



The Challenge

Created: 07/2019 by the National FFA Organization

STUDENT LEARNING OBJECTIVES:

After completing these activities, students will ...

1. Demonstrate understanding of how the food system affects hunger, food insecurity and human nutrition.
2. Evaluate understanding of how the food system affects hunger, food insecurity and human nutrition.

TIME REQUIRED: 245 minutes (approximately 4 hours)

RESOURCES:

Purdue University Writing Lab, https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

EQUIPMENT AND SUPPLIES NEEDED:

1. A copy of the "Your Challenge" worksheet for each student
2. A copy of the "Food Insecurity Evaluation" worksheet for each student
3. Access to computers
4. Access to a projector to display student presentations
5. Colored markers, highlighters and crayons (yellow, purple, red, blue, green)

THIS QUICK LESSON PLAN WOULD WORK WELL AS:

1. An Agricultural Issues lesson.
2. An Agricultural Advocacy lesson.
3. A food insecurity lesson.
4. A global awareness lesson.

STUDENT ACTIVITY SHEETS

<https://ffa.box.com/s/52poe8yqji875adj046sx2hrh67vlh8b> (Word)

<https://ffa.box.com/s/en08w0o1k57dhak3i6di0gnse4l9jrl> (PDF)

THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

AFNR Performance Element

- AS.02: Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
- AS.05: Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
- AS.08: Analyze environmental factors associated with animal production.
- BS.01 NCAE Standard: Assess factors that have influenced the evolution of biotechnology in agriculture (e.g., historical events, societal trends, ethical and legal implications, etc.).
- CS.01: Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.
- CS.05: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-G.Physical Growth: Take care of one's health by eating well, exercising, getting enough sleep, respecting one's body and setting personal goals for long-term health.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.PG-J.Mental Growth: Embrace cognitive and intellectual development relative to reasoning, thinking and coping.

- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

Common Career Technical Core

- AG1: Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.
- AG5: Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources Career Pathways.
- AG.ANI2: Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
- AG.ANI5: Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
- AG.ANI8: Analyze environmental factors associated with animal production.

NASDCTEC

- AGC10.03: Compare and contrast issues affecting the AFNR industry including biotechnology, employment, safety, environmental and animal welfare to demonstrate an understanding of the trends and issues important to careers in this industry.
- AGC10.04: Envision emerging technology and globalization and project its influence on widespread markets to demonstrate an understanding of technologies and trends that will impact the AFNR industry.

Common Core – Reading: Informational Text

- CCSS.ELA-Literacy.RI.9-10.2: Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.
- CCSS.ELA-Literacy.RI.9-10.4: Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
- CCSS.ELA-Literacy.RI.9-10.8: Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

Common Core – Writing

- CCSS.ELA-Literacy.W.9-10.2: Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

Common Core – Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-Literacy.SL.9-10.2: Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
- CCSS.ELA-Literacy.SL.9-10.4: Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

Common Core – Literacy in Science & Technical Subjects: Writing

- CCSS.ELA-Literacy.WHST.9.10.2: Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
- CCSS.ELA-Literacy.WHST.9.10.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Common Core – Science & Technical Subjects

- CCSS.ELA-Literacy.RST.9-10.7: Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
- CCSS.ELA-Literacy.RST.9.10.8: Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.
- CCSS.ELA-Literacy.RST.9.10.9: By the end of grade 10, read and comprehend science/technical texts in the grades 9-10 text complexity band independently and proficiently.

Common Core – Literacy in Science & Technical Subjects: Writing

- CCSS.ELA-Literacy.WHST.9.10.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Common Core – Math Practices

- CCSS.MP1: Make sense of problems and persevere in solving them.
- CCSS.MP3: Construct viable arguments and critique the reasoning of others.
- CCSS.MP5: Use appropriate tools strategically.
- CCSS.MP6: Attend to precision.

