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Fay

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Effects of Factory Farming on Human Health

**General purpose:** To Inform

**Specific purpose:** To inform my audience about the detrimental effects of factory farming on human health.

**Audience:** My audience has a lower knowledge level (average of 2) and a moderate interest level (average of 3).

**Introduction**

1. **Attention-getting strategy:** Raise your hand if you have personally known someone who has suffered with either cancer, food-borne illnesses, or any untreatable disease?
2. **Establish relevance:** Okay so most of us… we can all see clearly, our society is threatened with a multitude of health issues, so what if someone told you that a practice that has been going on in our society for decades is the culprit of some of those devastating health issues our society faces? Would you believe them?
3. **Credibility statement:** By strenuously researching multiple reputable sources regarding factory farming, I concluded that factory farming poses a great threat to human health. I have been interested in this topic for years so through research I have acquired a great deal of knowledge.
4. **Thesis statement:** In factory farming, overuse of antibiotics causes antibiotic resistance in humans which is particularly dangerous for the development of cancer, and poor sanitation and waste management causes the contamination of food supply which leads to diseases and food borne illnesses.
5. **Preview statement:** I am going to explain how with the development of factory farming our society has simultaneously seen the development of a multitude of health issues which is contributing to the downfall of our society’s health. First, I am going to discuss how the increase of antibiotic resistance from factory farming techniques poses a threat to cancer patients. After that, I will discuss the increase of food borne illnesses that occur from poor sanitation and waste management.

**[Transition:]** A factory farm is defined by Merriam Webster as a farm on which large numbers of livestock are raised indoors in conditions intended to maximize production at minimal cost. **(to define)** Today a modern hen produces 300 eggs a year, compared to just 20 eggs a year by her ancestors. **(compare/contrast)** Due to the goal of factory farming being to maximize production, antibiotics are used to promote growth production.

1. **Main point** (full, declarative sentence that constitutes a claim) In factory farming, overuse of antibiotics causes antibiotic resistance in humans which consequently increases of deaths from cancer.
2. **Subpoint** (evidence or sub-claim that demands evidence) While the usage of antibiotics is beneficial to the livestock industry, the antibiotics remain in our environment and cause health issues.
3. **Support** (evidence: testimonies, statistics, examples) According to an article published in 2001 by Scientific American, an online newspaper, 70% of U.S. produced antibiotics are fed to animals to promote growth. **(oral citation #1)** Antibiotics are beneficial to the livestock industry because the animals receiving antibiotics in their food can gain up to 4-5% more body weight than animals that do not receive antibiotics in their food. This of course creates a bigger profit for the companies, but a big loss to human health. **(evidence)** Here we can see how the same age chicken varies in size because of the antibiotics used to promote growth.
4. **Support** (evidence: testimonies, statistics, examples) Even if the antibiotics are out of the animal’s system before human consumption, antibiotic resistant bacteria spread through manure can leech into our waterways and ultimately ends up being consumed by humans. **(example)**
5. **Subpoint** (evidence or sub-claim that demands evidence) The more bacteria are exposed to antibiotics the more resistant they become. To explain this more, if the animals that humans consume are given antibiotics, human bacteria become more resistant over time and when humans get diseases their bacteria are already resistant to the antibiotics that otherwise would be able to cure them. **(to explain)** So looking here at these bar graphs, we can see how there is a direct correlation with the increase of factory farms and the increase of antibiotic resistance as well.
6. **Subpoint** (evidence or sub-claim that demands evidence) According to an article published in 2015 by Medical News Today, an online media outlet, cancer will affect one of every two men and one of every three women in the United States and cancer patients are particularly threatened by antibiotic resistance. **(oral citation #2)**
   1. **Support:** Cancer patients can be treated using multiple different types of treatment plans. They can range from chemotherapy, surgery, transplants, and more. With all of these aggressive treatment plans, antibiotics are critical for patient’s survival. But with antibiotic resistance on the rise, cancer patients will be at a greater risk of death from infections. **(example)**

**[Transition:]** Now that we have discussed the effects antibiotic resistance poses to cancer patients, we will now discuss how poor sanitation and waste management techniques of factory farms lead to diseases and food-borne illnesses.

