

September 15, 2009 -- In One Study, a Heart Benefit for Chocolate -- By NICHOLAS BAKALAR
<http://www.nytimes.com/2009/09/15/health/15choc.html>

In a study that will provide comfort to chocoholics everywhere, researchers in Sweden have found evidence that people who eat chocolate have increased survival rates after a heart attack — and it may be that the more they eat, the better.

The scientists followed 1,169 nondiabetic men and women who had been hospitalized for a first heart attack. Each filled out a standardized health questionnaire that included a question about chocolate consumption over the past 12 months. Chocolate contains flavonoid antioxidants that are widely believed to have beneficial cardiovascular effects.

The patients had a health examination three months after their discharge from the hospital, and researchers followed them for the next eight years using Swedish national registries of hospitalizations and deaths. After controlling for age, sex, obesity, physical inactivity, smoking, education and other factors, they found that the more chocolate people consumed, the more likely they were to survive. The results are reported in the September issue of The Journal of Internal Medicine.

But before concluding that a box of Godiva truffles is health food, chocolate lovers may want to consider some of the study's weaknesses. It is an observational study, not a randomized trial, so cause and effect cannot be definitively established.

Even though the researchers controlled for many variables, chocolate consumption could be associated with factors they did not account for — mental health, for example — that might reduce the risk for death.

The scientists did not ask what kind of chocolate the patients ate, and milk chocolate has less available flavonoid than dark chocolate. Finally, chocolate consumption did not reduce the risk for any nonfatal cardiac event.

Still, Dr. David L. Katz, an associate professor of public health at Yale who was not involved in the work, said the study added “an interesting element, following a group of adults who've had a heart attack and noting an impressive reduction in cardiac deaths.” While the study is observational, he said, “the broader context is reassuring.”

While the chocolate eaters in the study had a statistically insignificant reduction in the risk of death from any cause over the eight-year span, the reduced risk for dying of heart disease was highly significant. And it was dose-dependent — that is, the more chocolate consumed, the lower the risk for death.

Compared with people who ate none, those who had chocolate less than once a month had a 27 percent reduction in their risk for cardiac death, those who ate it up to once a week had a 44 percent reduction and those who indulged twice or more a week had a 66 percent reduced risk of dying from a subsequent heart event. The beneficial effect remained after controlling for intake of other kinds of sweets.

A co-author of the paper, Dr. Kenneth J. Mukamal, an associate professor of medicine at Harvard, said that there was considerable data from other studies suggesting that chocolate lowered blood pressure and that this might be a cause of the lower cardiac mortality found in the study.

Dr. Katz, of Yale, agreed that “there are many reasonable biological mechanisms” for a protective effect from chocolate.

“I like the study,” he said. “It adds to the general fund of knowledge we already have.”

Dr. Mukamal sounded a note of caution about the findings.

“Although this is interesting and provocative, chocolate does not come without costs,” he said. “For people looking for a small snack to finish a meal, this is a great choice. But it should be supplementing healthy eating and replacing less healthy snacks.”

Shot beats nasal spray in adult seasonal flu vaccine trial -- Robert Roos, News Editor

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/sep2909flumist-jw.html>

Sep 29, 2009 (CIDRAP News) – While there is evidence that the live nasal-spray vaccine for seasonal influenza works better than injectable vaccine in children, the injectable vaccine was found to be more effective in a trial in close to 2,000 young adults, according to a recent report in the *New England Journal of Medicine*.

Researchers led by Arnold Monto of the University of Michigan report that trivalent influenza vaccine (TIV, the injectable vaccine) was 68% effective and the live attenuated vaccine (LAIV) was 36% effective in preventing lab-confirmed flu in the study volunteers during the 2007-08 flu season.

The US government has ordered supplies of both injectable and intranasal vaccines against the pandemic H1N1 virus. Most of the supply will be the injectable form, but many of the first doses, expected to reach providers next week, will be the nasal-spray type.

Study showed 50% better protection for shot

The study was part of a 4-year randomized trial that began in 2004. The team recruited 1,952 volunteers between the ages of 18 and 49 for the study in the fall of 2007 (FluMist is currently approved for ages 2 through 49). The study took place on four university campuses in Michigan, and the mean age of the participants was 23.3 years.

The volunteers were randomly assigned to a TIV group, an LAIV group, or one of two corresponding placebo groups, with the vaccine groups five times as large as the placebo groups. About 62% of the volunteers were women, and 37.5% had received a flu shot at some time in the past.

Sanofi Pasteur provided the injectable vaccine, Fluzone, for the trial, while MedImmune provided FluMist. Several of the authors report having received grant support or lecture fees from Sanofi Pasteur.

One hundred nineteen volunteers (6.1%) had a case of lab-confirmed flu during the 2007-08 season, the report says. Of the 119 cases, 108 were A/H3N2, 1 was A/H1N1, and 11 were influenza B. Nationally, the season brought a fairly high rate of flu, mostly H3N2.

The absolute efficacy of the injectable vaccine against all types of flu was calculated at 68% (95% confidence interval [CI], 60% to 81%), while that of LAIV was 36% (95% CI, 0 to 59%), the report says.

In a comparison of the two vaccines, TIV was 50% more effective than LAIV, the authors calculated.

When the team looked at protection against influenza A strains only, TIV was found to be 72% effective (95% CI, 49% to 84%) and LAIV was 29% effective (95% CI, -14% to 55%).

There were too few cases of influenza B to allow a reasonable analysis, but the results suggested that neither vaccine was significantly better than placebo, the report says.

The authors write that the earlier years of their 4-year trial suggested that injectable vaccines worked better than the nasal spray form against influenza A, but the finding weren't conclusive. In contrast, "The current data provide clear evidence of significant differences between the two vaccines in providing protection against influenza A (H3N2) virus," they state. However, conclusive evidence about the two vaccines' effectiveness against type B is not yet available, they add.

Exactly why LAIV seems less effective in adults than in children is not yet clear, but it could be that live attenuated viruses are less able to infect adults because of their past exposure to similar strains of flu, the report says.

Experts add notes of caution

Lone Simonsen, PhD, a disease researcher who was not involved in the study, said the findings suggest that FluMist offered protection against influenza B, though the authors didn't find a significant effect. Simonsen is a research professor and research director in the Department of Global Health at George Washington University.

"The LAIV vaccine appeared to protect adults well against influenza B (vaccine effectiveness = 90%) in this study, albeit with borderline significance—probably explained by low circulation of influenza B in the study season," she said by e-mail.

... VISIT WEBSITE FOR CONTINUED ARTICLE ...

Monto AS, Ohmit SE, Petrie JG, et al. Comparative efficacy of inactivated and live attenuated influenza virus. *N Engl J Med* 2009 Sep 24;36(13):1260-7 [[Full text](#)]