<u>Name</u>	
Date	

## **Concentrated Animal Feeding Operations**

According to some estimates, if we could compile the amount of food, land, water, and energy used to raise the 10 billion animals slaughtered each year for meat, we could use those resources to feed every single starving person on earth. The majority of these resources are depleted by concentrated animal feeding operations (CAFOs). CAFOs are factory farms that mass-produce livestock—harming animals, the environment, and humans in the process. It is true that these farming methods provide an abundant source of food and employ thousands of workers across the country. However, CAFOs should be placed under more stringent restrictions because of their unfair treatment of animals and the harm they do to both the environment and humans.



One of the key controversies surrounding factory farms is animal rights. Factory farms raise livestock indoors, as opposed to allowing the animals to graze in fields and pastures. The farmers favor this overcrowded environment because it maximizes profits. Providing less space for the animals costs less money; filling pens to their maximum capacity ensures that no space is wasted. Consequently, animal pens are often so small that larger animals cannot lie down or turn around. In some cases, these small cages are beneficial for more than just maximizing capacity: calves, for example, do not gain muscle mass in this environment. This keeps their meat more tender, which makes it more attractive to consumers.

Livestock in CAFOs are often found living in their own urine and feces, stimulating the spread of diseases—such as avian flu, foot and mouth disease, and mad cow disease—among other animals on the farm. In order to combat this, farmers must give the animals antibiotics. In many cases, however, antibiotics are used for disease prevention instead of treatment. In addition to being used to combat the spread of disease, antibiotics are also commonly used to encourage faster growth in livestock. This overuse increases the risk of livestock developing immunity to antibiotics, ironically making animals even more susceptible to disease. After being digested, these antibiotics are released back into the environment in the form of milk, meat, and waste, which can affect the people who eat these products or the environment that absorbs them.

CAFOs also negatively impact the environment in the form of air and water pollution. Factory farms contribute to air pollution issues in the United States through the release of toxic gases and vapors and by burning fossil fuels to run farm machinery. These farms also have notable consequences for the environment in terms of water pollution. One characteristic of CAFOs that creates water pollution is the presence of a lagoon. Lagoons are artificial storage basins where animal excrement is temporarily contained; periodically, farmers flush this waste into ditches or nearby bodies of water.

This waste combines with runoff from fertilized fields to pollute the water sources surrounding CAFOs. It adds excess nutrients, pathogens, veterinary pharmaceuticals, heavy metals, and excreted hormones to the water sources. Such pollutants not only affect aquatic life, but can lead to severe impacts on human health.

Another negative environmental impact of factory farms is resource depletion. Factory farming uses more land than any other agricultural or industrial enterprise in the country. CAFOs consume a great deal of resources in terms of grain, energy, and land. There are far more efficient ways of using these resources to feed people. For example, it has been estimated that the grain used to feed livestock in the United States alone could feed up to 800 million people in one year. By contrast, the production of livestock in CAFOs is a wasteful use of energy. While both chicken meat and soybeans are good sources of protein, producing equivalent amounts of protein from chicken meat and soybeans does not require equivalent amounts of energy: chicken meat production consumes 14 times more energy than soybean production. Grain and energy supplies should be used more efficiently to produce food sources other than livestock.

In order to combat the unfair treatment of animals and the risks to environmental and human health, CAFOs should be placed under stricter guidelines. One such regulation would force factory farms to adhere to air and water quality protection standards from which they have previously been exempted, like those set forth by the Clean Water Act. Enforcing these standards would lead to banning environmental hazards such as waste lagoons, which in turn would reduce environmental pollution and human health liabilities.

Some have suggested that due to these environmental and human health concerns, factory farms should be banned outright. Advocates for CAFOs, however, argue that factory farming allows for lower production costs that translate into lower food prices for consumers. Organic and free-range products, they argue, do not allow for the large-scale production of livestock; prices for meat, eggs, and dairy would increase should the country shift towards organic products. Although this would be an inconvenience to consumers, a price increase would encourage people to eat a diet of less meat. This cultural change would assist in solving the broader resource crisis as fewer grain, energy, and land resources would be needed to support smaller-scale production. Better treatment of animals and more responsible environmental practices would protect humans more from infectious diseases and the effects of air and water pollution—a benefit everyone should embrace.