

## Knowledge vs. Habit: Energy Drinks Consumption Among Polish Medical Students

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### Abstract

**Introduction:** The consumption of energy drinks is rising globally, including in Europe. Among university students—particularly those in medical and health-related fields—the use of caffeine-based stimulants is often seen as routine, despite well-documented health risks. Excessive intake has been linked to cardiovascular, neurological, and behavioural issues. This study examines the gap between medical knowledge and personal health behaviours among Polish medical students, highlighting an underexplored public health concern that affects future healthcare professionals.

**Materials and Methods:** A cross-sectional survey was conducted among 1089 students studying medicine, nursing, dietetics and other medical fields at several Polish universities. Participants completed an anonymous questionnaire assessing energy drink consumption patterns, motivations, awareness of potential health risks, and the use of other caffeine sources. The survey also included questions about diagnosed ADHD, adverse reactions to energy drinks, and attention to product labelling.

**Results:** Ninety-three percent of students had tried energy drinks, with 47% consuming them weekly and 12% daily. The main motivations included increasing energy, improving focus while studying, and enjoying the taste. Although 84% of respondents acknowledged the potential health risks, only 29% reported reading nutrition labels, and few adjusted their behaviour based on this knowledge. Notably, 67% experienced side effects such as insomnia, tachycardia, irritability, or fatigue after stopping use. Students with ADHD (11.9%) reported significantly higher intake. The regular consumption of coffee (75%) and tea (60%) indicated a high cumulative stimulant burden.

**Conclusions:** These findings reveal a striking disconnect between health and nutrition knowledge and actual dietary choices among students training to become healthcare and nutrition professionals. The frequent use of energy drinks, despite awareness of their risks, suggests that knowledge alone may be insufficient to influence dietary choices. These findings raise important questions about how lifestyle, stress, and cultural norms around performance and productivity shape stimulant use in student populations globally. As energy drinks remain widely available and aggressively marketed in many countries, further international research and coordinated public health responses are needed to address the rising stimulant burden and to foster healthier, more informed consumption habits across diverse settings.