Antibiotics Kill Your Body's Good Bacteria, Too, Leading to Serious Health Risks

by Doug Kaufmann

"It is ironic that this humbled fungus, hailed as a benefactor of mankind, may by its very success prove to be a deciding factor in the decline of the present civilization."

-Dr. John I. Pitt, The Genus Penicillum, Academic Press, 1979

Simply put, antibiotics are poisons that are used to kill. Only licensed physicians can prescribe them. The drugs are used to kill bacteria. Certainly, many people have benefited from using them. However, if bacteria were the only organisms that antibiotics killed, much of this book would be unnecessary. In fact, I contend that poisons that kill small organisms in small doses -- organism-specific varieties notwithstanding -- can also kill big organisms, when they are taken in big doses. You, my friend, are a big organism.

We've talked about the link between fungus and human disease. This chapter addresses the possibility that antibiotics may help fungi to proliferate within the human body.

As an adult human, you have three to four pounds of beneficial bacteria and yeast living within your intestines. These microbes compete for nutrients from the food you eat. Usually, the strength in numbers beneficial bacteria enjoy both keeps the ever-present yeasts in check and causes them to produce nutrients such as the B vitamins.

However, every time you swallow antibiotics, you kill the beneficial bacteria within your intestines. When you do so, you upset the delicate balance of your intestinal terrain. Yeasts grow unchecked into large colonies and take over, in a condition called dysbiosis.

Yeasts are opportunistic organisms. This means that, as the intestinal bacteria die, yeasts thrive, especially when their dietary needs are met. They can use their tendrils, or hyphae, to literally poke holes through the lining of your intestinal wall. This results in a syndrome called leaky gut. Yeasts are not the only possible cause of this syndrome. Some scientists have linked non-steroidal, anti-inflammatory drugs (NSAIDS) such as naproxen and ibuprofen to the problem. Given their ability to alter intestinal terrain, antibiotics also likely contribute to leaky gut syndrome.

In addition to possibly causing leaky gut syndrome, I believe that parasitic yeasts can also cause you to change what you eat in that they encourage you to binge on carbohydrates including pasta, bread, sugar, potatoes, etc. So, it should come as no surprise that weight gain counts as one of the telltale signs of antibiotic damage and subsequent yeast overgrowth.

By altering the normal terrain of the intestines, antibiotics can also make food allergies more likely. An array of intestinal disorders can ensue, as well. Sadly, most doctors claim ignorance concerning their patients' intestinal disorders rather than admit that the drugs they themselves prescribed actually caused the disorders to begin with.

Tons of antibiotics are fed to American livestock on a daily basis, purportedly to proof them

against bacteria. This practice not only possibly contributes to antibiotic resistance in humans -- many experts feel weight gain, and not disease prevention, is the real reason antibiotics are so widely used. Fat cattle sell for more than thin cattle. That's all very well, but imagine what the antibiotics thereby possibly present in dairy products could be doing to our children's health.

Back in the 1950s, two researchers in Albany, New York, worked to develop an antimicrobial drug from a substance produced by a soil-based fungus. Although the nystatin they discovered is technically a mycotoxin, it works wonders an intestinal antifungal. This as yet revolutionary drug stops the yeast overgrowth caused by all other antibiotics and is 100 percent safe to use. In addition, nystatin works with no side effects, though it can cause a pseudo sickness that patients often confuse with side effects.

Also in the 1950s, scientists used mice to grade the relative toxicity of 340 antibiotics (Dr. William S. Spector, The Handbook of Toxicity, 1957). The researchers based their rankings on the amount of a given antibiotic required to kill half of the lab mice injected with it. I relate this story only to ask you, before 1957, how did scientists decide what would serve as prescriptive doses for these very same antibiotics when used in humans?

I'll assume that the same toxicity scale remains in place today. If it does, and if a given dose of penicillin will kill 50 percent of mice injected, it stands to reason that a much larger dose, or perhaps repetitive doses extended over 40 years, might prove fatal to a human. I don't know if larger doses are in fact administered to people. And, the 40-year scenario has its problems. But you have to admit, it's certainly food for thought.

The time span between when patients take rounds of antibiotics and when they die interests me. That's because I believe that few people really die of heart disease and diabetes. In actuality, antibiotics are responsible for deaths attributed to these diseases, because these drugs are what caused people to develop the diseases to begin with. And yet, incredibly, death certificates usually state the probable cause of death without mentioning whether the deceased had a history of taking antibiotics.

Remember, antibiotics are dangerous mycotoxins -- fungal metabolites. Just as importantly, medical experts have written articles maintaining that these drugs kill people. But, other experts insist on remaining sceptical as to the problem, even though these same experts readily recognize the link between weakened immune systems and death.

