

DC Online

Brian Sutton, DC

Mental Activity Fights Alzheimer's Disease

A report in *Neurology*¹ concludes that better-educated people are more resistant to the effects of Alzheimer's disease. In this study of 130 clergy members, the mentally debilitating effects of the disease were compared to physical changes found in subsequent autopsies. The amount of Alzheimer's-related plaquing usually corresponds to the cognitive abilities of the patient during the end stages of the disease, but this study found that those with higher levels of education had fared better on their cognitive tests than the autopsy results suggested.

Another study published in *The New England Journal of Medicine*² reports that the risk of dementia, including Alzheimer's disease, decreases when a person is more mentally active. For example, doing the Sunday crossword puzzle each week may reduce the risk of dementia by 7 percent. Overall, this study of 469 elderly individuals found that the most mentally active third of the subjects were much less likely to develop dementia than the other two-thirds. Other beneficial mental activities included reading, playing cards or board games, and playing a musical instrument. The researchers found no effect from physical exercise except for dancing, which provided a similar benefit.

1. *Neurology*, June 24, 2003.
2. *NEJM*, June 19, 2003.

Can Certain Foods Reduce the Risk of Alzheimer's?

Research from a Chicago hospital³ suggests that meals rich in fish, nuts and oily salad dressings may reduce the risk of Alzheimer's disease. This seven-year study of 815 nursing home residents found that individuals who habitually consumed these foods at least once a week were 60 percent less likely to develop the disorder. The researchers hypothesize that the fatty acids in such items are part of the makeup of the brain cell membranes, explaining why they offer some resistance to the disease.

1. Archives of Neurology, July 2003. <http://archneur.ama-assn.org/cgi/content/abstract/60/7/940>.

Fiber and Bowel Cancer

Here is yet another study relating to the on-again, off-again link between dietary fiber and resistance to bowel cancer. This investigation involved probably the largest sampling of patients to date: approximately 500,000 people from 10 European countries. People who consumed five or more portions of fruit and vegetables a day, plus the equivalent of five slices of whole meal bread, had a 40 percent lower rate of developing bowel cancer than other subjects. Other studies that

have shown little correlation between dietary fiber intake and bowel cancer risk did not supply enough fiber in the diet to achieve the results seen in this study, according to these authors.⁴

1. Reuters, May 2, 2003, reporting on the work of Professor Sheila Bingham, head of the diet and cancer group at the British Medical Research Council's Dunn Human Nutrition Unit in Cambridge, England.

Exercise Prescriptions

The American Heart Association (AHA) says doctors should routinely prescribe exercise as a way to lower blood pressure and prevent heart disease. Most doctors don't, even though such measures often work just as well as the drugs they prescribe. "One problem is that doctors are not trained in preventing disease, but only in treating it,"⁵ commented one of the AHA statement's authors, who also noted that there are few sales reps that train physicians to promote exercise instead of drugs. The AHA's recommendation is based on data from 44 different studies.

1. Reuters, reporting on an interview with Dr. Paul Thompson of Hartford Hospital in Connecticut.

A Mother's Care Can Last a Lifetime

Researchers at McGill University in Montreal report that the amount of care and attention given by mothers to their infants can impact the children's stress levels for the remainder of their lives. This study was performed on rats, but the researchers suspect the results may also apply in some manner to humans. They found that when mothers licked the baby rats more frequently, they became less anxious adults and tended to produce lower levels of stress hormones. They also formed more cortisol receptors in their brains. To rule out genetic factors, the researchers tried swapping the babies around, so that the mothers who licked frequently (up to five times as often) raised pups that were born of mothers more stingy with the tongue; similar results were noted. Finally, they found that removing the mothers altogether after birth and using a paintbrush to stimulate the pups also produced comparable results.⁶ (I wonder now if I was wrong to get upset with my mom when she said I "needed a good lickin.")

1. Associated Press, June 8, 2003, reporting on the work of Professor Michael Meaney.

Do-It-Yourself CPR

A researcher from Poland⁷ is promoting a method of self-CPR that may save your life in the event of a heart attack. The technique, which has been around for a while, but is not widely known, is called "Cough CPR." Most cardiac arrests happen at home, and the victim, who is often alone, may have less than a minute to call for help before falling unconscious. In his study, the researcher trained 115 people to recognize the symptoms of a heart attack, and instructed them to cough strenuously and rhythmically if they began to feel faint during a suspected cardiac arrest. The patients used the technique 365 times; all outcomes were successful, and medical intervention was required in only 73 cases. The coughing exerts pressure on the heart, forcing it to pump passively; apparently, this pressure is enough to maintain live-saving circulation until help arrives or, as has been observed in some cases, the normal heart rhythm returns.

