

INTRODUCTION

1. Thanksgiving, competing if not for antibiotics
2. Everyone has consumed meat, poultry, pork
3. Various research on internet
4. Antibiotics in food have proven to be of use since the beginning, so we should keep using it in our foods.
5. I will go over what they are, how the food industry was before and after antibiotics, and our population rate.

BODY

What is it

- a. **(NPS MedicineWise, Dr. Lynn Weekes, 4/5/12)**
 - i. Treat infect. by bacteria, stop them from multiplying
 - ii. Growth
- b. **(10/26/16, NARMS, CDC)**
 - i. Important disease ↓
 - ii. Monitor factors, impact human health

* Now that I've explained a bit of background on the topic, I'll give you a bit of history of how things were before we had antibiotics in our food.

History Before

- a. **(Maureen Ogle, Scientific American, 9/3/13)** Historian, 4 books (similar)
 - i. Farmers not keep up w/ urban
 - ii. Americans, USDA, keep up w/ demand

*The struggles to keep up with demand ended up resulting in a new way of providing for our population which started the beginning of this new period.

History After

- a. " "
- i. Giving antibiotics, 50% faster growth
- b. **(Haihong Hao & 9, 6/12/14, NCBI)** National Center for Biotechnology Information
 - i. Environment Improvement
 - i. Animal poop, pollution
 1. Antibiotics ↓ pollution
 - ii. Animal production
 - i. Orally given, conception, milk, live birth rate

- ii. ↓ fat ↑ lean

*We now know how antibiotics has impacted us in a positive manner, so how will it help our growing population?

Population

- a. **(U.S. and World Pop. Clock, US Census Bureau, 11/22/16)**
 - i. America: 324,979,425 - World: 7,354,060,155
- b. **(2016, Max Roser, Our World in Data)** Economist, U. of Oxford
 - i. By 2100 pop. rise 50%
 - i. 11 billion
 - ii. Need to keep antibiotics, keep up with demand

CONCLUSION

1. Antibiotics in food has proven to be of use to us since the beginning, so we should keep using it in our foods.
2. I have gone over what antibiotics were, how the food industry was before and after antibiotics, as well as the rate of our population.
3. Thank antibiotics, don't have to wrestle @ grocery store

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