According to the 2001 Allergy and Asthma Report, the first immunodeficiency syndrome was identified in 1952. This document tells us that since that time, "more than 95 immune syndromes have been identified, with new conditions coming to light every day." The report goes on to say that research indicates that "increased antibiotic use in human infancy may be associated with increased risk of developing allergies."

Max Planck won the 1918 Nobel Prize in Physics. He once weighed in as to why science is slow to change even in the presence of overwhelming evidence that it should do so.

"A new scientific truth does not triumph by convincing its opponents and making them see the light," Planck said, "but rather because its opponents eventually die and a new generation grows up that is familiar with the ideas from the beginning."

That a new generation will grow up knowing of the dangers inherent in taking antibiotics is a good thing. That doctors will continue randomly prescribing fungal toxins should teach us the importance of knowing medical facts before blindly accepting any prescription. Please study the antimicrobial benefits and the immune system stimulants that nature provides. Know also that, in some instances, antibiotics may become necessary.

If you reach the point where no alternatives exist, I recommend that you ask your doctor to prescribe nystatin simultaneously with the antibiotic (see Dr. Holland's article). Also, keep in mind the post-antibiotic importance of restoring the intestinal terrain with plain yogurt and probiotics. If you experience bloating, belching, gas, constipation, diarrhea, GERD, or other intestinal problems, probiotics can play an important role in restoring your intestinal terrain.

Antibiotics -- to Take or Not to Take?

by David A. Holland, M.D.

I looked up antibiotics in Harrison's Textbook of Internal Medicine. The listing referred me to "antimicrobials." This caused me to realize how much more accurately the second term describes these substances, given the broad-spectrum nature of a lot of them.

I must confess that, as a doctor, I do prescribe "antimicrobials." Perhaps I prescribe more antifungals and nonprescription remedies than the usual doctor, but I do prescribe antibiotics, as well. Perhaps even more horrifying, considering Doug's articles condemning them, is that I've taken them myself! In fact, in these times it's a rare individual who goes through life without ingesting those little pills. So, three questions have become important -- when should you take antibiotics, when should you refrain, and what will you do when you've already taken them?

Alexander Fleming, by the grace of God, brought us a mixed blessing in 1928 with his accidental discovery of penicillin produced by, of all things, a fungus. Medicine's interest treating people for exposure to fungi dropped dramatically in succeeding years, until the microbes were only thought important insofar as their ability to produce increasingly diverse varieties of antibiotics.

Interest in fighting bacteria proliferated like a flesh-eating Strep infection, fueling the race to discover ever more antibiotics. Pharmaceutical salespeople invaded doctors' offices and hospitals, intent on convincing physicians their antibiotic was better than the others. These salespeople supported their pitches with studies, graphs, charts and convincing stats, while often failing to mention that their research had been funded by their own companies. The possible conflict of interest was, and remains, enormous.

I have no quarrel with such salespeople. They're regular men and women like you and me, just trying to make a living. However, when human lives are involved, funding research to prove that your own product is better than the competition's is just plain wrong. The advantage is obvious, and the danger that a great deal of objectivity could be lost is only all too real.

I believe that an impartial, third party should be assigned to perform such research, funded by a mandatory "ante" from all pharmaceutical companies involved in producing a given category of drug. Of course, that will be the day! In case the above scenario never happens, we would do

well to take with several grains of salt the unregulated information that companies provide about their own products.

Perhaps you are wondering about the use -- and abuse -- of antibiotics in general. Let me give you an example. One of the most common diagnoses given at a doctor's office is the upper respiratory infection (URI). It accounts for up to 70 percent of all antibiotics dispensed (Annals of Internal Medicine. American College of Physicians. American Society of Internal Medicine. March 20, 2001).

However, according to Dr. Carol Kauffman, most URIs are not caused by the bacteria that antibiotics are designed to fight. Rather, Kauffman says, they are caused by fungi. So, unless a secondary, bacterial infection presents itself -- and even then, the rules change -- most URIs do not require the use of antibiotics.

Regarding ear infections, in one study, children administered antibiotics for acute otitis media suffered double the rate of adverse effects compared to children in the study who took placebos (Clinical Evidence. 2000). The difference in outcome for those children in the study who took antibiotics compared to those who do not was almost negligible. Some scientists counter that children who take antibiotics run lower risks of secondary ear infections such as meningitis or mastoiditis (infection of the angular bone located behind your ear).

Of course, the landscape is complicated by noncompliance. The portion of people who take their antibiotics as prescribed has been estimated at anywhere between 8 to 68 percent. So it's difficult to say just how effective antibiotics actually are.

Now, say my daughter were to get sick for 10 days, miserable with a high fever and screaming ear pain. Say our doctor said her ear canal checked out as angry red. Am I going to have my daughter take the prescription? Probably so. We cared for a young woman at the hospital where I worked who was literally at her death bed with overwhelming Streptococcal -- bacterial -- pneumonia. One of her lungs was saturated with the infection, which had also spread throughout her bloodstream.