Next Generation Science

- HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.05: Consider the environmental, social and economic impact of decisions. Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organizations and the environment.
- CRP.06: Demonstrate creativity and innovation. Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization.
- CRP.07. Employ valid and reliable research strategies. Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies.
- CRP.08: Utilize critical thinking to make sense of problems and persevere in solving them. Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem.
- CRP.11. Use technology to enhance productivity. Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems.

Partnership for 21st Century Skills

- Communication
- Critical Thinking and Problem Solving
- Initiative and Self-Direction
- Leadership and Responsibility
- Information, Communications, and Technology Literacy
- Global Awareness
- Think Creatively

LESSON PLAN:

1. *Bell Ringer:* What would you do to better the world if you had access to unlimited resources?
2. *Introduction:* We have learned throughout this lesson set that there are multiple factors that go into feeding the global population. From access to food to how it is produced, we now know this is a challenge that needs to be addressed. Today, we are going to work together to try to address the food insecurity issue.
3. *Activity:* Each student needs a copy of the worksheet "[Your Challenge](#)." During this activity, students will develop a solution to food insecurity. Students will begin by reading the challenge letter that has been written by the president of the National Turkey Federation, Joel Brandenburger. Once they have finished reading the letter, students will follow the prompts next to the letter that instruct them to underline, circle and highlight specific important pieces of information that will be used for the final project. Once students have completed the challenge letter, they will move on to the group project. Using the challenge question presented, students will work in groups (selected by the teacher) to develop a five- to 10-minute PowerPoint presentation to present their solution to the challenge question. Utilizing the guiding statements listed on the worksheet, students will develop a solution and then present to a panel and/or class. Once all students have presented, have a class discussion about all of the proposed solutions and how all nations should work to address the food insecurity issue.
4. *Assessment:* At the completion of this lesson set (Lessons 1 through 6 in this series), have students complete the final "[Food Insecurity Evaluation](#)" summative assessment to demonstrate what they have learned throughout the unit. Students will be assessed on items learned in all six lesson plans.
5. *Follow-up:* Have students write a reflection about what they have learned and its impact on them. If students are comfortable, have them share with the class.
6. *Leveling Up:*
 - a. Have students plan an event to address food insecurity in their community (example: canned food drive).
 - b. Many know that they can grow their own food. However, many do not know how to care for or use the product produced. Build and plant raised garden beds at your school. Have the local elementary students help care for and harvest the produce. Then hold educational programming to teach students how to use the fresh produce for meals (ex. making salsa or tomato sauce). Lastly, allow students to take home what they harvest and teach their families about what they have learned.
 - c. Plant a school garden and utilize the produce to provide food and snacks through a 'giving cart'. A 'giving cart' is a location in the cafeteria where students can get food, at no cost, to supplement their lunches when they are still hungry. Students can also donate extra food they are not going to eat (ex. packaged cookies)

to benefit other students.

7. *Exit Ticket:* How will you address food insecurity and hunger as you move forward in life?

NAME: _____

Your Challenge

DIRECTIONS:

Read the challenge letter below and follow the prompts.

Aligned to the following standards:

AS.02; AS.05; AS.08;BS.01; CS.01; CS.05; FFA.PL-A;FFA.PL-E;FFA.PL-F;
FFA.PG-G; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; AG1; AG5;
AG.AN12; AG.AN15; AG.AN18; AGC10.03; AGC10.04; CCSS.ELA.RI.9-
10.2; CCSS.ELA.RI.9-10.4; CCSS.ELA.RI.9-10.8; CCSS.ELA.9-10.2;
CCSS.ELA.RI.9-10.8; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2;
CCSS.ELA.SL.9-10.4; CCSS.WHST.9.10.2; CCSS.ELA.WHST.9.10.4;
CCSS.ELA.RST.9-10.7; MP1; MP3; MP5; MP6; HS-ETS1-3; CRP.02;
CRP.04; CRP.05; CRP.06; CRP.07; CRP.08; CRP.11

It is very important for all Americans — and all people around the world — to have access to nutritious, wholesome and affordable food. It is important to raise awareness of the major challenges facing our global food system. Hunger is a persistent problem in this country and around the world. We see it in developing countries like Kenya where more people constantly fear for lack of adequate food than those who do not. We also see it in developed countries such as the United States where, according to the United States Department of Agriculture (USDA), 16.7 million U.S. children under age 18 live in households where they are unable to consistently access enough of the nutritious food necessary for a healthy life.