1. Dr. Tadeusz Petelenz, a professor at Silesian Medical School in Katowice, reported by Associated Press, Sept. 2, 2003.
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Medical Errors Consistent

Research from the Commonwealth Fund, a New-York-based foundation that studies health policy, suggests that although health care systems vary greatly between the United States, Britain, Canada, Australia and New Zealand, medical malpractice complaint patterns are all very similar.⁸ They found that from 18 percent to 28 percent of those surveyed had suffered from a medical or drug error in the previous two years. In addition, the error rate rose as the patient consulted more doctors. While the percentages were generally consistent from country to country, the worst scores were typically seen in the United States, something the authors attributed to its lack of universal health coverage. The study involved 750 patients from each country.

1. Health Affairs, May/June 2003. www.healthaffairs.org.
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Diabetic Heart Failure

A study published in the *Mayo Clinic Proceedings*⁹ warns that two popular drugs used in the treatment of type-2 diabetes can cause pulmonary congestion and heart failure in some patients. The medications (sold under the brand names Avandia and Actos)¹⁰ induced the problem in patients with poor kidney or heart function. Approximately 6 million Americans each take one of these drugs.

1. www.mayo.edu/proceedings/2003/sep/sep2003.html.
 2. Reuters, Sept. 9, 2003.
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Walking for Life

The U.S. Centers for Disease Control and Prevention reports that current research shows that victims of adult-onset diabetes can lower their risk of premature death by nearly 40 percent by simply walking briskly for two hours each week. The report is based on studies of more than 2,800 patients (near the age of 60) who had been diagnosed with diabetes for an average of 11 years. Even better outcomes were reported for those who walked three to four hours per week at a sufficient pace to increase their heart rate and respiration.¹¹

1. Reuters, June 24, 2003.
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The Fatted Kid

We all know that America's youngsters are much heftier, on average, than in the past, but now, a new study has quantified one of the reasons: a decline in exercise. Research outfitted nearly 2,000 grade-school children in the United States, Sweden and Australia with pedometers and compared the readings to each child's body-mass index. The most active children were in Sweden, where they took about 33 percent more steps each day than American children, who were the least active.¹² The heaviest children in the study were from the U.S. The researchers blame much of the inactivity on a lack of safe walkways and bike paths, which leads to an increasing dependence on parents for

transportation.

1. *Medicine and Science in Sports and Exercise*, August 2003.
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New Anti-Antibiotic Strategy

The U.S. government, frustrated with the continued indiscriminate prescription antibiotic by licensed medical doctors, is starting to change its strategy. A new campaign is underway to appeal directly to parents to ask their doctors to not give antibiotics to their children for conditions for which they would be useless, such as a cold or flu. By some estimates, as much as 40 percent of antibiotics are prescribed for virus infections. Commenting on the antibiotic-abusing doctors, a spokeswoman from the Centers for Disease Control said, "If a patient comes in with strong expectations, it is tempting - and takes less time - to write the prescription for antibiotics."¹³ The CDC is asking parents to insist that their doctors use good medical judgment! This is in a country in which children can be taken away from parents who don't follow medical advice.

1. Dr. Julie Gerberding, quoted by the Associated Press, Sept. 17, 2003.
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Live and Let Diet

You've probably heard of some of the studies reporting that laboratory animals live longer if their food intake is restricted. Now a new study¹⁴ suggests that the benefit will still occur even if the restriction doesn't happen until middle age. (Lucky us!) The study was done on fruit flies, but the researchers think that subsequent studies will show similar results with mammals and probably humans. The flies on restricted diets, whether the restriction began at early life or middle age (about three weeks, for a fruit fly), lived twice as long as those on a normal diet. But before you start your new meal planning, be aware that laboratory animals on the restricted diet also lost interest in procreation. The researchers wonder if maybe some of the increased life span comes from the reduced stress and energy expenditures of reproduction.¹⁵

1. *Science Magazine*, Sept. 19, 2003.
2. www.sciencemag.org/content/vol301/issue5640/index.shtml.

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