I went on to my next rotation thinking that was the last I would hear of that patient. However, I later spoke with her attending physician. He told me she walked out of that hospital, completely cured. So, antibiotics save lives, but it's not exactly a common occurrence. Certainly, most of you out there suffering from the common cold are not near death, so you should think twice about taking antibiotics.

The non-synthetic antibiotics are fungal by-products called mycotoxins. Penicillin is perhaps the best example. In other words, mycotoxins kill off fungi's competitors, allowing fungi to grab up all of the nutrients for themselves. Alexander Fleming himself observed this in action, and it later led him to develop penicillin. When a mold –(molds are fungi)-- contaminated a bacteria colony upon which Fleming was performing an experiment, the invader cleared the area around it of all bacteria. When Fleming investigated, It turned out that the fungus had produced a substance he would later call penicillin, killing the bacteria in residence.

Just because they kill bacteria, you may be thinking, doesn't mean that some, many or especially all of the mycotoxins used as antibiotics are necessarily harmful to human beings. A. V. Costantini in effect counters this idea when he speaks of the work of two scientists by the name

of Bernstein and Ross. Costantini says that the men found that two or more months of treatment with penicillin and other antibiotics contributed to what they saw as a "significantly increased risk of non-Hodgkin's lymphoma in humans (Costantini, A. V. Fungalbionics. 1998)."

How many people, children included, have undergone dose after dose of antibiotics for recurring infections? Doug and I believe that these relatively small doses taken over long periods of time are actually harming us in similar, incremental fashion, later showing up as cancer, diabetes, vasculitis or other diseases.

We take antibiotics when we are sick, when our immune systems weaken. The mycotoxins pharmacies dispense for use as antibiotics only exacerbate the problem, because the lion's share of these substances have been shown to be immunosuppressants (CAST Report No. 116. November 1989.). Not only are they capable of hamstringing our immune systems, they also destroy the friendly bacteria that guard our intestines.

These friendly bacteria include Lactobacillus acidophilus, Bifidus and Bulgaricus, supplements for which can be found in any health food store's refrigerated section. They protect us against pathogens such as Salmonella, yeast, cholera, and the bad E. coli. They are so potent that, prior a trip abroad, to protect yourself from traveler's diarrhea you'd do better to skip the usual antibiotics and instead take acidophilus supplements.

Unfortunately, these good flora are so vulnerable to antibiotics that, in mice, a "single injection of streptomycin can eradicate the protective effect of the normal flora. (Mandell. Principles and Practice of Infectious Diseases. 2000.)" And, once gone, these friendly bacteria are replaced by hostile bacteria such as Pseudomonas, Clostridium, and Klebsiella, and by Candida yeast, a powerful member of the fungi family.

So, we have the good and the bad regarding our chemical friends known as antibiotics. They can "save the day" at times, but they have ruined them at others -- just ask any woman with a yeast infection or look at any baby who suffers from thrush. You should know that, even should you just say "no" when your doctor moves to prescribe antibiotics for you, theoretically speaking you may still be taking them with every bite of steak and pork you eat.

That's because more antibiotics per pound are used on livestock than in human medicine. How much of those antibiotics are passed on is difficult to determine, but the mere possibility of this kind of thing is certainly a worry.

Our goal in this book is to educate you and to help you make informed decisions. Some final, simple tips follow:

1. An ounce of prevention.... Exercise, eat intelligently and take a few supplements. Avoid alcohol, smoking, and recreational drugs. Get some rest once in a while. Pray.

   Despite our best efforts, most of us will get sick at some point and decide to go see a doctor. If you are a stubborn, married man, your wife will likely make the appointment for you.

2. Ask Questions. If your doctor diagnoses you with an upper respiratory infection, sore throat (in which the strep test is negative), bronchitis, sinusitis, or ear infection, and you

wonder if you really need an antibiotic, make a point of asking her about it. A lot of physicians would be pleasantly surprised that one of their patients would even consider trying to recuperate without antibiotics. Ask if you can treat your condition symptomatically and come back or call in a couple of days if you are not better.

If your questions annoy your doctor, then get another doctor. After all, you pay the bills, either directly or out of your paycheck in the form of insurance, and you deserve adequate treatment. On the other hand, if you feel you, in fact, do need an antibiotic and your doctor disagrees, try to work a deal in which she will prescribe an antibiotic for you if you don't feel better in a couple of days. I learned an important lesson about this kind of disagreement during college, on a visit to the infirmary. The doctor there refused to give me an antibiotic for a URI I'd come down with. I had to suppress my anger at what I saw as arrogance on his part, but lo and behold, he was right. I got better without the pills I'd been sure I'd needed. I think a lot of people tend to underestimate their bodies' healing abilities, in much the same way as I did. That's just one reason why doctors are oftentimes in a better position to make the call as to whether or not to prescribe.