Current estimates indicate that by 2050 the global population will increase from our current 7 billion to approximately 9 billion. Experts believe that we will have to increase our food production worldwide by 100 percent. We will have to do it with little or no additional land, and we will have to do it at a time when growing numbers of individuals in the United States and other developing countries are advocating for an emphasis on alternative agricultural practices that, because of their cost, increase the challenge of providing affordable food to hungry Americans.

All of this information begs the question for you to explore — how will we feed a growing world population with a safe, affordable, nutritious and sustainable food supply? We encourage you to investigate this question, looking closely at the challenges to producing and distributing affordable food, and do not be afraid to think outside of the box for possible solutions.

Each of you will play a large part in the future of fighting hunger. Upon completing the research of your possible solution to feeding the growing world population, you will be asked to present your findings to a panel of community members. We hope this project will inspire you to reach out to your neighbors to help them with food security issues.

Sincerely,

Joel Brandenberger
President
National Turkey Federation

NATIONAL
Turkey
FEDERATION

1. With a **yellow** highlighter, highlight the challenge question being posed to you.
2. In **purple**, circle the projected population in 2050.
3. In **red**, underline the challenge that farmers are going to have in providing food to the projected population.
4. In **blue**, circle what USDA stands for.
5. In **green** highlighter, highlight the person and organization posing the challenge.



DIRECTIONS:

Using the challenge question presented above, you and your group are tasked with developing a 5- to 10-minute PowerPoint presentation to present your solution to the challenge question. Reference the guiding statements below to develop a solution to present to a panel.

What is the challenge question you will be addressing? (Write it here.)



Statement of Problem

- What is the problem? Include research that assists in showing the extent of the issue.
- Explain how the problem impacts certain areas of the world/people in specific locations.
- What are the factors influencing the problem?
- Is the problem increasing, decreasing or remaining steady?

Solution

- Provide a description of your solution, including how it relates to food production, food insecurity and waste, water risk, nutrition and food distribution.
- How should your solution be implemented?
- What are the pros and cons of your proposed solution?
- Estimate the cost to implement the solution.

Presentation

- Must use PowerPoint with a minimum of 10 slides (a minimum of one slide per bullet point above).
 - Other multimedia (ex. video clips) are allowed.
- Your presentation should be interesting to the audience.
- Your presentation should be well-organized.
- Ensure your presentation is professional and grammatically correct with no misspellings.
- Have balanced participation from each person in the group.
- Use a variety of sources to enhance your presentation quality.
- A minimum of 5 references in APA format should be included.
 - For help with APA formatting, you can utilize the following resource from the Purdue University writing lab: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html.

Notes

Aligned to the following standards:
 AS.02; AS.05; AS.08;BS.01; CS.01; CS.05; FFA.PL-A;FFA.PL-E;FFA.PL-F; FFA.PG-G; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; AG1; AG5; AG.ANI2; AG.ANI5; AG.ANI8; AGC10.03; AGC10.04; CCSS.ELA.RI.9-10.2; CCSS.ELA.RI.9-10.4; CCSS.ELA.RI.9-10.8; CCSS.ELA.9-10.2; CCSS.ELA.RI.9-10.8; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2; CCSS.ELA.SL.9-10.4; CCSS.WHST.9.10.2; CCSS.ELA.WHST.9.10.4; CCSS.ELA.RST.9-10.7; MP1; MP3; MP5; MP6; HS-ETS1-3; CRP.02; CRP.04; CRP.05; CRP.06; CRP.07; CRP.08; CRP.11

