

DC On Line

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Doctors Ignore Antibiotic Warnings

After 20 years of imploring physicians to prescribe antibiotics judiciously, the Alliance for the Prudent Use of Antibiotics (APUA) reports that doctors have not changed their prescription habits measurably. Experts are now trying to formulate a new plan to try to stem the proliferation of antibiotic-resistant bacteria that has many health officials scared half to death. The key, said leaders at a recent conference sponsored by the American Society for Microbiology, is for doctors to take the initiative in educating patients to the concept that an antibiotic is not the answer for every ailment that might involve an infection.¹ It seems, though, that if that hasn't happened by now, it isn't likely to happen in the near future.

Experts are also trying to find a way to make doctors realize that antibiotics are ineffective against viral infections such as the common cold. For those who already understand that concept, they want doctors to stop falsely portraying antibiotics as a cure in those cases to patients.

1. United Press, September 26, 1999.

Aerosol Headaches

A British study of 14,000 pregnant women² reports that those using some kind of aerosol product (such as air fresheners) on a regular basis experienced 25 percent more headaches than those who used them rarely. Aerosols were also linked to a 19 percent increase in depression. Infants exposed to the products had 30 percent more ear infections and a 22 percent higher rate of diarrhea. Researchers blame compounds such as xylene, ketones and aldehydes for the effect.

2. *New Scientist*, September 1, 1999.

Walk for Heart Health

A new study published in *The New England Journal of Medicine*³ concludes that women can decrease their risk of heart disease by one third by regularly taking a brisk walk. The best results were seen in women who walked at a pace of at least 3 mph for a 30 minute time period, for a total workout of one to three hours per week. On average, the more time and energy put into the workout, the fewer cardiovascular incidents were noted. Other types of regular exercise showed similar, though not as consistent, results. The cardiovascular benefits of exercise appear even if the patient begins a workout

program late in life.

3. *NEJM*, August 26, 1999.

Blueberries for Youthful Vigor

A new study of rat neurophysiology concludes that something about blueberries is very good for the nervous system. Geriatric rats fed the equivalent of a cup of blueberries per day became smarter and better coordinated than a control group. Communication between neurons was one of the benefits of the fruit, which led to improved learning. It also made a marked improvement in motor skills, as exhibited by the blueberry-fed rats on a test comparable to "lumberjack log rolling." They were able to stay on the "log" an average of ten seconds compared to the control group's average of six.⁴ The researchers are working to pinpoint the exact mechanism producing these results, but in the meantime have started eating blueberries themselves.

4. *Neuroscience*, September 1999.

Flea Collars

Research from Mississippi State University⁵ suggests that animals that wear flea collars might be transferring organophosphates to their owners. Five minutes of petting the animals, researchers say, is enough to produce measurable amounts of the chemicals on human hands. Researchers do not yet know how much is actually absorbed by the body; a new study is now looking at this question. In the meantime, they recommend against letting children sleep with or hug pets that are wearing fresh flea collars or that have recently had a flea dip.

5. Led by toxicologist Janic Chambers, reported to the New Orleans meeting of the American Chemical Society, August 22, 1999.

How to Be More Attractive - to Mosquitoes

University of Florida researchers are delving into factors affecting mosquito motivations. Mosquitoes are apparently quite selective when feeding time comes. Breath odor is one of the biggest clues a mosquito uses to decide if a mammal will offer a suitable meal. The researchers say that mosquitoes can sniff out human breath rich in cholesterol and B-vitamin metabolites (substances they can't manufacture on their own) from as far away as 40 miles, zigzagging across the scent trail until they find their target.

Sweat is also an attractant, but only after bacteria have started metabolizing it, which is why a just-bathed body is often ignored by mosquitoes for a period of time. Be aware, though, that some skin care products are particularly appealing to the little bloodsuckers.⁶

6. Reuters, reporting on the work of entomologist Jerry Butler.

Botulism for Migraines

A plastic surgeon, using small amounts of botulism toxin to smooth out the forehead wrinkles in his patients, found an interesting side effect: a dramatic reduction in migraine headaches. Among a group of 96 migraine sufferers, half reported a complete cessation of the headaches for three to four months after administration of the toxin. Another 27 percent of the patients said the frequency of attacks was cut in half. Why it works is a complete mystery, though a clue might lie in its paralyzing action, currently used to stop muscle tremors.⁷

7. Reported by Dr. Daniel Null of the LSU Medical School's department of otolaryngology at a medical conference in New Orleans, September 28, 1999.

Nose Blowing Worsens Upper Respiratory Infections?

A group from the University of Virginia and the University of Aarhus in Denmark reports that blowing one's nose might actually lead to a prolongation of a cold or the development of a sinus infection. After introducing a CT-sensitive dye into the nose, they found that volunteers who blew their noses also blew dye and mucus back into the sinus cavities. However, coughing and sneezing did not produce this same effect. Adults blow their nose an average of 45 times each day during the first three days of a cold.⁸

8. Dr. Owen Hendley of the University of Virginia, September 28, 1999, reporting to the American Society of Microbiology conference in San Francisco.

Infectious Fingernails

Researchers from the University of Michigan Health System in Ann Arbor report that virulent bacteria appear quite frequently on nurses' fingernails, especially artificial ones. They found that many bacteria - including a deadly strain of *Staphylococcus aureus* - were not removed from artificial fingernails by routine hand washing, or even with use of an alcohol-based gel. They recommend a ban on artificial nails for hospital workers.⁹

9. United Press, reporting on the work of Dr. Shelly McNeil et al., September 28, 1999.

Another Effect of Smoking

New research suggests that smoking is related to yet another undesirable condition: lessened sexual satisfaction. A survey of nearly 300 men between the ages of 24 and 36 found that smokers

experienced sex only about half as frequently as non-smokers. Not only was quantity reduced among smokers, but also quality: on a scale of one to 10, smokers rated their enjoyment a "5" compared to the non-smokers' "9."¹⁰ The study does not, however, definitively answer the question of whether smoking is the cause or merely a type of compensatory behavior.

10. Panayiotis Zavos of the American Institute of Andrology, Lexington, KY, reported by United Press, September, 1999.

Hot Tub for Diabetes

A very small study published in *The New England Journal of Medicine*¹¹ reports that a daily 30-minute soak in a hot tub may benefit diabetes sufferers. After a three-week period, a blood sugar level reduction of 13 percent was noted. One volunteer is reported to have had to cut back his insulin dose by 18 percent to keep his blood sugar level from going too low. The research was prompted by a physician trying to find a way to reduce blood sugar levels of type II diabetics who were unable to exercise.

11. *NEJM*, September 26, 1999.

Pain Sensitivity

Another study¹² concludes that newborns exposed to painful experiences tend to be less tolerant of pain as they grow older. Early interventions such as circumcision or blood drawings lead to an increased anxiety about pain when they grow up, according to this analysis of research papers. Researchers think that early painful experiences somehow "prime" the nervous system. Circumcision is a major concern to some, as for some reason many doctors do not believe it can be painful to an infant. Also at high risk for this pain sensitization are infants born prematurely or very ill, who are subjected to an average of 700 hospital procedures during their stay.¹³

12. *Developmental and Behavioral Pediatrics*, August 13, 1999.

13. United Press, August 13, 1999.

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