NEWS RELEASE
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Dangers of Adolescent Energy Drink Consumption for the Heart:
Cardiologists Urge Physicians, Parents, Educators to Monitor Adolescents’
Energy Drink Consumption More Closely
Overconsumption of These Non-Regulated Drinks Poses Risks for Arrhythmias and Other
Cardiovascular Events, as Reported in the Canadian Journal of Cardiology

Philadelphia, PA, April 1, 2015 – The rapid rise in popularity of energy drinks (EDs), particularly among
adolescents (aged 10-19 years) and young adults, has serious implications for cardiac health. In an
article published in the Canadian Journal of Cardiology, researchers focus on the pharmacology of EDs,
adverse reactions to them, and how the marketing of these drinks as a means to relieve fatigue and
improve physical and cognitive performance may be ignoring real dangers.

An international research team led by Fabian Sanchis-Gomar, PhD, MD, of the Research Institute of
Hospital 12 de Octubre (“i+12”), Madrid, Spain, noted that EDs can trigger sudden cardiac deaths in
young, apparently healthy individuals. For persons with underlying heart diseases, the risk of triggering
sudden arrhythmic death syndrome (SADS) or other arrhythmias can be significant. Even atrial fibrillation
(AF), normally uncommon in children without structural heart disease, has been observed in a 13-year-old
adolescent boy during a soccer training session after ingesting EDs.

It is estimated that 31% of 12- to 19-year old adolescents regularly consume EDs. These beverages often
contain high amounts of labeled caffeine. However, they can contain “masked” caffeine, in the form of
guarana, for example, which comes from a Brazilian plant and is identical to caffeine found in coffee
beans, but at twice the concentration. The addition of guarana and other substances such as ginseng and
taurine in variable quantities may generate uncertain interactions.

Although caffeine is widely used and generally regarded as safe, serious adverse effects have been
reported, especially when consumed in larger doses. With a range of readily available sources, such as
EDs, gums, inhalers, and orodispersible sheets, adolescents and young adults can easily overdose. It is
estimated that as many as 46% of the 5,448 caffeine overdoses reported in the United States in 2007
occurred in adolescents younger than 19 years.

Dr. Sanchis-Gomar and his co-investigators, Dr. Pareja-Galeano (Universidad Europea de Madrid), Dr.
Cervellin, Dr. Lippi (Academic Hospital of Parma), and Dr. Earnest (Texas A&M University), caution that:
One can (250 mL) of an ED per day is safe for most healthy adolescents.
ED consumption before or during sports practice should be avoided.
Adolescents with clinically relevant underlying medical conditions should consult cardiologists before drinking EDs.
Excessive ED consumption together with alcohol or other drugs, or both, may lead to adverse effects, including death.

“As ED consumption continues to grow, physicians are advised to ask adolescent patients whether they consume EDs, to be aware of the symptoms of ED overconsumption, and to discuss the dangers of EDs alone and mixed with alcohol,” explained Dr. Sanchis-Gomar. “It is important for physicians to understand the lack of regulation in caffeine content and other ingredients of these high-energy beverages and their complications so that parents and children can be educated about the risk of cardiac arrhythmias and the potential development of anxiety and phobias accompanying excessive ED consumption.”

The authors also urge that concerns should be communicated to parents and educators, who may be inadvertently guilty of promoting overconsumption of caffeine.

NOTES FOR EDITORS

Full text of this article is available to credentialed journalists upon request. Contact Eileen Leahy at 732-238-3628 or cjcmedia@elsevier.com to obtain copies. Journalists who wish to interview the authors should contact Fabian Sanchis-Gomar at fabian.sanchis@uv.es.

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The Canadian Journal of Cardiology (www.onlinecjc.ca) is the official journal of the Canadian Cardiovascular Society (www.ccs.ca). It is a vehicle for the international dissemination of new knowledge in cardiology and cardiovascular science, particularly serving as a major venue for the results of Canadian cardiovascular research and Society guidelines. The journal publishes original reports of clinical and basic research relevant to cardiovascular medicine as well as editorials, review articles, case reports, and papers on health outcomes, policy research, ethics, medical history, and political issues affecting practice.

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