Presentation Rubric

	Exceeds Requirements 5 Points	Proficient 4 Points	Approaches Standard 3 Points	Needs Improvement 2-0 Points	Total Points
Concept	- Reflects application of critical thinking - Has clear goal that is related to the topic - Information from a variety of reliable sources - Accuracy in content - Includes a description of pros and cons of solution	- Has application of critical thinking that is apparent - Has clear goal that is related to the topic - Is pulled from several sources & is accurate with good references - Solution focuses on at least one of the following: food production, food insecurity or waste. - Solution is supported by research. - Includes a good problem statement - Includes a statement of who would be impacted and how - Includes a description of pros and cons of solution	- Supports the solution - Has application of critical thinking that is apparent - Has no clear goal - Is pulled from a limited number of sources - Has 2 to 3 factual errors or inconsistencies	- Provides inconsistent information for solution - Has no apparent application of critical thinking - Has no clear goal - Is pulled from few sources - Has 3 or more factual errors, misconceptions or misinterpretations	
Style	- No spelling, grammar or punctuation errors - High-level use of vocabulary and word choice.	- Few (1 to 3) spelling, grammar or punctuation errors - Good use of vocabulary and word choice	- Low-level use of vocabulary and word choice - Three to five spelling, grammar or punctuation errors	- More than 5 spelling, grammar or punctuation errors - Poor use of vocabulary and word choice	
Organization	- Information is clearly focused in an organized and thoughtful manner. - Information is constructed in a logical pattern to support the solution presented.	- Information supports the solution to the challenge or question. - Includes one graphic presenting either the extent of the problem or depicting a flow chart for implementation of the solution	- Project has a focus but might stray from it at times. - Information appears to have a pattern, but the pattern is not consistently carried out in the project. - Information loosely supports the solution.	- Format does not suit the content. - Content is loosely organized. - Presentation organization of information is haphazard.	

Presentation	• Multimedia is used to clarify and illustrate the main points. • Format enhances the content. • Presentation captures audience's attention. • Presentation is organized and well laid out.	• Multimedia is used to illustrate the main points. • Format is appropriate for the content. • Presentation is interesting and captures audience's attention. • Presentation is well-organized. • Presentation includes a good, research-based problem statement, rationale for solution and description of who would be impacted by the solution and how. • Includes a description of pros and cons of solution • Includes a Q&A period; presenters are poised in their responses to questions.	• Content is unfocused and haphazard. • Information does not support the solution to the challenge or question. • Information is poorly organized. • Presentation does not capture audience's attention.	• Presentation appears sloppy and/or unfinished. • Multimedia is overused or underused. • Format does not enhance content. • Presentation has no clear organization.	
Total					

Comments:

Food Insecurity Evaluation

DIRECTIONS:

Complete the following questions to the best of your ability using what you have learned throughout this unit. Circle the best answer.

Aligned to the following standards:

AS.02; AS.05; AS.08;BS.01; CS.01; CS.05; FFA.PL-A;FFA.PL-E;FFA.PL-F;
FFA.PG-G; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; AG1; AG5;
AG.AN12; AG.AN15; AG.AN18; AGC10.03; AGC10.04; CCSS.ELA.RI.9-
10.2; CCSS.ELA.RI.9-10.4; CCSS.ELA.RI.9-10.8; CCSS.ELA.9-10.2;
CCSS.ELA.RI.9-10.8; CCSS.ELA.SL.9-10.1; CCSS.ELA.SL.9-10.2;
CCSS.ELA.SL.9-10.4; CCSS.WHST.9.10.2; CCSS.ELA.WHST.9.10.4;
CCSS.ELA.RST.9-10.7; MP1; MP3; MP5; MP6; HS-ETS1-3; CRP.02;
CRP.04; CRP.05; CRP.06; CRP.07; CRP.08; CRP.11

