

## How to head off a caffeinated energy drink habit

January 29 2020



Credit: Pixabay

Regular consumers of popular caffeinated energy drinks may need help kicking the habit.

New Flinders University research, published in the international journal *PLOS One*, put a form of cognitive incentive retraining—a form of computer-based training aimed at reducing decision-making biases in purchasing energy drinks—to the test on more than 200 regular consumers of energy drinks aged between 18 and 25.

With the powerful marketing by brands such as Red Bull, V, Mother and



Monster, the Australian Research Council-funded research is focusing on finding ways to reduce or combat the rising levels of energy and soft drink consumption.

The training aimed to reduce energy drink consumption by either reducing the extent to which energy drink cans capture the attention of regular energy drink consumers (attentional bias) or reducing the tendency for these consumers to approach energy drinks (approach bias).

"We are keen to expand these trial methods on consumers to combat through their attentional and approach bias towards energy drinks," says Mind, Body and Cognition research leader Professor of Psychology Eva Kemps.

"By giving participants some simple techniques, we examined whether they were prepared to moderate their bias toward choosing energy drinks over soft drinks and more healthy options, and perhaps reduce consumption before they become addicted."

While an occasional energy drink is not problematic, it has been reported that some individuals consume four or more energy drinks a day. Excessive intake can lead to the development of intolerance and serious withdrawal symptoms upon cessation.

Energy drink consumption is rising, with one estimate of it doubling in the past 10-15 years to more than 11.5 billion liters a year globally, with a majority of consumers young adults.

Side-effects of excessive intake of the high caffeine drinks, with other stimulants taurine, guarana and ginseng, can lead to a range of negative physical and mental health consequences, including anxiety, depression, or even stress PTSD and substance abuse.



Reported adverse effects range in severity from headaches to heart palpitations, renal failure, seizures, and in rare cases death.

The 226 volunteers in the study—many of them university students—said they consumed one or more cans a fortnight, for an energy boost, to relieve fatigue, improve sporting or academic performance, or as a party mixer with alcohol.

The training aimed to reduce energy drink consumption by tackling either the extent to which the products capture the attention of regular energy drink consumers (attentional bias) or the tendency for these <u>consumers</u> to approach <u>energy drinks</u> (approach bias).

Attentional and approach biases have been demonstrated for a range of appetitive substances, including alcohol, tobacco, drugs and chocolate.

The research is part of an ARC Discovery Project (2018-21) looking at the role of automatic processing in the (over)consumption of soft drinks, and follows previous attentional retraining research to reduce food cravings and promote healthier eating and weight loss.

The paper, "Cognitive bias modification for energy drink cues," by E Kemps, M Tiggemann, M Cibich and A Cabala was published in *PLoS ONE*.

**More information:** Eva Kemps et al. Cognitive bias modification for energy drink cues, *PLOS ONE* (2019). DOI: 10.1371/journal.pone.0226387

Provided by Australian Research Council



Citation: How to head off a caffeinated energy drink habit (2020, January 29) retrieved 31 January 2024 from <a href="https://medicalxpress.com/news/2020-01-caffeinated-energy-habit.html">https://medicalxpress.com/news/2020-01-caffeinated-energy-habit.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.