1. **Main point** Poor sanitation and waste management techniques of factory farms are the leading cause of food-borne illnesses.
2. **Subpoint** Specifically, poor ventilation, contaminated feed, and fecal contamination are prominent reasons for so many illnesses being spread.
   1. **Support** Poor ventilation in factory farms facilitate the spread of bacteria. Additionally, research in Holland found that 10% of the poultry feed examined was contaminated with Salmonella. **(statistics)** To better describe the conditions of factory farms I have this picture from a factory farm and we can see how the chickens are crammed together. (describe)(demonstrate)
3. **Subpoint** The U.S. Centers for Disease Control and Prevention reported in 2000 that an estimated 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year are due to foodborne diseases. **(statistics) (to report) (oral citation #3)**
4. **Support** In fact, last summer my younger brother got really sick with e. coli. He would constantly get sick and was very weak and the doctor said the probable cause of the e. coli was from a hamburger he ate. After he got so sick, I realized that there actually is a direct correlation from the factory farms to the health of our society. **(testimony)**

**[Transition:]** Through studying intensive research, we have learned that factory farms have the possibility of causing a lot of harm to human health.

**Conclusion**

1. **Restate Thesis** We learned that in factory farming, overuse of antibiotics causes antibiotic resistance in humans which is particularly dangerous for the development of cancer, and poor sanitation and waste management causes the contamination of food supply which leads to diseases and food borne illnesses.
2. **Summarize ideas** The overuse of antibiotics are used to increase size of animals for a greater profit; however, as animals are consumed by humans, human bacteria grow increasingly resistant to antibiotics which might be needed for survival in certain situations, especially cancer patients. Furthermore, poor sanitation and waste management in factory farm conditions is the cause of millions of food-borne illnesses.
3. **Memorable ending** (clinch) With becoming more aware and educated of how certain practices such as factory farming affect our society, we can make insightful decisions on how to combat additional social issues that might arise.

Works Cited & Annotated Bibliography

Bartelt-Hunt, S., Snow, D. D., Damon-Powell, T., & Miesbach, D. (2011). Occurrence of steroid hormones and antibiotics in shallow groundwater impacted by livestock waste control facilities. *Journal of Contaminant Hydrology*, *123*(3-4), 94-103.

This resource gives examples of the chemicals used in factory farming practices and how factory farming waste is evident in our society through the spreading of bacteria through water.

Fox, M. W. (1980). Factory farming.

This article gives a good overview of how factory farm conditions are and what practices are used in them which raises concern for human health.

Horrigan, L., Lawrence, R. S., & Walker, P. (2002). How sustainable agriculture can address the environmental and human health harms of industrial agriculture. *Environmental health perspectives*, *110*(5), 445.  
 This source was helpful for my speech because it gave information regarding antibiotic resistance and how that affects human health. It also examines the effect of factory farming conditions on human health.

Leutwyler, K. (2001, January 10). Most U.S. Antibiotics Fed to Healthy Livestock. Retrieved September 30, 2018, from <https://www.scientificamerican.com/article/most-us-antibiotics-fed-t/>

This source provided the information about what percentage of U.S. produced antibiotics are used for livestock production.

Marshall, B. M., & Levy, S. B. (2011). Food animals and antimicrobials: impacts on human health. *Clinical microbiology reviews*, *24*(4), 718-733.

This source examines the specific strands of bacteria that are affected by antibiotic resistance.

O’Brien, T. (1997). Factory farming and human health. *Compassion in World Farming Trust*.

I am using this source for information on the conditions of factory farms and how they contribute to food-borne illnesses.

Silbergeld, E. K., Graham, J., & Price, L. B. (2008). Industrial food animal production, antimicrobial resistance, and human health. *Annu. Rev. Public Health*, *29*, 151-169.

This resource explains in detail what antibiotic resistance is and how antibiotic resistance effects humans.

Whiteman, H. (2015, February 04). '1 in 2 people will develop cancer in their lifetime'. Retrieved September 30, 2018, from <https://www.medicalnewstoday.com/articles/288916.php>

This source provided information about cancer statistics and the ratio of men and women developing cancer in their lifetimes.

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