1. Which of the following terms best describes the situation in which a person is continuously eating too little to meet their nutritional/energy needs?
 - a. Malnutrition
 - b. Food security
 - c. Food insecurity
 - d. Food unavailability
2. Which of the following individuals could be at risk for being hungry?
 - a. One of your classmates
 - b. The local grocery store owner
 - c. Your teacher
 - d. All of the above
3. _____ is the "supply side" of food security and is determined by the level of food production, stock levels and net trade.
 - a. Food availability
 - b. Food access
 - c. Food utilization
 - d. Food stability
4. _____ is the physical and economic ability to acquire food.
 - a. Food availability
 - b. Food access
 - c. Food utilization
 - d. Food stability
5. _____ is the way in which the body utilizes the nutrients coming from food.
 - a. Food availability
 - b. Food access
 - c. Food utilization
 - d. Food stability
6. _____ is the uncertainty of access to food, even if you had a sufficient meal today.
 - a. Food availability
 - b. Food access
 - c. Food utilization
 - d. Food stability
7. Which of the following would a person who is food insecure have a greater risk of?
 - a. Type 2 diabetes
 - b. High blood pressure
 - c. Obesity
 - d. Heart disease
 - e. All of the above
8. True or False

Upper and middle income communities tend to have 3 times as many grocery stores as neighborhoods with low incomes.
9. True or False

Compared to the past, food is traveling farther each year to reach the consumer.
10. Which of the following terms best describes promoting others' welfare by giving back in time, money or donations?
 - a. Food insecurity
 - b. Philanthropy
 - c. Food security
 - d. Food access

11. _____ is a location in which residents have limited access to healthy and diverse food options. These individuals are typically in low income areas and live roughly one mile away from a source.

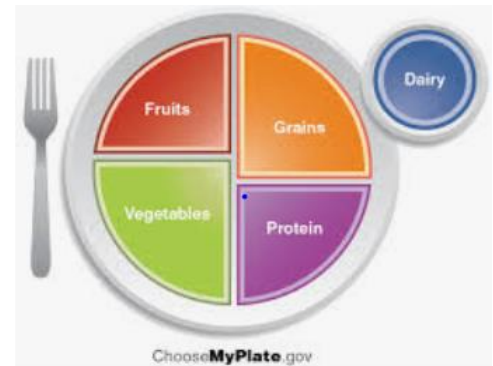
- a. Grocery store
- b. Convenient store
- c. Food desert
- d. Food island

12. GMO stands for _____.

- a. Generic Meal Opportunity
- b. Genetic Meat Organism
- c. Genetically Modified Organism
- d. Genetically Mutated Organism

13. Describe the impact the production process of a food product has on the final cost to the consumer. (Example: organic vs. non-organic milk)

14. What role does the MyPlate model play in determining your nutritional needs? What role do animal and grain products play in meeting those needs?



15. Which of the following vaccines have been developed using GMO technology?

- a. Diabetes, Hepatitis B
- b. Cholera, Hepatitis B
- c. Cholera, Diabetes
- d. Hepatitis A, Cholera

16. What does the term agronomic mean?

- a. Agricultural crops
- b. Only plants that are GMO
- c. The transfer of information to get desired traits

17. _____ is the top agronomic commodity.

- a. Cotton
- b. Soybeans
- c. Wheat
- d. Corn

18. Which of the following are ways in which GMOs are utilized every day?

- a. Herbicide resistance
- b. Internal plant defense
- c. Helping to produce consistent medicines and vaccines
- d. All of the above

19. Which of the following could be classified as philanthropy?

- a. Working at the local soup kitchen serving meals
- b. Hosting a clothing drive
- c. Hosting a 5k run/walk to raise money for Alzheimer's research
- d. All of the above

20. This type of responsibility falls to the federal, state or local government. (Example: Supplemental Nutrition Assistance Program [SNAP] and Women, Infants and Children [WIC])

- a. Public responsibility
- b. Private responsibility
- c. Civic responsibility
- d. None of the above

