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Caffeine: A boon or a bane?

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Dear Editor,

Caffeine, the extensively honored central nervous system boost constitute in coffee, tea, and chocolate, has been considerably delved for its different impacts on health (Martyn *et al.*, 2018). While moderate input offers benefits like enhanced mood and alertness (McLean *et al.*, 2010, Mitchell *et al.*, 2014), inordinate consumption poses pitfalls, including headaches, pulsations, and anxiety.

Studies emphasize caffeine's eventuality in precluding conditions like Parkinson's and certain cancers, but overdue daily input can lead to adverse symptoms and increase the threat of death from various causes, including suicide (Jahrami *et al.*, 2020). On comparing the caffeine content of different products, brewed coffee offers 96 mg per 237 ml, while decaf coffee provides only 2 mg in the same serving size. Concentrated espresso coffee contains 64 mg per 30 ml, and decaf espresso contains none. Instant coffee and its decaf interpretation have analogous caffeine situations, accessible for on- the- go consumption. Chocolate options range from 100% cocoa with 240 mg per 2.5 cups to milk chocolate with 45 mg in the same serving size. Green tea and black tea give moderate caffeine kicks with 40 mg and 26 mg independently. Additionally, chewing gum and soda contain 50 mg per 2 pieces and 49 mg per 16oz respectively (Fulgoni III *et al.*, 2015, Mitchell *et al.*, 2014, Tran *et al.*, 2016). These products, along with others listed, contribute to diurnal caffeine intake, emphasizing the significance of moderation for overall health.

The illustration of the chance of caffeine product input across different age groups- 32 for children, 48 for university pupils, 60 for commercial workers, 53 for middle-aged individuals, and 65 for elderly citizens (Branum *et al.*, 2014). These numbers punctuate the wide prevalence of caffeine consumption across various demographics, emphasizing its part as a ubiquitous salutary element throughout different life stages.

Caffeine products carry a range of implicit side goods that individuals should consider. Coffee consumption may lead to headaches, insomnia, unease, perversity, frequent urination, tachycardia, and muscle temblors. Likewise, tea

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consumption can reduce iron absorption, anxiety, insomnia, nausea, heartburn, dizziness, and headaches. Energy drinks, known for their high caffeine content, can catalyse dehydration, irregular heartbeats, anxiety, and insomnia. Furthermore, other caffeine- containing products may contribute to hypertension, tachycardia, dependence, tolerance, and pulsations (McLean *et al.*, 2010)[3]. These side effects emphasize the significance of moderation and mindfulness when consuming caffeinated products, as well as the need for individuals to monitor their caffeine input and its implicit impacts on their health.

In conclusion, while caffeine can offer benefits when consumed responsibly, its implicit adverse effects emphasize the significance of promoting mindfulness and encouraging healthier alternatives. This comprehensive data highlights the ubiquity of caffeine across varied products and age groups, emphasizing the need for a delicate approach to its consumption. By fostering a culture of moderation and seeking substantiated guidance from healthcare professionals; individuals can consume caffeine more effectively, ensuring optimal health across all life stages.

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Conflict of interest

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