# Antibiotics, Friend or Foe?

By Wendy Marks
January 2016

When I began the process of writing this newsletter, I thought to myself that I should have one of those warnings that they have in movie theaters where they rate what you are about to see. If I were to rate this discussion I would rate it "I" for important, and "S" for some scary scenarios.

All of the quotes that I am using in this article are from Stephen Harrod Buhner's amazing book "Herbal Antibiotics". In this book he provides descriptions of how to use a variety of herbs for different diseases. He suggests that we all should understand how to do this in order to deal with the fact that disease resistant bacteria have come and aren't going away anytime soon. In the forward to Buhner's book, James A. Duke, Ph.D. says, "Stephen Buhner has arrived at the frightening truth that you won't find in the Journal of the American Medical Association: We are running out of weapons in the war on germs. Since germs can go through a generation in 20 minutes or so, instead of the 20 years or so it takes us humans to reproduce ourselves, it is no small wonder that the germs are evolving resistance to our chemical weapons as rapidly as we develop them."

Resistant bacteria exist and we have a limited time in which to alter our behavior if we wish to keep antibiotics in our quiver of useful drugs. "As a species, when it comes to the overuse of antibiotics, we have to alter our behavior to match with the researchers have been saying, and finding, for decades, that we must do - that is, stop using antibiotics except in absolutely essential circumstances, which is to say, in situations where there is a strong possibility of death or permanent disability if they aren't used."

So what is really happening? Penicillin was discovered back in the 1920s, and there has been no looking back since. We found that people didn't have to die from diseases such as strep throat, pneumonia, and tuberculosis. We were the masters of our fates, but as with most mastery and hubris, it did not last forever. Disease resistant bacteria arise because bacteria evolve very quickly. A disease that a lot of people are familiar with is MRSA. When I was a child I had never heard of MRSA. Now I hear of it occurring in frail populations, elderly populations, and even in young children. It has become something that is ubiquitous in hospitals, and even transmitted through skin contact, causing severe skin infections. When you're in the hospital you are quite likely to come home with a disease that you didn't come in with, with MRSA being one of the more common.

Antibiotics are also being used everywhere. We are putting antibiotics in the water that we pass from our bodies and through the passage of the bodies of the animals that we eat. Even the fish that we farm have antibiotics put in the water. The water that is waste goes into the streams and the oceans and onto the land in which we are growing our food. All water that we drink at this point contains a small amount of antibiotic substance. Again I quote "antibiotics, in their pure forms or metabolized states, form a significant part of hospital waste streams. They are excreted in their millions of pounds from the millions of

patients who visit hospitals each year. Expired antibiotics are simply thrown into the garbage. Antibacterials used as disinfectants and antibiotic remnants from various treatments also enter the hospital waste stream. Pharmaceutical manufacturers discharge thousands of tons of antibiotic waste into the environment. American factory farms dispense nearly 30 million pounds of antibiotic so that Americans food animals will survive. In short, the American continent, like much of the world, is literally awash with antibiotics."

So what's the problem you might say? We can come up with new antibiotics. Well we haven't been. As Buhner says, "Many people believe there will always be antibiotics, and that if the ones we have now aren't working, others will be discovered that will work just as well, so no need to worry. The truth, unfortunately, is very different. There are virtually no new antibiotics under development, and there are unlikely to be. Pharmaceutical companies have almost completely given up the search for them. There are a number of reasons for this, the main one being, of course, financial." He goes on to explain that antibiotics are for short-term use. Companies tend to invest in drugs that deal with chronic illness. For example, an arthritis drug might be a really hot item because it will probably be used for years by the person who has arthritis. If you have strep throat your treatment may be for a period of at most a couple of weeks.

But this very depressing scenario need not lead us to despair, for herbal medicine may come to the rescue. We have had the ability to use herbs for many generations, and in fact we have probably had the ability to use herbs for as long as there have been people. Herbs generally have a longer treatment time than that of antibiotics, but we can get them to help us just as effectively. The secret behind using herbal medicine for treatment of infection is that herbs themselves are very complicated organisms. The disease cannot easily recognize the herb and become resistant to it. Plants evolve in the same fashion as do the germs that cause our disease. In addition, plants harvested in different places have slightly different genetic signatures and the germs cannot necessarily recognize these. Also, when we use herbs it is often in combination, and several different herbal drugs are unlikely to be used in a pattern that allows microbes to develop a resistance.

I am not saying that we should give up the antibiotics that we have. In fact about a month ago I came down with some horrible flu, and for the first time in several years I went to my doctor and asked for an antibiotic. After several weeks in which I was unable to fight off the flu bug a secondary sinus infection had developed opportunistically. When I asked what I had, she just called it "the crud", some anonymous bug. It was quite a relief to have the bacterial infection lifted off so my body could successfully fight the flu.

The key is to use antibiotics sparingly, something we have hopefully been lucky enough to discover before it's too late. We need to do this now, so that there will continue to be antibiotics for future generations. In the meantime, as we become educated about herbal treatments, we should discontinue the rampant use of feed antibiotics. We can do this if we put our minds to it. I have enormous confidence in the resilience of people.

Namaste, Wendy