21. Which of the following is a way you could give back to your local community?

- a. Donating clothes
- b. Teaching elementary students about food production
- c. Volunteering your time to pack lunches for the homeless
- d. All of the above

22. Which of the following is NOT from an animal source?

- a. Egg and cheese breakfast sandwich
- b. Spaghetti and meatballs
- c. Tofu salad
- d. Chicken Caesar salad

23. Which of the following is NOT considered one of the ways one can be a philanthropist?

- a. Time
- b. Talent
- c. Taxes
- d. Treasure

24. A location that provides food items to those in need at no cost is called a _____.

- a. food island
- b. food preserve
- c. food service
- d. food bank

25. Thinking about your community, how would you propose to solve the food insecurity and hunger issues that exist? Write a step-by-step plan on how you could solve this problem. Be specific in your steps and include how you would make this plan happen.

KEY: Your Challenge

DIRECTIONS:

Read the challenge letter below and follow the prompts.

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President
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DIRECTIONS:

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How will we feed a growing world population with a safe, affordable, nutritious and sustainable food supply?



Statement of Problem

- What is the problem? Include research that assists in showing the extent of the issue.
- Explain how the problem impacts certain areas of the world/people in specific locations.
- What are the factors influencing the problem?
- Is the problem increasing, decreasing or remaining steady?

Solution

- Provide a description of your solution, including how it relates to food production, food insecurity and waste, water risk, nutrition and food distribution.
- How should your solution be implemented?
- What are the pros and cons of your proposed solution?
- Estimate the cost to implement the solution.

Presentation

- Must use PowerPoint. Other multimedia (ex. video clips) are allowed.
- Your presentation should be interesting to the audience.
- Your presentation should be well-organized.
- Ensure your presentation is professional and grammatically correct with no misspellings.
- Have balanced participation from each person in the group.
- Use a variety of sources to enhance your presentation quality.
- References in APA format should be included.
 - For help with APA formatting, you can utilize the following resource from the Purdue University writing lab: https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html.

Notes

KEY: Food Insecurity Evaluation

DIRECTIONS:

Complete the following questions to the best of your ability using what you have learned throughout this unit.

1. Which of the following terms best describes the situation in which a person is continuously eating too little to meet their nutritional/energy needs?
 - a. Malnutrition
 - b. Food security
 - ☒ c. Food insecurity
 - d. Food unavailability
2. Which of the following individuals could be at risk for being hungry?
 - a. One of your classmates
 - b. The local grocery store owner
 - c. Your teacher
 - ☒ d. All of the above
3. _____ is the "supply side" of food security and is determined by the level of food production, stock levels and net trade.
 - ☒ a. Food availability
 - b. Food access
 - c. Food utilization
 - d. Food stability
4. _____ is the physical and economic ability to acquire food.
 - a. Food availability
 - ☒ b. Food access
 - c. Food utilization
 - d. Food stability
5. _____ is the way in which the body utilizes the nutrients coming from food.
 - a. Food availability
 - b. Food access
 - ☒ c. Food utilization
 - d. Food stability
6. _____ is the uncertainty of access to food, even if you had a sufficient meal today.
 - a. Food availability
 - b. Food access
 - c. Food utilization
 - ☒ d. Food stability
7. Which of the following would a person who is food insecure have a greater risk of?
 - a. Type 2 diabetes
 - b. High blood pressure
 - c. Obesity
 - d. Heart disease
 - ☒ e. All of the above
8. ☒ True or False
Upper and middle income communities tend to have 3 times as many grocery stores as neighborhoods with low incomes.
9. ☒ True or False
Compared to the past, food is traveling farther each year to reach the consumer.
10. Which of the following terms best describes promoting others' welfare by giving back in time, money or donations?
 - a. Food insecurity
 - ☒ b. Philanthropy
 - c. Food security
 - d. Food access

11. _____ is a location in which residents have limited access to healthy and diverse food options. These individuals are typically in low income areas and live roughly one mile away from a source.

