



# A Food, Inc. Intro to Modern Food Production

## WORKSHEET, SECTION I

### SECTION I: INTRODUCTION AND A HISTORY OF THE INDUSTRIAL FOOD MODEL

FILM CLIPS: CHAPTER 1 INTRODUCTION SECTION (0:00 to 4:00) CHAPTER 2 FAST FOOD TO ALL FOOD SECTION (4:00 to 9:00, and 12:00 to 14:30) Total film time: 11.5 minutes.

The process of growing, marketing and purchasing food has changed dramatically in the past 50 years. One of the driving factors was the growth of the fast food industry. This section examines the history of fast food and the ways it changed food production and farming practices.

#### Short Answer Questions

- How many products are in the average supermarket today?
- McDonalds is one of the largest purchasers of which food items? Name three.
- 80% of the beef market in the United States is controlled by how many corporations?
- Chickens have been bred to produce more white meat. What is the cost or consequence for the chicken?
- Antibiotics are commonly included in chicken feed at low doses. Name a potential negative consequence for chicken health described in the film.

#### Extended Response Questions

- Describe the revolutionary idea which McDonalds and other fast food corporations initiated.
- "There are no seasons in the North American food market anymore." Describe what this statement means and give examples.
- Describe how the use of the phrase "farm fresh" to describe food might be misleading.
- Explain why you think the chicken farmer had to remove so many dead chickens each day.
- The title of this chapter is "Fast Food to All Food." Explain what you think is meant by the title.
- Elaborate on environmental hazards to the chicken farmer. Cite two examples from the film.



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## WORKSHEET, SECTION 2

### SECTION 2: DEPENDENCE ON CORN

FILM CLIPS: CHAPTER 2 CORNICOPIA OF CHOICES (17:00 to 24:30) Total film time: 7.5 minutes.

This section discusses the industrial farming of corn and soybeans. Specifically, it addresses how corn is used to manufacture a number of artificial products like high fructose corn syrup and how corn replaced grass as food for most livestock raised in the US.

#### Short Answer Questions

- What percentage of the land in the United States is used to grow corn?
- What percentage of products on the supermarket shelves is estimated to contain a corn or soy bean product?
- List three ingredients found in processed foods that are manufactured from corn. Also, list three non-food items made from corn.
- How much meat does the average American eat in a year?
- What is the main component of food fed to animals in the United States?
- Cows have evolved to eat grass. List two reasons why we feed corn to cows in a feedlot rather than grass.
- Where did the scientist put his hand?
- What specific organism, harmful to humans, is found in the food in the cow's stomach?
- CAFO is the acronym for Concentrated Animal Feeding Operation. What factors in the CAFO feedlot may contribute to the spread of harmful bacteria?



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### Extended Response Questions

- Explain what it means when the film states that most food starts in a corn field in Iowa. Give at least two examples.
- In the last generation, there has been a dramatic shift in meat production in the United States. Instead of pasture, most of our meat now comes from large industrial feedlots. Discuss one reason presented in the film which caused this shift in agriculture to occur.
- A single crop like corn, grown in large fields, is an example of monoculture. This type of agriculture may require large amounts of pesticides. Explain why you think monoculture is so pesticide dependent compared to a small field with a great diversity of crops.
- CAFO stands for Concentrated Animal Feeding Operation. In a CAFO, thousands of animals may be concentrated for a few months before they are slaughtered. In terms of pollution, describe three potential environmental problems posed by CAFO operations.



### SECTION 3: OTHER FARMING METHODS "THE POLYFACE FARM MODEL"

FILM CLIPS: CHAPTER 6 IN THE GRASS SECTION (44:20 to 47:00), SPECIAL FEATURES HONORING THE PIGNESS OF PIGS, (4:00 minutes) and IT'S IN THE GRASS (2:40 Minutes) Total film time: 9.5 minutes.

Joel Salatin is one of a breed of new meat producers who are not comfortable with industrial farming practices. Salatin's Polyface Farm is based on minimizing the social and environmental problems associated with industrial farming and processing methods. Consequently, the meat produced on his farm is a little more expensive to the consumer.

#### Short Answer Questions

- At Polyface Farm, is meat production based on grass or corn?
- Describe two ways grazing cows in a pasture benefits the farm/farmer.
- How is a pasture like a salad bowl?
- 50 years ago, Polyface Farm would have supported how many cows?  
Now it supports how many cows?
- Why is a pasture better than a plowed field in terms of global warming?

#### Extended Response Questions

- On Polyface Farm, everything is grass based. Describe what that means.
- Describe some of the costs associated with feed-lot beef which Salatin does not have to pay for as a result of grazing his animals on a pasture.
- Describe two environmental problems associated with corn-fed beef raised in a feedlot and describe how the grass-fed beef on Salatin's farm avoid these problems.
- Give an example of how Polyface farms practices symbiosis.
- Describe the function of pigs in the cow barns. How does this help the environment?
- Clover is a legume and it has a relationship with soil bacteria that fix nitrogen. Describe how allowing clover to grow amongst the grass on Polyface Farm helps the environment.
- Significant costs associated with feedlot beef is based on oil while Salatin uses the concept of "solar dollars" to describe his farm. Explain what he means by this.
- Salatin says that industrial food is not cheap but really is expensive. Explain what he means. Use examples from the video to elaborate.





## **SECTION 5: SHOCKS TO THE SYSTEM AND THE BEGINNING OF CHANGE**

FILM CLIPS: CHAPTER 10 SHOCKS TO THE SYSTEM (1:24:00 to 1:26:00) and SPECIAL FEATURE THERE IS NO PLACE CALLED AWAY (5:30 minutes) Total film time: 7.5 minutes.

This section discusses how the industrial farming system could reach a point of collapse and how organic farming methods are beginning to become mainstreamed.

### **Short Answer Questions**

- Modern agriculture is heavily dependent on what substance?
- How many gallons of oil are needed to bring a steer to market?
- What happened to the river where Gary Hirshberg grew up?
- In the last 30 years we have increased pesticide use by a factor of 10 yet during this time the loss of food crops due to pests has \_\_\_\_\_.
- What causes hypoxia in the Gulf of Mexico off the coast of New Orleans?
- What is missing in a hypoxic area that results in the death of marine life?
- Describe Gary Hirshberg's method of making organic food less expensive.

### **Extended Response Questions**

- Describe the connection between oil and food production.
- Describe how the price of oil can shock the world's agricultural system.
- Explain how a farmer in Iowa, in the middle of the country, can impact an ocean.