

DC On-Line (Chiropractic Research)

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Cardiac Medication Shows No Effect on Mortality

A three year study of digoxin, a cardiac medication derived from digitalis, concludes that the drug has no effect on mortality when used to treat patients with heart failure. The study, published in the New England Journal of Medicine,¹ found that an identical death rate of 35 percent was seen in patients that were given placebos and those given the digoxin. The study did note, however, that there were six percent fewer hospitalizations in the digoxin group. In light of recent studies that correlate risk of injury and death to hospital stays, one could wonder how much better the placebo group would have fared had the researchers adjusted for "hospitalization."

Plant Communication

Researchers at Rutgers University have found that some plants seem to be able to warn their neighbors about a virus. Tobacco plants infected with the mosaic virus produce methyl salicylate (oil of wintergreen), which evaporates. Neighboring plants absorb the compound, which causes them to dramatically increase production of salicylic acid (up to 300 times normal), which helps to block infection.² Previous research has shown that tomato plants respond to vapors released by certain plants under attack by insects by making their leaves less palatable.

Heroin Vapor

Inhalation of heroin vapor, a practice called "chasing the dragon," poses some substantial risks to drug abusers trying to avoid needle-transmitted HIV. The New England Journal of Medicine³ warns that it causes degeneration of the brain's white matter that continues even after the patient discontinues the practice. This causes inability to perform simple motor functions. The paper reports on one case that left a patient mute and predominately quadriplegic. The death rate is 25 percent.

Eat Less to Survive Longer

In the June 17, 1996, issue of this column I reported on the preliminary results of a study correlating lower food intake to longevity. The work has now been completed and the results are in. Researchers at the National Institute on Aging in Bethesda, Md., studied 200 rhesus and squirrel monkeys over the past ten years. Half were allowed to eat as much as they desired, the other half were given about 30 percent less. The scientists looked at 125 indicators of health status such as hormone levels, immune system strength, and lipoproteins. One striking finding was that

the freely fed monkeys had half the level of HDL (the "good" cholesterol) as those on the restricted diet. The underfed animals also had lower blood pressure and utilized insulin more efficiently. One researcher speculated that caloric restriction in humans could add 20-30 years of life, in light of this study.⁴

Leaky Implant Test

Tulane University researchers have developed a blood test that can indicate a leaking silicone breast implant. The test detects antibodies formed in response to the silicone. This study suggests that there may indeed be some merit to the claims of the over 400,000 women who report symptoms that they blame on the devices.⁵

Diet, Exercise, Stress Management = Health Heart

A treatment used on cardiovascular patients in a study funded by the Mutual of Omaha insurance company is showing some impressive results. Chest pain was eliminated in 65 percent of the subjects; arterial blockages were stopped or reversed in two thirds. The company says that medical costs were reduced by an average of more than \$13,000 per patient in a three year period. The treatment used was a diet (created by Dr. Dean Ornish),⁶ exercise, and stress management. The Ornish diet eliminates meat, chicken, and nuts, and reduces fat intake to 10 percent of calories.⁷

Smoking and Drug Use Linked

A Florida study has found that teenagers who smoke are also much more likely to be involved in illegal drug and alcohol usage. The survey of 22,000 middle and high school students found that smokers are eight times more likely to be using cocaine; six times more likely to smoke marijuana; and drink alcohol three times as often as non-smokers. It is estimated that more than 85,000 children and adolescents in Florida are candidates for drug or alcohol treatment programs.⁸

Sleep Patterns and Mood

Two studies published in the Archives of General Psychiatry⁹ suggest that a person's biological clock has a great deal of impact on mood. The conclusions are that shift work or frequent time zone changes lead to depression or irritability when one is awake at a time when the body thinks it should be sleeping. The study confined volunteers to laboratories where their sleep/wake cycles were extended to 28-30 hours. Researchers hope the data will lead to better ways to treat depression.

Fiber and Diabetes

A study of 65,000 nurses 40-65 years of age concludes that a high sugar and/or low fiber diet increases the risk of diabetes. Women who consumed the most sugar and least fiber were 2.5 times more likely to develop the condition than those whose diets consisted primarily of "low glycemic load" foods. This study, done at Harvard University Medical School,¹⁰ follows an earlier one by Israeli researchers with similar findings.

British Health Authority Polling Citizens on Chiropractic

Buckinghamshire citizens were recently given the chance to voice their opinions on chiropractic treatment in a new use of the Internet. A "citizen's jury" was convened by the health ministry to investigate the value of chiropractic and osteopathic care. Statements from witnesses were posted on a web site sponsored by the London Museum of Science, as well as daily discussions. Local residents were invited to enter their comments from their computers over a two week period. One statement posted on the site was a testimonial from a chiropractic patient who had good success after traditional medicine had failed.¹¹

Teenagers' Health Declining

A researcher from the University of California in San Francisco¹² says that teenagers are becoming less healthy, mostly from preventable causes. Injuries and violence are replacing illness as the main cause of death. Poor nutrition (e.g., junk food), risky sex, drug abuse, lack of exercise, and bad driving habits are all contributing to the early demises. Nationwide, one third of all male students report that they carry a weapon. About one fourth of all high school students are heavy drinkers.¹³

Research May Prevent Some Premature Deliveries

Researchers at Mount Sinai School of Medicine hope to save some babies from premature delivery by giving obstetricians this news: twins conceived by artificial insemination techniques may grow at different rates. Doctors are often uneasy when they see different size babies in the same womb and suspect problems. This study reminds them that the genetic material may come from different parents and thus development may proceed quite differently, something you might have thought they would already understand. Now this report makes it official.¹⁴

References

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