3. Take an objective look at yourself and your life-style. If you keep coming down with the same thing, do some research and a little thinking. Do you drink a lot of soda? Do you smoke? Are you taking antibiotic after antibiotic and now have a secondary yeast or fungal infection? How is your spiritual life? Your stress level? The point is, myriad factors contribute to "wellness."

As far as chronic sinus infections go, Johns Hopkins researchers are now saying most such conditions are caused by a fungus. So, if you do have chronic sinusitis, stop taking antibiotics, get on an antifungal diet, and ask your doctor for antifungal medications. If your doctor refuses, visit a health food store for natural, off-the-shelf antifungals such as olive leaf extract, garlic, and Caprylic acid.

Once you improve, make sure you go back and let your doctor know how things worked out. Chances are she is neither experienced nor comfortable with prescribing antifungal medication. Your story may convince her to do her own research, the first step to changing her treatment philosophy.

It shouldn't be too difficult to convince your doctor to let you try a prescription of nystatin. As one of the better gut antifungals, nystatin is also remarkably safe and free of side-effects.

If you've decided to go ahead and take an antibiotic:

1. Get the facts. Ask your doctor how many days you must take the antibiotic and if you, in fact, do need the latest, most powerful one on the market. Simple urinary tract infections are now treated with only three days of antibiotics. Sinus infections, bronchitis, and ear infections in children over two years of age can be treated with as few as five days of antibiotics, new or old, generic or name brand. This may not be possible, however, if you have other medical conditions or if you smoke.
2. Build trust. Commit to the full course of the antibiotic unless you experience significant side effects or an allergic reaction. You sought medical advice and agreed to the prescription. You will build trust with your doctor if you work as a team. This trust will be very important once you see number 3 below.

3. Take an antifungal with the antibiotic. For example, you could ask your doctor for a prescription of nystatin to take during the course of your antibiotic. Many dermatologists do this when prescribing long-term antibiotic courses for acne. I suggest adults take two tablets twice a day -- 1 cc of suspension twice a day for children -- to prevent yeast overgrowth in your intestines. Most cases of upset stomach or diarrhea that kick in a few days of beginning a round of antibiotics can be cured with a single dose of the drug. Diarrhea after a two-week round of antibiotics is likely caused by a different bug altogether -- be sure to bring that to your doctor's attention.

   I should tell you that, in my clinical practice years, many of my patients made great strides against acne through taking nystatin and a change in diet alone, without the antibiotics.

4. Supplement your intake. Take an antioxidant supplement, one which includes vitamin E, zinc, selenium, vitamin C, and vitamin A, among others. According to A.V. Costantini, all antioxidants are antifungal. (Costantini. 1998.)
5. Keep your bowels moving. If antibiotics kill off your friendly, intestinal bacteria, once you cease taking antibiotics you'll run a higher risk of infection by other, more hostile bacteria. These bacteria will be quick to find and exploit pockets of debris that could be collecting and putrefying in your intestines if you happen to become constipated. So, be sure to keep your digestive tract as clear as possible until you can repopulate it with friendly bacteria. Psyllium hulls fiber from your local health food store is the best, bulk fiber to use, as long as you don't have a history of intestinal obstruction. Psyllium not only relieves constipation. It also slows diarrhea by absorbing excess water.
6. Replace the good bacteria in your intestines. Supplement with an acidophilus supplement for a few weeks following any course of antibiotics. Do not take these simultaneously with your antibiotic, or you will simply end up with a lot of very dead, albeit still friendly bacteria in your intestines. At the very most, take acidophilus supplements either in between antibiotic doses or after you have completely finished your prescription.
7. Look back at why you became ill to begin with. I once suffered from strep throat after indulging in half a box of chocolates. That should have come as no surprise. Who wouldn't be crippled by that amount of garbage? More than likely, you have your own experience regarding similar binges. My point is, diet plays at least as much a role as actual exposure to germs as to whether we get sick -- when we are healthy and eating correctly, our bodies are amazingly resistant to infection.

One, last note: Please ignore advertisements that recommend guzzling orange juice for the vitamin C it contains. A big dose of sugar is what you'd actually be getting. I have heard more than a few patients note that once they felt they were coming down with something, they immediately began downing glass after glass of orange juice, only to get even sicker. They concluded that they must not have caught the illness in time, which couldn't have been any further from the truth.

The truth is, they simply fueled the fire of their infections with lots of sugar, all because they trusted a corporation's advertisement to educate them about proper healing strategies. If you want that much vitamin C, you will be perfectly fine taking it in the 1,000 mg pill form a few times a day. As far as fluid requirements are concerned, your body is 70 percent water – and that is exactly what it needs!