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Letter to the Editor

Changes in energy drink consumption during the COVID-19 quarantine

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S U M M A R Y

The present letter to editor comments the manuscript "Caliskan SG, Kilic MA, Bilgin MD. Acute effects of energy drink on hemodynamic and electrophysiologic parameters in habitual and non-habitual caffeine consumers. Clin Nutr ESPEN. 2021 Apr; 42:333–338. https://doi.org/10.1016/j.clnesp.2021.01.011. Epub 2021 Feb 4. PMID: 33745602." presenting some data on consumption of energy drinks among medical students during COVID-19 pandemic.

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Dear Editor,

We have read with great interest the paper "Acute effects of energy drink on hemodynamic and electrophysiologic parameters in habitual and non-habitual caffeine consumers" by Caliskan SG and coworkers [1] and we found it of importance with a view to cardiovascular prevention in young people. This study evaluated the acute hemodynamic and electrophysiological effects of energy drink (EDs) on habitual and non-habitual caffeine consumers. Authors suggested that EDs consumption has a negative effect on hemodynamic parameters. However, as the habituation level increases, the impact of EDs on hemodynamic parameters tends to decrease.

With reference to the findings reported in the paper, we would like to make the following contribution to the discussion. In previous manuscripts we have underline the relationship between EDs and supraventricular arrhythmias, specifically we reported episodes of atrial fibrillation in young subjects [2]. EDs are very popular drinks among young people who take them to increase attention and concentration levels or alternatively during recreational activities, sometimes together with alcohol. During the quarantine of COVID-19, several changes in eating habits have been reported, mainly in young and frail people [3]. In a recent survey we evaluated the changes in the eating habits of pre-graduate students with attention to EDs during the quarantine period induced by the spread of COVID-19 (March–May 2020). The 24% of students reported that an increase frequency and quantity of energy drinks consumption. As reported by Majori and colleagues, EDs users are 18–22 years old and are mostly male (51.8) [4]. During the quarantine we observed an increase in EDs involving both genders. We also found a change in the motivation for taking EDS. Before quarantine the main reason for ED consumption was "to increase attention during exam preparation", while during quarantine the main reason was "to increase attention by playing video games". In the group that reported this increase in EDs consumption, a reduction in sleep was also reported.

We could also speculate that an increase in ED consumption during COVID-19-induced social life restrictions could be a way to cope with stress and boredom.

Our series was composed of young pregraduate students, however we can hypothesize that the effect on the hemodynamic parameters of the EDs, reported by Caliskan SG and coworkers, together with the increase in adrenergic activity induced by stress, may have determined an endothelial dysfunction damage whose effects will be visible in the long term [5]. Unhealthy changes in eating, such as increase in sugar-rich food and drinks, have already led to an increase in obesity in the young population.

We need to act promptly with a series of educational and preventive actions tailored to young people to reduce the damage of an unhealthy lifestyle.

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