

DC On-Line

Brian Sutton, DC

Fish Oil for Manic Depression

Researchers from Harvard University's McLean Hospital report a marked improvement in manic depressive patients given a dietary supplement containing fish oil. Researchers described the effect as "very strong."¹ The study² involved 30 patients over a four-month period. Half received fish oil capsules (up to 10 grams daily, derived from a type of herring), half received olive oil (as a placebo). Psychological tests were performed at two week intervals. The researchers believe that the benefit is from omega-3 fatty acids, which bolster serotonin levels, possibly through some mechanism involving reinforcement of the brain cells' lipid bilayers.

1. Reuter interview, May 14, 1999.

2. Stoll AS, Severus WE, Freeman MP, Rueter S, Zboyan HA, Diamond E, Cress KK, Marangell LB. Omega 3 fatty acids in bipolar disorder: a preliminary double-blind, placebo-controlled trial. *Arch Gen Psychiatry* 1999;56:407-412

Diabetic Epidemic

Type II diabetes is being described as a "worldwide epidemic" by spokesmen from the Centers for Disease Control and Prevention (CDC).³ Over the next 30 years, the rate is expected to increase by 42 percent in developed countries. Developing nations are starting to catch up. They are projected to experience a 170 percent increase in the disorder.

In the United States, 200,000 people die each year from diabetic complications, making it the sixth official leading cause of death. Sixteen million are currently diagnosed with diabetes, 90 percent of which are of the type II variety. The head of one diabetic research organization⁴ notes that the problem is due mostly to obesity and inactivity. NIH is seeking from Congress an 87 percent increase in funding to study the problem.

3. Reuter, May 14, 1999.

4. Ronald Kahn, head of the Diabetes Research Working Group.

Lights in the Nursery

Researchers from the University of Pennsylvania Medical School report that a period of total darkness each night may be required for proper development of a child's eyes during the first few years of life. They surveyed 479 children at an eye clinic to determine their sleeping environment and found that among those who had routinely slept with a room light on, more than half developed nearsightedness. A small night light was associated with a 34 percent incidence of myopia, while

those sleeping in total darkness were nearsighted only 10 percent of the time.⁵

5. *Nature*, May 1999.

Youth Activity and Bone Density

A study⁶ of tennis players who started playing the game at an average age of 11 suggests that activity during youth has a lasting effect on bone structure. Using bone density measurements that compared the two arms of each athlete, researchers established a baseline during the players' peak training years. When the tests were repeated two years after competition had ended, the bone mass proportions were virtually identical. Although the subjects were still playing, they were spending an average of less than half as much time on the court. This and similar research suggests that osteoporosis may become an increasing problem as children become more sedentary and more and more schools do away with active physical education classes.

6. *Medicine and Science in Sports and Exercise*, May 1999.

Pass the Water

A new study of close to 48,000 male health professionals suggests that bladder cancer is influenced by fluid intake.⁷ A higher fluid intake, especially of water, seems to decrease the risk in a somewhat proportional manner. The study concludes that, on average, each glass of water (per day) decreases the risk of bladder cancer by seven percent. It is thought that diluted urine decreases the bladder wall irritation caused by chemicals being held there. Researchers did not find any increased risk of bladder cancer attributable to coffee or alcohol consumption. Smoking was a factor, nearly quadrupling the risk. Fruit juices, for some as-yet unknown reason, seemed to increase the risk very slightly.

7. Michaud D, Spiegelman D, Clinton S, et al. Fluid intake and the risk of bladder cancer in men. *N Engl J Med* 1999;340:1390-7.

Study Reports Acceptance of Unresearched Drugs

Researchers from the University of North Carolina at Chapel Hill are questioning the casual prescription of serotonin selective reuptake inhibitors (SSRIs) to hundreds of thousands of children each year. "Our survey data suggests that despite a lack of research support, adequate training and comfort with the management of depression, SSRIs are gaining physician acceptance and becoming incorporated into primary care practice," said a university spokesman recently.⁸ He warns that it is not prudent to use these drugs for "school problems or nebulous behavioral problems."

While SSRIs are approved for patients over 18 years of age, there is little scientific evidence that they are safe and/or effective for mental illness in children. These drugs, which include Ritalin and Prozac, are known to cause sleep disturbances and untoward behavioral changes in children. Nothing is known about their effect on developing nervous systems. They are frequently prescribed

in the U.S. to treat children for hyperactivity and ADD, obsessive-compulsive disorder, aggression-conduct disorder and even bed-wetting.

