Academic Antibiotic Resistance Research Paper

An antibiotic is a type of antimicrobial substance active against bacteria and is the most important type of antibacterial agent for fighting bacterial infections. Antibiotic medications are widely used in the treatment and prevention of such infections. They may either kill or inhibit the growth of bacteria.¹

Antibiotic resistance is a naturally occurring phenomenon that can

be slowed, but not stopped. Over time, bacteria adapt to the drugs that are designed to kill them and change to ensure their survival. This makes previously standard treatments for bacterial infections less effective, and in some cases, ineffective.²

For this research paper, you may write about antibiotic resistance, its history, and its consequences for the future. Below are the more specific requirements for this assignment:

- 1. Your paper must have a thesis statement.
- 2. Everything following your thesis statement must clearly work to support it.
- 3. There is no length requirement but it needs to be long enough to full explain antibiotic resistance.
- 4. I (Ms. BradyLong) am your audience but you will want to make sure you are writing enough so that I know you know what you are talking about. Do not skip key information because you know I understand antibiotics. Prove to me you understand them.
- 5. Your paper must be correctly formatted according to MLA standards (including citations).
- 6. You must cite all information gained from a source. If you had to look it up, you have to cite it.
- 7. You must cite peer-reviewed research paper (google scholar is a good place to start to fine one of these). As many sources as possible should be from peer-reviewed papers.
 - Hon At least 5 peer-reviewed Ac At least 1 peer-reviewed
- 8. Your final paper will be submitted hardcopy in class and on Turnitin.com.

Questions to consider (this is not an exhaustive list but a good place to start your research):

- What are antibiotics?
- When were antibiotics discovered?
- How were antibiotics discovered?
- How do antibiotics work?
- How does antibiotic resistance work?
- How does antibiotic resistance occur naturally?
- How does antibiotic resistance spread?
- How have humans changed the natural pathways of antibiotic resistance?
- When did we first know we were changing the pathway of antibiotic resistance?
- What consequences are there to these changes in antibiotic resistance?



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¹ "Antibiotics." NHS Choices, NHS, 9 June 2016, www.nhs.uk/conditions/antibiotics/.

² Steckelberg, James M. "Protect Yourself from Superbugs." Mayo Clinic, Mayo Foundation for Medical Education and Research, 20 Feb. 2018, www.mayoclinic.org/diseases-conditions/infectious-diseases/expert-answers/superbugs/faq-20129283.