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AMERICAN
BOTANICAL
COUNCIL

File: ■ DMAA
■ Dietary Supplements

HC 061268-457

Date: September 28, 2012

RE: Banning DMAA in Dietary Supplements

Cohen PA. DMAA as a dietary supplement ingredient. *Arch Intern Med.* 2012;172(13):1038-1039.

This editorial by Dr. Pieter Cohen appeared as a Research Letter in *Archives of Internal Medicine* in May 2012. In his letter, Dr. Cohen discusses a controversy involving the amphetamine derivative 1,3-dimethylamylamine (DMAA). This compound was used as a nasal inhaler manufactured by Eli Lilly & Co. (Indianapolis, Indiana) since 1948. The compound was patented originally by Lilly in 1944 and 1945 and again in 1971. In 1971, it was patented as the drug "Forthane." Forthane is now a name used for an unrelated drug. DMAA was found to cause adverse side effects and has been withdrawn from the market since the 1970s.

Regardless, DMAA is listed as an ingredient in many sports-oriented drinks and supplements sold in the United States; to be legally sold as a dietary supplement, it must be a naturally occurring substance with a documented history of use prior to 1994. However, the claim that DMAA occurs naturally in geranium (*Pelargonium graveolens*) leaves and stems is based on a single study from 1996 that relied on insufficient evidence and standards to definitively identify the compound.¹ Additionally, the finding could not be substantiated in many later publications.

The use of DMAA is a concern due to the associated adverse side effects such as panic attacks, seizures, cardiomyopathy, and death. Although not definitive, DMAA has also been correlated with an instance of stroke, and supplements with DMAA were shown to cause both increased blood pressure and heart rate. Health Canada, Canada's governmental body overseeing public health, has enacted a ban on supplements that contain DMAA. Further, the United States military has pulled products that contain DMAA from their exchanges across the globe. Dr. Cohen asserts that the FDA should follow suit with legislation that not only holds companies with deceptive labeling practices accountable, but also forbids DMAA to be used in consumable products sold in the United States.

—Amy C. Keller, PhD

Reference

¹Ping Z, Jun Q, Qing L. A study on the chemical constituents of geranium oil. *Journal of Guizhou Institute of Technology.* 1996;25(1):82-85.

The American Botanical Council has chosen not to reprint the original article.

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