

Davis et al. (2015) set out to empirically test the popular saying “an apple a day keeps the doctor away.” Apples are often used to represent a healthy lifestyle, and research has shown their nutritional properties could be beneficial for various aspects of health. The authors’ unique approach is to take the saying literally and ask: do people who eat apples use healthcare services less frequently? If there is indeed such a relationship, they suggest, promoting apple consumption could help reduce healthcare costs.

The study used publicly available cross-sectional data from the National Health and Nutrition Examination Survey. Participants were categorized as either apple eaters or non-apple eaters based on their self-reported apple consumption in an average 24-hour period. They were also categorized as either avoiding or not avoiding the use of healthcare services in the past year. The data was statistically analyzed to test whether there was an association between apple consumption and several dependent variables: physician visits, hospital stays, use of mental health services, and use of prescription medication.

Although apple eaters were slightly more likely to have avoided physician visits, this relationship was not statistically significant after adjusting for various relevant factors. No association was found between apple consumption and hospital stays or mental health service use. However, apple eaters were found to be slightly more likely to have avoided using prescription medication. Based on these results, the authors conclude that an apple a day does not keep the doctor away, but it may keep the pharmacist away. They suggest that this finding could have implications for reducing healthcare costs, considering the high annual costs of prescription medication and the inexpensiveness of apples.

However, the authors also note several limitations of the study: most importantly, that apple eaters are likely to differ from non-apple eaters in ways that may have confounded the results (for example, apple eaters may be more likely to be health-conscious). To establish any causal relationship between apple consumption and avoidance of medication, they recommend experimental research.