

1. Skim read the essay below.
 - What is the essay topic?
 - What are the controlling ideas of each paragraph?
2. Write a topic sentence for each body paragraph
3. Watch the TED talks:
Why I'm a weekday vegetarian and *Why not eat insects?* – from 5.55 (see reference list).
 - Take notes about the environmental impact of meat production while you watch the videos
 - Complete the in-text references in the first body paragraph

Essay question: Write an informative essay to explain two issues related to food sustainability

There has been a huge increase in population over the last century. From 1900 to 2000, the population increased from 1.5 billion to 6.1 billion (Roser & Ortiz-Ospina 2017). This increase in population leads to questions of food security and sustainability. One billion people go hungry every day even though enough food is produced globally (Barber 2010). While some countries do not have enough food, Australia produces two times more than its domestic need (Varga 2013). Food sustainability not only involves the number of mouths to feed but also the environmental impact. In fact, the environmental impact of meat production and the amount of food that is wasted are two very serious issues related to food sustainability.

_____. Meat production accounts for more emissions than the combination of all forms of transportation (_____). This is because livestock produces waste in the form of manure, which in turn emits ammonia and other greenhouse gasses (_____). Meat production wastes water resources as it uses 100 times more water than vegetable production (_____). Land is another finite resource that must be managed carefully. Currently, 70 percent of agricultural land is used for meat production. If current agricultural practices are continued, 70 percent more land will be needed to cope with population growth and this will result in deforestation, further contributing to climate change (_____). Meyer (2016) reports that one study estimated a typical American diet requires 2.67 acres of farmland per person per year, while a vegetarian diet would only require approximately 0.32 acres per person.

_____. Approximately 30 to 50 percent of food is wasted (Varga 2013) by individuals, supermarkets and restaurants. An estimated 28 percent of global agricultural land is used every year to produce food that is later wasted (Lipinski et al. 2013). Food waste not only means a waste of resources such as land and water, but also results in emissions of harmful greenhouse gases. An estimated 3.3 billion tonnes of these gases are emitted every year due to food waste (Lipinski et al. 2013). Most food waste is dumped in landfill and as it degrades, methane is produced. This gas is even more harmful to the atmosphere than carbon dioxide (Varga 2013).

In conclusion, issues of food sustainability are complex. Current agricultural practices, especially meat production, are not sustainable because they waste valuable resources and contribute to climate change. Similarly, food waste also wastes land and water and results in high greenhouse gas emissions leading to global warming. These issues of food sustainability not only impact our ability to feed a growing population, but also the future of our planet. These issues can be overcome, but it will involve change from individuals, families, companies and governments. If changes are implemented to agricultural and business practices, as well as to consumers' choices and habits, then the future will be sustainable for all of us.

References

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Varga, D 2013, *Waste not, want not*, Australia Unlimited, viewed 14 May 2018, <<http://www.australiaunlimited.com/food/waste-not-want-not>>.