare the data of these findings.

Finally, from this investigation, students will present their understanding of the facts by writing a persuasive essay along with a power-point presentation as part of their project. After their presentation, they will entertain questions about their report from the audience (their peers).

Youth giving voice to their concerns about this epidemic and to food selection is as powerful as the voices of big business, politicians, and intellectuals. The ultimate goal is a collective voice of youth who now understand this epidemic and have formed some opinions and concerns about this problem and its impact on how big business, etc. will prepare and package food in the future. Probably one of the most important voices is that of youth who are the future of our country; they are tomorrow’s heads of households and ultimate consumers.

The results of this unit investigation should yield a respect for the problem that this present generation faces and should provide students with some handles for developing an understanding of the problem and to move forward to address the obesity problem in their own lives and their family members’ lives.

Multiple writing assignments will require them to interpret the data that they will gather about themselves, their families and their peers. Students will be asked to chart the caloric-intake results of people from various time periods. Their research should affect how they will move forward to give voice to how food should be consumed to maintain a healthy body and influence food choices based on best practices.

**Strategies**

What follows is a break-down of the unit into three weeks of instruction along with what is to be accomplished. In keeping with the requirements of the twelfth grade state standards for the English curriculum, students will do the following:
Week 1
As a backdrop to the research that directly affects them, students will begin by searching literature for clues about diet starting with the Middle Ages and will draw conclusions as to why the obesity epidemic was not prevalent during earlier times. Students will read about and tabulate the caloric-intake of the meals described in the literary works assigned - caloric recording of the diets representative of their eating habits. Students will make charts (line and/or pie graphs) to compare and contrast their findings. These assignments align with the Pennsylvania State Standard 1.8 - organize, summarize, and present the main idea from research.

Week 2
In contrast to their findings about the eating habits of people from earlier periods, students will now focus on the eating habits of their own generation. Again, they will read literature for clues about eating habits. They will compile data of the caloric-intake of their peers their families, and themselves. Referring to the food pyramid, they will compare the recommended calories to the actual caloric-intake of these groups. From information gathered, they will be able to answer the question of why obesity is a reality beginning primarily in the twentieth century. The Pennsylvania State Standard 1.8 requires students to organize, summarize, and present the main idea from research.

Week 3
Students will be required to formulate a position on how moving forward they will alter their eating habits, if at all, in light of their findings. Their opinions will be formed into a 1,500 word persuasive essay in an attempt to give voice to what and how food should be consumed to prevent obesity among this generation. Students will present their position papers in class. A five minute oral presentation will be required that includes a power point presentations and a review of their data which is in keeping with the 12th grade Pennsylvania State Standard 1.4 of writing a persuasive piece and/or presenting and defending a written work for publication.

Classroom Activities

Three twelfth grade classes will study this unit for a period of three weeks. Each class is held for fifty-four minutes in length. Significant time will be allocated for researching and massaging information gathered; most students in this school do not own personal computers, so time will be built into the unit for student utilization of school computers. In light of this, how the lessons are implemented will be determined by individual instructor’s needs and available times. Daily activities have been separated out only for the first few classes of this unit. The other activities are grouped in a weekly format.

Week One - Day 1
Questions:
What does it mean to be obese?
Why is obesity now an epidemic?
How can you know if you are “overweight”?
What is BMI?
Why should teens be concerned with obesity epidemic?
What percentage of your classmates are healthy - based on their BMI?

Objective:
Students will be able to define obesity.
Students will discover why obesity is referred to as an epidemic.
Students will know how to find out if a person is obese.

To Do:
Read article entitled “Survey Links Fast Food. Poor Nutrition…”
Complete the K-W on the K-W-L chart (Know-Want to know-Learned) on obesity.
Complete the K-W chart on epidemic.
Discover your individual body mass using BMI chart.
Complete/review the “L” section of the K-W-L chart for both words - epidemic and obesity.
Ask five classmates outside of your class for their weight and height.

