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Multivitamins – Hype or Health?

The discovery of vitamins sparked a transformation in the way dietary and nutritional health was perceived. Since their unearthing, vitamins have emerged as vital ingredients in the recipe for ultimate wellbeing. In recent years, the multivitamin industry has boomed – more than half of all Americans take a dietary supplement and over a third take a multivitamin or multimineral, which typically contains large amounts of micronutrients that sometimes exceed daily recommended vitamin intakes. Americans are hooked - multivitamins are thought to prevent the risk of cardiovascular disease, diabetes, and cancer. However, media organizations and news companies disagree – New York Times headlines like “Don’t Take Your Vitamins” and “Skip the Supplements” assert that vitamin supplements have no real use to human health. These articles urge the public to stop wasting their money on useless pills.

In an attempt to gauge the true impact of multivitamins on human health, this paper will evaluate three major aspects of vitamin use: the characteristics of vitamin users in American society, trends in dietary supplement and multivitamin intake, and the effect of particular vitamins on human health indicators such as cognitive health and heart disease risk. The nature of American multivitamin users was found using several hypothesis tests; the results from these tests indicated that users were predominately female and over the age of 40. Trends in multivitamin users were evaluated using a linear regression test and graphical displays – these charts portrayed the multivitamin user population as largely elderly with a growing number of middle-aged users. Utilizing data from recent studies, the effect of vitamins and multivitamins on human health was measured through hypothesis tests and confidence intervals. These tests revealed that strong correlations between vitamin intake and improved health in the average person did not exist. However, vitamins may prove beneficial in the elderly or the deficient.