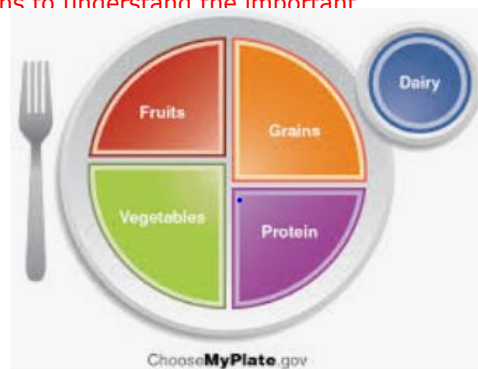
- a. Grocery store
- b. Convenient store
- ☒ c. Food desert
- d. Food island

12. GMO stands for _____.

- a. Generic Meal Opportunity
- b. Genetic Meat Organism
- ☒ c. Genetically Modified Organism
- d. Genetically Mutated Organism

13. Describe the impact the production process of a food product has on the final cost to the consumer. (Example: organic vs. non-organic milk) **The final cost to the consumer is higher for products that are produced through methods other than conventional techniques. For example, organic milk has a higher cost due to the organic requirements during production.**

14. What role does the MyPlate model play in determining your nutritional needs? What role do animal and grain products play in meeting those needs? **The MyPlate model is a way for Americans to understand the important components to their diet and the portion sizes of each component they should be consuming. Animal and grain products make up the majority of all of the foods that we consume. For example, many of our protein sources come from animals. On the plate there is an entire category that encompasses the grains that are produced.**



15. Which of the following vaccines have been developed using GMO technology?

- a. Diabetes, Hepatitis B
- ☒ b. Cholera, Hepatitis B
- c. Cholera, Diabetes
- d. Hepatitis A, Cholera

16. What does the term agronomic mean?

- ☒ a. Agricultural crops
- b. Only plants that are GMO
- c. The transfer of information to get desired traits

17. _____ is the top agronomic commodity.

- a. Cotton
- b. Soybeans
- c. Wheat
- ☒ d. Corn

18. Which of the following are ways in which GMOs are utilized every day?

- a. Herbicide resistance
- b. Internal plant defense
- c. Helping to produce consistent medicines and vaccines
- ☒ d. All of the above

19. Which of the following could be classified as philanthropy?

- a. Working at the local soup kitchen serving meals
- b. Hosting a clothing drive
- c. Hosting a 5k run/walk to raise money for Alzheimer's research
- ☒ d. All of the above

21. Which of the following is a way you could give back to your local community?

- a. Donating clothes
- b. Teaching elementary students about food production
- c. Volunteering your time to pack lunches for the homeless
- ☒ d. All of the above

23. Which of the following is NOT considered one of the ways in which to be a philanthropist?

- a. Time
- b. Talent
- ☒ c. Taxes
- d. Treasure

20. This type of responsibility falls to the federal, state or local government. (Example: Supplemental Nutrition Assistance Program [SNAP] and Women, Infants and Children [WIC])

- ☒ a. Public responsibility
- b. Private responsibility
- c. Civic responsibility
- d. None of the above

22. Which of the following is NOT from an animal source?

- a. Egg and cheese breakfast sandwich
- b. Spaghetti and meatballs
- ☒ c. Tofu salad
- d. Chicken Caesar salad

24. A location that provides food items to those in need at no cost is called a _____.

- a. food island
- b. food preserve
- c. food service
- ☒ d. food bank

25. Thinking about your community, how would you propose to solve the food insecurity and hunger issues that exist? Write a step-by-step plan on how you could solve this problem. Be specific in your steps and include how you would make this plan happen. **Answers will vary.**

Example response: Develop a food bank in every community.

1. Form a committee to develop the guidelines for the plan.
2. Develop the different parts of the activity.
3. Market the activity and gain community support.
4. Execute the activity.
5. Evaluate the effectiveness of the project.