

Your Health

by Dr. Paul Roumeliotis

Antibiotics: Friend or Foe?

I get many questions about antibiotic effects such as will they destroy our antibodies or ruin our teeth. These are very common concerns shared by many parents. The answer is antibiotics do not affect antibodies and do not usually affect or ruin teeth. Now let's discuss antibiotics, which treat bacteria and not viruses. Before antibiotics became available, people, especially children and the elderly, were dying from bacterial infections that today we can usually treat. Antibiotics, like penicillin, work by killing or preventing bacteria from growing and spreading. Usually our body can fight off infection, but sometimes the infection is so powerful that we need antibiotics to help kill or stop the bacteria so that our immune (or protection) system clears up the rest.

Antibiotics are vital in today's medical practice, even though, as with all medications, there may be some side effects which overall are outweighed by the benefits. Under certain conditions antibiotics may even be prescribed over a long period of time in order to protect from certain infections; for example, in persons with kidney abnormalities or weakened immune or respiratory systems. On the down side, we now understand that overuse or misuse of antibiotics can result in bacteria developing ways of resisting the effect of the antibiotics. This is referred to as antibiotic resistance. The so-called "superbugs" are becoming increasingly resistant to more than one antibiotic. Experts fear that we will eventually not be able to treat them with any of the antibiotics available today. An example of such a bug is streptococcus pneumoniae, a major cause of ear infections and lung infections which because of resistance is becoming quite difficult to treat.

So today, it is important to have a rational approach to antibiotic use. We do not treat all infections with antibiotics, especially when they may be caused by viruses. Patients are often surprised when they are told they do not need antibiotics, as most respiratory infections that we see in children and adults, including the common cold, diarrhea and vomiting, are caused by viruses and do not need antibiotics.

Here are some guidelines that can help prevent the development of antibiotic resistance:

- Viral infections should not be treated with antibiotics.
- If your child is prescribed antibiotics, he or she should take the whole course that is prescribed even if feeling better. Not completing the entire prescribed dose may also promote resistance.
- Antibiotics should only be taken when prescribed by your doctor.
- You should never use antibiotics given to you by someone else or prescribed for a previous infection. To avoid this temptation, dispose of any extra antibiotics left over from a previous infection (either return them to your pharmacy, or to a toxic waste center).

In conclusion, antibiotics are one of mankind's best friends and should not be seen as an enemy or something that will destroy our system. On the contrary, they can protect and help us when necessary. However, a sensible approach to their use is best.

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