

DC Online

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Flu Shot Disappointments

U.S. Researchers attempting to quantify the number of lives that have been saved by influenza vaccines have come up with a disappointing number: something close to zero.

Early predictions were that flu vaccines would save the lives of about half of those vaccinated. However, "Based on U.S. mortality rates from 1968 to 2001, the study by the National Institute of Allergy and Infectious Diseases found no correlation between increasing vaccination rates after 1980 and declining death rates in any age group."¹ Some researchers are now suggesting the earlier studies were flawed, and also that the elderly may not be getting much of a benefit because many fail to produce antibodies in response to the vaccination. Natural immunity development may be responsible for the earlier perceived benefits of inoculations. Details are in the *Archives of Internal Medicine*.²

1. Reuters World Report, Feb. 14, 2005.
 2. *Arch Intern Med* 2005;165:265-272.
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Diabetic Waist

A study of 27,270 men, 884 of whom had been diagnosed with type II diabetes, concludes that waist size is a more reliable indicator of a person's risk than body mass index (BMI). Researchers from Johns Hopkins University found a doubled risk of diabetes when waists measured 35 inches, compared to the 29-34 inch group. At 40 inches, the risk was 12-fold. Other assessments, such as BMI or waist-hip ratios, did not correlate as well.¹

1. *American Journal of Clinical Nutrition*, March 2005.
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Life Expectancies Shortening

Researchers are predicting that, for the first time in many generations, the average life expectancy of Americans will be decreasing in the next few years. The reason is the current obesity epidemic affecting the nation. Obesity rates have been rising by about 50 percent per decade since 1980, to the point where nearly every third American is now excessively fat. Childhood obesity is also rising at an alarming rate.¹

1. *New England Journal of Medicine*, March 17, 2005.
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Hidden Costs of Obesity

A new study from the Centers for Disease Control and Prevention (CDC) cites obesity as a major contributing factor to airline cost increases over the past decade or two. During the 1990s, the average passenger weight increased by 10 pounds. The extra fuel required to keep this extra weight aloft cost airlines \$275 million during the year 2000 alone, according to CDC calculations. It's little wonder they've quit serving meals. The environment is worse off as well, as the extra 350 million gallons of fuel burned released another 3.8 million tons of carbon dioxide into the atmosphere.¹

1. Associated Press, Nov. 4, 2004.
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Mercury and Autism

A study reported in the *journal Health and Place*¹ links environmental mercury and autism. The study looked at autism rates and mercury contamination from coal-fired power plants in Texas. Researchers say their data suggest a 17-percent increase in autism rates per thousand pounds of contaminant. The study comes from researchers at the University of Texas Health Science Center in San Antonio.

1. *Health and Place*, March 16, 2004.
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Eczema Treatment Carries Cancer Risk

The FDA says it will require two eczema cream preparations that carry a warning about the potential of cancer from use of the drugs. This action is being taken subsequent to the agency learning of cancer development in animal studies, and some human clinical experience, relating to the drugs Elidel and Protopic. The FDA says it is also concerned that the drugs are being aggressively marketed for unapproved uses, such as skin problems in infants. The drugs were approved by the FDA in 2000 and 2001.¹

1. Reuters, March 10, 2005.
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White Blood Cell Count and Heart Disease

A study published in the *Archives of Internal Medicine*¹ suggests that an elevated WBC count in elderly individuals may signify heart disease. Postmenopausal women who started with the highest number of white blood cells were more likely to have a stroke or heart attack (46 percent and 40 percent higher, respectively) during the course of the study. The study involved a relatively large number of women in the age range of 50-79.

1. *Arch Intern Med*, March 15, 2005.
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MRIs for Depression

Researchers are reporting an apparent sedating effect of a certain type of MRI scan in studies on rats. The effect is described as similar to that seen after the administration of standard

antidepressant drugs.¹ The researchers were testing the effects of echo planar magnetic resonance spectroscopic imaging (EP-MRSI) after colleagues had reported mood improvements in human patients undergoing the procedure. While the findings may suggest a new, nonpharmaceutical treatment for depression, they also indicate that such brain scans are more invasive than generally believed.

1. *Biological Psychiatry*, March 2005.
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Green Tea Anti-Cancer Ingredient

European researchers have identified a component present in green tea that they believe is responsible for the anti-cancer activity of the beverage. They have shown that EGCG, present in high concentrations in green tea, binds to the dihydrofolate reductase enzyme, preventing DNA replication and therefore growth of the cancer cells. This enzyme is the known target of certain anti-cancer drugs such as methotrexate. Lowered activity of this enzyme is also implicated in the formation of neural tube defects such as spina bifida, suggesting that large amounts of green tea may not be a good idea for pregnant women.¹

1. Reuters, March 14, 2005, reporting on the work of Professor Roger Thorneley of the John Innes Center in Norwich, England.
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Sunshine for the Prostate

A large study from Brigham and Women's Hospital and Harvard Medical School in Boston suggests that a little bit of sunshine may go a long way toward preventing prostate cancer. Researchers found that men with higher blood levels of vitamin D were about half as likely to contract an aggressive form of prostate cancer. While milk provides vitamin D, it also provides calcium, which will decrease blood levels of vitamin D. Other studies have suggested that high levels of calcium seem to increase the chances of prostate cancers. It is generally thought that about 15 minutes of sunshine each day is enough for the body to make sufficient quantities of vitamin D for normal body functions.¹

1. Associated Press, Feb. 17, 2005.
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Coffee and the Liver

A large study (90,000 subjects) from Japan suggests that coffee may have a protective effect against liver cancer. Researchers say that compared to non-coffee drinkers, those who have a cup or so every day have half the risk of developing the cancer. More coffee appears to increase the protection. There are no firm hypotheses to explain the effect.¹ Some suggest antioxidant activity may be responsible, although green tea does not appear to offer any protection. Another study in animals has found a protective effect against skin cancer when a caffeinated cream was applied.

1. Associated Press, Feb. 16, 2005, reporting on the work of Monami Inoue of the National Cancer Center in Tokyo.

Gum, Heart Disease

Researchers from Columbia University in New York report that they have found a correlation between the number of bacteria in a person's mouth and thickening of the carotid arteries.¹ They used ultrasound to measure arterial wall thickness, and correlated that with the quantity of specific bacteria associated with gum disease and/or heart disease: *Actinobacillus actinomycetemcomitans*, *Porphyromonas gingivalis*, *Tannerella forsythia*, and *Treponema denticola*. A strong correlation was noted, suggesting that gum disease is an indicator of a potential stroke or heart attack. Similar associations have been seen in previous studies.

1. *Circulation*, February 2005.

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