

A Review on the Effects of Caffeine on Human Health

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Abstract: *Caffeine is one of the most commonly expended psychoactive substances around the world, basically found in coffee, tea, vitality drinks, and different solutions. Its popularity stems from its ability to stimulate the central nervous system, improving alertness, concentration, and mood. This review delves into the complex effects of caffeine on human health, emphasizing both its benefits and potential risks. Regular, moderate caffeine consumption has been linked to reduced risks of neurodegenerative diseases such as Parkinson's and Alzheimer's, enhanced cognitive performance, and improved physical endurance. It also exhibits antioxidant properties that may help combat oxidative stress and support cardiovascular and metabolic health. However, excessive intake can result in adverse effects, including sleep disturbances, heightened anxiety, gastrointestinal issues, and dependency. The impact of caffeine varies widely among individuals, influenced by factors such as genetics, age, and tolerance levels. This variability underscores the importance of personalized recommendations for caffeine consumption. This review aims to provide an in-depth analysis of caffeine's role in human health, balancing its positive and negative effects, and identifying areas for further research to better understand its long-term implications on diverse populations..*

Keywords: Caffeine, human health, cognitive performance, physical performance, neurodegenerative disorders, metabolic function, antioxidant properties, sleep disturbances, anxiety, cardiovascular health.