

10 FACTS ABOUT ANTIBIOTICS

1. Antibiotics are derived from microorganisms, which *presumably* synthesize them as defensive compounds.
2. When Alexander Fleming first isolated penicillin from the fungus *Penicillium* (1928), he called it "mould juice." When mass-produced for WWII, it was nicknamed, "The Wonder Drug" (not to be confused with the "cure all miracle drug," cocaine).
3. There are reports of moldy bread being used to treat wounds to prevent infection. That is not the origin of "Wonder Bread," though.
4. Some antibiotics cause side effects due to their effect on our mitochondria, which are bacteria.
5. 10% of Americans believe antibiotics are addictive. Same % believe antibiotics are ineffective treatment for bacterial infections.
6. Approximately 1/3 of adults in the United States believe that antibiotics can also kill viruses.
7. The biggest consumers of antibiotics are farm animals. Second biggest user is children (who are usually sick with viruses).
8. Prescription of antibiotics to people with viral infections contributes to the evolution of drug-resistant bacteria, which kill tens of thousands each year and cost us billions in health care expenses.
9. The word "antibiotic" (actually "antibiotique") was first used in late 1800s. It meant, "destructive to microorganisms." Most dictionaries, including Google's, retain this original definition.
10. In 1942, Selman Waksman (who stole the discovery of a bacteria-derived antibacterial from his graduate student, Albert Israel Schatz) began using "antibiotics" to refer to compounds that kill *only* bacteria. The change in definition from #9 likely causes #6, #7, & #8.