Materials:
“Survey Links Fast Food. Poor Nutrition…”
“MSN BMI Indicator” http://pediatrics.about.com/cs/usefultools/l/bl_bmi_calc.htm
BMI chart handout

Homework:
Become familiar with the BMI chart.
Be ready to share interpretation of data with classmates

Week One - Day 2
Questions:
How effective is the BMI?
How does your group data compare with other classmates’ findings?
What concerns do you have with the BMI?

Objective:
Students will be able to compare their own BMI with their peers.
Make inference about BMI chart based on gender-evident data.
Student will draw a pie graph showing the percentages of the healthy vs. unhealthy.
Students will use a bar graph to compare the healthy number of boys to the girls.

Materials:
Graph paper
Handout article “BMI Poor Indicator…”
BMI data (boys and girls).

To Do:
Read article “BMI poor indicator…”
Work in gender groups to chart healthy/unhealthy BMI data of boys vs. girls.
Write individual paragraph about what your data suggests about obesity among youth.
Share findings with class

Homework:
Proof read paragraph
Prepare data to share in class

Week 1 - Days 3 -5
Questions:
What is a calorie?
What is the average caloric-intake of Americans today?
What did a typical meal in the Middle Ages consists of?
How does present day caloric-intake differ from the Middle Ages?
What factors from literature can you find that contribute to the absence or presence of obesity in the Middle Ages vs. today?
Using the pyramid chart, identify daily consumed food items that are high in calories.

Objectives:
Students will be able to define a calorie.
Students will distinguish the differences in the caloric-intake of Middle Ages vs. today.
Students will use the food pyramid to count calories in a given meal.
Students will read literature to discover the eating habits throughout various time periods.

Materials:
Students will refer to the following food intake accounts:
Food in the Arts Refound - Global Directory of Food in the Arts.
“The Franklin and the Cook” http://www.Londonfoodfilmfiesta.co.uk
“Calorie Counter” http://www.healthyweightforum.org

To Do:
Select examples of meals from three time periods in literature.
Calculate a meal for the Romantic Period and the Middle Ages.
Discuss with classmates the importance of calorie-intake and health.

Homework:
Write a brief paragraph on how the right number of calories affects your health.
Week 2

Questions:
What was the average calorie intake for your family members, community, and peers?
What do these eating habits suggest about the likelihood of obesity for these groups?
What are the actual differences in caloric intake of recommended and actual diets of your peers and family members?

Objectives:
Students will be able to compile food consumption data from various groups close to them.
Students will compare the eating habits as represented in modern day literature with present day eating.
Students will compare the eating habits as represented during the Romantic and Middle Ages with Modern Times.
Students will draw conclusions from data gathered about the likelihood of each researched group becoming overweight.

Materials:
I Know Why the Caged Bird Sings by Maya Angelou
Emma by Jane Austen
Graph paper
“Franklin and the Cook” from the Canterbury Tales.

To Do:
Read I Know Why the Caged Bird Sings (pages 137-138)
Read Emma
Read “Franklin and the Cook” from the Canterbury Tales.
Select a meal from each book and chart the caloric-intake.
Interview family, community and peers about typical meals consumed.
Record data
Write a brief page about calorie intake and the likelihood of obesity from each era.

Homework:
Proof read your paragraph.

Week 3

Questions:
Develop a thesis that speaks to your concerns about the obesity epidemic.
How has this research affected your thinking about how you eat?
What will you do differently based on knowledge you have gained?

Objectives:
Students will begin to form an opinion on how daily diet impacts their health.
Students will evaluate the literature concerning obesity authored by government and big business.
Students will give a persuasive presentation of research findings.
Students will respond to interlocutor’s questions during presentations.

To Do:
Write a 1,500 word persuasive essay that expresses your concerns about the epidemic.
Critique peer writing (as assigned by teacher).
Compile a power point presentation (no less than 5 slides and no more than 8).
Present a 5-7 minute persuasive essay on the obesity epidemic (to include power point slides).
Respond to questions about presentation from audience.

Homework:
Proof read essay.
Select materials for power point.
Practice persuasive presentation.

Annotated Bibliography - Teachers

Black, Maggie. Food and Cooking in 19th Century Britain - History and Recipes.
An account of the foods of the ordinary people and effects of the “potato disease” of food supply.

