

“Expert” Advice On Dietary Supplements

Tianna N. Wikert, Katelynn C. Kletzli, Amy D. Rickman, Jeffrey S. Lynn. Slippery Rock University, Slippery Rock, PA

The incidence of dietary supplement use is high amid the US population. Seventy-eight percent of American adults have used at least one dietary supplement within the past 12 months. Supplements are regulated as food, not drugs, and their safety and effectiveness are often unknown. **Purpose:** This study aimed to evaluate the safety and effectiveness of advice provided by pharmacists and retailers. A secondary purpose was to evaluate whether either recognized symptoms associated with serious cardiovascular concerns and if appropriate follow-up advice was given. **Methods:** Two college-aged women of normal BMI visited 51 pharmacies and 22 retailers with a standardized script that included a desire to lose weight, a lack of energy, and the presentation of multiple, potential cardiovascular disease symptoms. Immediately upon departure, all data from the advice given were recorded. Data were then uploaded into a spreadsheet for analysis. **Results:** Descriptive analyses revealed that 44.2% of pharmacists and 100% of retailers recommended supplements, and only 35.6% of all advice suggested the creation of a negative energy balance. A total of 50 different supplements, with multiple repeats, were recommended. Cardiovascular symptoms were directly addressed by 4.1% of pharmacists and 0% of retailers. Further, 25.5% of pharmacists and 0% of retailers made a referral to a physician. Eleven percent of the time, symptom interpretation by pharmacists and retailers led to misdiagnoses of asthma (n=4), dehydration (n=1), electrolyte imbalance (n=1), allergies (n=1), or vitamin deficiencies (n=1), while, 75.3% of the time, symptoms were ignored entirely. **Conclusions:** Given the high percentage of dietary supplement usage in the United States and the lack of appropriate advice, consumers must use extreme caution when interpreting information from pharmacists and retailers. Supported by two Slippery Rock University grants: Norton Undergraduate Research Scholarship and Grant for Student Research, Scholarly or Creative Achievement Program.