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In One Study, a Heart Benefit for Chocolate

By NICHOLAS BAKALAR
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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.



Andrew Rodriguez

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.

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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."

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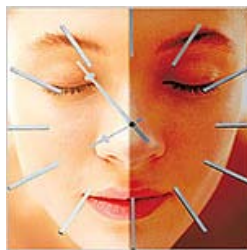


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