An insight into medieval culinary traditions through an reenactment of an elaborate medieval banquet evening at the Middleham Castle during a visit by Edward IV.


Globally, obesity is a public health problem. A discussion at the international level lends to the seriousness of this epidemic.

A prototype version of healthy eating self-monitoring tool as an alternative to traditional paper and pen record tabulations.

A closer look at diet, energy and food costs as possible factors of obesity.

Focus on the environment and other external factors that play in food choices.

“Food of the Middle Ages  500-1500A.D.”  <http://www.LibraryThinkQuest.org>. Internet game that allow you to develop a menu from the Middle Ages.

An account of the peasant diet in eighteenth century and the relationship between diet and industrialization.

The cost of food and how it influences food choice.


The current trend of food consumption and its fatal results.

A backdrop into the life of author Jane Austen with an insight into the kinds of foods prepared and served during that period.

Effects of combining exercise and healthy eating.

An account of what is being done to combat obesity.

Impact of America’s eating habits from an agricultural to industrial to informational economy.


Questions and answers to diet. A supply of diagnostic materials that can be purchased.

This article purports that there has been a rapid increase in obesity, cardiovascular disease, diabetes, and cancer in the youth ages 19-39 and seeks to ascertain answers for this increase.

A look at the influence of advertisement on food consumption.

Focuses on the environment and other external factors that play in food choices.

A record of the health of a people during 1100 to1700. The sanitation problem that leads to communicable disease.

Historical account of Medieval Europe that details the issues surrounding erratic food supply and its implications, proliferation of disease and linkage to sewage driven streets that contaminated the water supply.
Annotated Bibliography for Students

A novel that describes the lifestyle of an Afro-American girl raised in the south.

A novel that paints the lifestyles of a generation during the 1800’s.

Bliss, Rosalie M. “Survey Links Fast Food, Poor Nutrition Among U.S. Children”
*http://www.ars.usda.gov*.
You can browse by subject any questions you have about nutrition or read about current research on the same.


Matterer, James L. 2000. *Chaucer and Food* “The Franklin and the Cook”
Taken from the Canterbury Tales, is an actual account of food that was prepared and eaten during the Middle Ages.

“Nutrition Quest - Caloric Intake Charts”

Online Resources

An account of food in the arts that includes lists of novels that speak about food.

A number of games to test fitness, calculate calorie intake, and a fast food game. Develop an individual diet profile.

A contrast of the eating habits of the poor and the mile class.

“Resources for Teachers”<http://www.tesol.net>.
A game that requires entering in personal data to calculate the obesity density of males and females.

A tool to help estimate quantities one should eat from various food groups in
keeping with caloric-intake.

Appendices

There are specific guidelines for the 11th grade English curriculum.

1.2.11
A. Read and understand essential content of information texts and documents in all academic areas.
   1. Differentiate fact from opinion across a variety of texts by using complete and accurate information, coherent arguments and points of view.
   2. Distinguish between essential and nonessential information across a variety of sources, identifying the use of proper references of authorities and propaganda techniques where present.
   3. Use teacher and student established criteria for making decisions and drawing conclusions.
B. Use and understand a variety of media and evaluate the quality of materials produced.
   1. Select appropriate electronic media for research and evaluate the quality of the information received.

1.4.11
B. Write complex informational pieces (e.g., research papers, analyses, evaluations, essays).
   1. Use relevant graphics (e.g., maps, charts, graphs, tables, illustrations photographs).
C. Write persuasive pieces.
   1. Include a clearly stated position or opinion.

1.6.11
C. Speak using skills appropriate to formal speech situations.
   1. Pace the presentation according to audience and purpose.
   2. Adjust stress, volume and inflection to provide emphasis to ideas or to include the audience.
D. Contribute to discussions.
   1. Ask relevant, clarifying questions.
   2. Respond with relevant information or opinions to questions asked.
   3. Listen to and acknowledge the contributions of others.

1.8.11
A. Select and refine a topic for research.
B. Locate information using appropriate sources and strategies.
   1. Use traditional and electronic search tools.
C. Organize, summarize and present the main ideas from research.