

# Caffeine Costs: Examining Energy Drink Effect on Mood and Sleep

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## The Problem

Over the past several decades, researchers have investigated the ways energy drinks may affect the human body. Despite the growing popularity of these beverages, many aspects of their health effects are still not fully understood. A recurring question in the research is whether energy drinks are harmful to consumers (Harvard, 2025). However, a definitive answer remains unclear because existing research is often inconsistent, limited in scope, or focused primarily on specific age groups such as adolescents.

Several studies have documented potential detrimental effects associated with energy drink consumption. Research suggests that these beverages may produce both short-term and long-term health consequences due to their high caffeine content, artificial additives, and other stimulants (Costantino et al., 2023). These ingredients have been linked to a range of physiological and behavioral effects, including sleep disruption, irritability, and other mood-related changes.

Despite increasing public health warnings and growing evidence of potential risks, energy drink consumption continues to rise. Many individuals consume these beverages regularly for convenience, taste, or the perceived boost in energy and alertness. Because of this continued use, further research is needed to better understand how energy drink ingredients may influence sleep patterns and mood. Examining these effects may provide additional insight into the potential health implications associated with regular consumption.

## Research Question

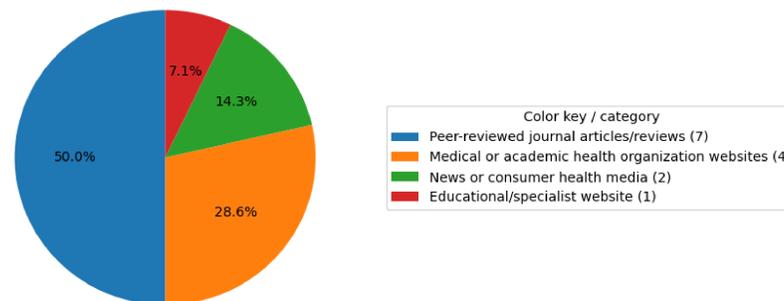
“What affects do energy drinks have on a consumer's mood and sleep habits?”

## Methodology

Energy drink-related health effects were identified through professional research journals and credible web-based academic sources. Articles included in this review were required to be published in English, peer-reviewed, and published within the past ten years. Relevant research articles were located by searching academic databases, including:

- PubMed
- CINAHL
- PsycINFO
- Google Scholar

Search terms used included “energy drinks,” “caffeine consumption,” “sleep disturbance,” “mood changes,” “stimulant beverages,” and “energy drink health effects.” These keywords were used to locate studies examining the relationship between energy drink consumption and its potential effects on sleep patterns and mood.



## Results

A total of 14 sources related to the health effects of energy drink consumption were identified based on the inclusion criteria of English-language, peer-reviewed, and recently published research. Of these sources, seven were peer-reviewed journal articles, four were medical or academic health organization publications, two were news or consumer health sources, and one was an educational website. The literature consistently reported potential health concerns associated with energy drink consumption, particularly due to high caffeine levels and other stimulants. Commonly discussed effects included sleep disruption, mood changes, and cardiovascular impacts. Many studies focused on adolescents and young adults, indicating a research emphasis on younger populations. However, fewer studies directly examined the combined relationship between energy drink consumption, sleep patterns, and mood, highlighting an area that may benefit from further research.

## Conclusion

After reviewing available web sources and research journals, the literature shows growing concern about the health effects of energy drink consumption, particularly related to caffeine and stimulant ingredients. Many studies report potential risks such as sleep disruption, mood changes, and cardiovascular effects, especially among adolescents and young adults. However, research specifically examining the combined relationship between energy drink consumption, sleep patterns, and mood remains limited. Increasing awareness about the possible health impacts of energy drinks may help individuals make more informed decisions about their consumption. Additional research is needed to better understand how energy drink ingredients influence sleep quality and mood over time.

## References