8. Jerry Rushton, a researcher quoted by Reuters news service, May 1, 1999.

More Liposuction Deaths

A report in the *New England Journal of Medicine*⁹ describes the deaths of five patients in the New York City area during or soon after liposuction. The problem appears to be due to lidocaine, which is injected into the fatty area to loosen the fat cells prior to suction. If lidocaine moves into the bloodstream too quickly, it can cause the patient's heart to stop. The author of this report suggests that since there is no mandatory reporting or review of adverse events associated with liposuction, deaths attributed to the procedure may be greatly underreported.

9. Rao R, Ely S, Hoffman R. Deaths related to liposuction. *N Engl J Med* 1999;340:1471-5.

Hepatitis B Defense

Researchers from the Scripps Research Institute in La Jolla, California,¹⁰ have discovered that the immune system can combat hepatitis B infection. They have found that the body is able to stop the virus without destroying the host cells. Something in the immune system allows it to "cure certain viral infections by instructing the infected cells to stop producing virus and to accelerate viral elimination."¹¹ The study was funded by the National Institute of Allergies and Infectious Diseases.

10. Drs. Luca Guidotti and Francis Chisari.

11. Reuter, April 29, 1999.

Inhaler-Induced Heart Attacks

A doctor from the University of Seattle¹² reports a high level of heart attacks in persons using asthma inhalers, especially for the first time. Normally, persons with a history of heart disease are three times more likely to suffer a heart attack than the average citizen. However, it appears that first-time users of beta agonist inhalers are seven times as likely to suffer an attack, even without a previous history of heart disease. There are a couple of possible explanations:

1. Beta agonists are known to increase heart rate and contraction strength, both of which can stimulate a heart attack in a susceptible person.
2. Another likely reason, says this doctor, is that physicians faced with a patient exhibiting signs of chest discomfort and shortness of breath may use an inhaler as a diagnostic test. In other words, they try an inhaler to see if it helps. In a patient with latent heart disease, this can be fatal (see #1 above).

12. Dr. David H. Au, presenting to the annual conference of the American Lung Association/American Thoracic Society in San Diego, April 27, 1999.

Asthma Inducers

Two studies presented at the American Lung Association/American Thoracic Society conference this past April suggest contributing factors to the increased incidence of asthma in industrialized countries. One study¹³ of 16,000 children suggests, as have earlier studies, that excessive weight makes a child more than twice as likely to have the breathing disorder. It is thought that shallow breathing (due to restricted lung space and/or lack of exercise) somehow makes airways more susceptible to irritants.

An Australian study of more than 2,800 children points to another factor: lack of, or early termination of, breastfeeding.¹⁴ The researchers involved in this study suspect that breastfeeding interacts with a child's immune system to create a healthier respiratory system.

13. Study led by Harvard researcher Carlos Camargo.

14. Wendy H. Oddy, et al. of the TVW Telethon Institute for Child Health in West Perth, Australia.

Literary Therapy

A study published in the *Journal of the American Medical Association*¹⁵ concludes that patients with chronic conditions such as arthritis and asthma tend to improve after putting past stressful incidents from their lives onto paper. A group of 112 patients was divided into two groups: one wrote for a total of one hour (20 minutes a day for the first three days of the study) about a terrible experience, such as the death of a loved one or a car wreck. The other wrote about their plans for the day. The patients were tested for four months.

Nearly 50 percent of the patients who wrote about their stresses improved significantly by the end of the study, compared to less than one quarter of the other group. You might also be interested to know that more than 20 percent of the group writing their daily plans were worse at the end of the study; less than five percent of those writing about past stressful events deteriorated. Other findings: improvements were noted in the asthmatics' lung capacities in about two weeks; the arthritis patients took the entire four months to improve.

15. Smyth J, Stone A, Hurewitz A, Kael A. Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis. *JAMA* 1999;281:1304-1309.

Early Smoking

A new study¹⁶ concludes that there is an amount of DNA damage attributable to smoking that never gets repaired, even after the habit is kicked. The exact amount of this damage does not seem to depend on how often a person lights up or for how many years, but at what age the smoking started. Smokers who had started by age 15 showed twice the DNA damage as those who began in their 20s. One researcher commented, "There is something uniquely bad about starting young."¹⁷ Other studies have shown that smoke in developing lungs stunts their growth, increases breathing problems, and is more addictive.¹⁸

16. *Journal of the National Cancer Institute*, April 1999.
17. John K. Wiencke, genetics expert at the University of California, San Francisco.
18. Associated Press, April 6, 1999.

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