

## DC On Line

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### Drugging School Children

Researchers from the Center for Pediatric Research in Virginia report that doctors appear to be overprescribing drugs to grade-school children.<sup>1</sup> Attention deficit-hyperactivity disorder (ADHD) is thought to affect only three percent of children to the extent that medication is prescribed. However, this study finds that between 8-10 percent of children in second through fifth grades routinely take medication for ADHD. Among fifth graders, one of every five white males is taking ADHD medication. Most experts seem to think that doctors are misdiagnosing these children.

1. *American Journal of Public Health*, September 1999.

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### Vitamin A against Malaria

A study published in *The Lancet*<sup>2</sup> reports that vitamin A appears to offer some protection against malaria. The research involved 240 children under the age of five who were given vitamin A supplements for just over a year.

Overall, malaria attacks decreased by 30 percent compared to a control group; in addition, one third less parasites were present in their blood at the end of the study. The youngest children, normally the most severely affected by malaria, fared even better: blood levels of the malaria parasite were 68 percent lower than expected. According to the authors of the study, these results were better than results from field-tested experimental malaria vaccines.

2. *The Lancet*, July 17, 1999.

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### Traffic Fumes and Cancer

A Swedish study from the Institute of Environmental Medicine in Stockholm<sup>3</sup> concludes that people living in areas with a high saturation of automobile traffic fumes are more likely to develop lung cancer. Residents who lived in high-traffic areas of Stockholm for 10 years were 20 percent more likely to develop the disease. Thirty-year residents had a 40 percent higher risk. The effect was the same for smokers and nonsmokers.

Automotive pollution in Stockholm is generally considered light compared to other major cities.

3. Led by Professor Goran Pershagen of IEM; reported by the *Times of London*, August 1, 1999.

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## Financial Stress Hard on the Gums

A study published in the *Journal of Periodontology*<sup>4</sup> reports that people under long-term financial stress are twice as likely to suffer from gum disease. There were 1,400 people involved in the study. Stresses due to family, work, and marital problems did not appear to have the same effect.

A number of factors seem to be involved, including neglect of oral hygiene, but they also found physiological changes, such as a change in saliva composition and a weakened immune response. The increase in gum disease was not seen, however, in those who were judged to cope well with financial stress.

4. *Journal of Periodontology*, July 1999.

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## Intelligent High-Fat Consumers

A study published in the journal *Neurology*<sup>5</sup> has reached a rather unexpected conclusion. The typical Western high-fat, high-protein diet appears to offer protection from stroke-related dementia. The study spanned 25 years and looked at the dietary preferences of 8,000 Japanese-American men. Compared to those consuming a low-fat, high-carbohydrate Asian-style diet, cases of dementia were significantly lower in people who preferred Western foods. The researchers proposed no substantive explanation.

5. *Neurology*, July 22, 1999.

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## Diabetes and Alcohol

A recent study published in the *Journal of the American Medical Association*<sup>6</sup> suggests that the recently touted cardiovascular benefits of alcohol apply equally, if not more so, to diabetics. This 12-year study of 983 type II diabetics over the age of 40 concludes that one or two drinks each day can decrease the risk of death from heart disease in diabetics by up to 80 percent. Alcohol also appears to help diabetics by reducing insulin resistance, a problem that makes it harder for diabetics to take advantage of the little insulin they are able to produce.<sup>7</sup>

6. *JAMA*, July 21, 1999.

7. Associated Press, July 20, 1999.

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## Viagra for Your Plants

Israeli researchers have discovered that two or three milligrams of Viagra dissolved in water and applied to plants (such as cut flowers) decreases the production of ethylene, the gaseous substance responsible for aging and eventual spoilage of fruits and vegetables. This results in the plants remaining fresh and "helps them stay erect" longer.

According to one of the researchers, "Plants aren't all that different from people."<sup>8</sup> A patent has

been registered on the findings, which some think will revolutionize packaging and double the shelf life of produce. There are some concerns, however, about the effects of Viagra-laced fruits and vegetables on the general population.

8. Reuters news service, quoting Professor Yaacov Leshem of Bar-Ilan University, July 18, 1999.

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#### Aspirin May Help Prevent Hearing Loss Side-Effects of Some Common Antibiotics

Researchers from the University of Michigan report that aspirin may be helpful in preventing the hearing loss side-effects of certain common antibiotics. Streptomycin, gentamicin and neomycin are known to cause hearing loss by damaging the inner ear hair cells. Studies in China suggest that antibiotics have caused two-thirds of deaf-mutism cases in southeastern China. The University of Michigan group found that salicylate appears to block this damage in guinea pigs. Clinical trials involving aspirin and these antibiotics are now underway in human guinea pigs.<sup>9</sup>

9. United Press, July 13, 1999, reporting on the work of Jochen Schacht of the University of Michigan.

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#### Fish Oil for the Heart

A study published in *The Lancet*<sup>10</sup> reports that fish oil offers a relatively quick benefit to the cardiovascular system. This research involved over 11,000 men and women who had suffered a heart attack during the previous three months. Over the next 3 1/2 years, patients taking one gram of omega-3 rich fish oil capsules were 30 percent less likely to die from a heart-related problem. The study also tried to correlate vitamin E supplementation to cardiac benefits, but no clear relationship was seen during the course of this study.

10. *The Lancet*, August 7, 1999.

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#### Adult Growth Hormone Therapy

In the wake of early studies that suggested high doses of growth hormone might benefit critically ill patients, doctors at many hospitals have begun using it in post surgical, intensive care, bacterial infection and gastrointestinal patients. Unfortunately, two new studies indicate that this may not be a good idea.<sup>11</sup> While these studies suggest that growth hormone may speed recovery in burn and physical trauma victims, it appears to increase the death rates of other patients.

In the combined pool of 522 patients involved in the two studies, the death rate was doubled for those given the growthhormones compared to the placebo group. The treatment also prolonged the time patients remained on a respirator or spent in intensive care.

11. *New England Journal of Medicine*, September 9, 1999.

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#### Sports Injuries and the Brain

Research published in the *Journal of the American Medical Association*<sup>12</sup> suggests that mild head trauma associated with sports such as soccer and football has a lasting effect on brain function. Amateur athletes involved in these sports were compared to similar athletes who participated in swimming and running.

Athletes playing physical contact sports scored lower on memory and planning ability tests three times as often. Those scoring the lowest had suffered more than one concussion or had returned to the playing field immediately after a head injury. Researchers say that a second injury inflicted to the brain before an earlier one heals is far more severe than two individual injuries separated by a lengthy time frame.

12. *JAMA*, September 8, 1999.

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### Vitamins for Preeclampsia

A study published in *The Lancet*<sup>13</sup> reports that vitamins C and E have a protective effect against preeclampsia. Women at high risk of the disorder who were given supplements (1,000 mg of vitamin C, 400 IU of vitamin E daily) experienced the problem at less than half the rate of a placebo group. Three hundred women were involved in the study. A similar but larger study is now being planned to verify the results.

13. *The Lancet*, September 4, 1999.

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