

MEMORANDUM

Date: November 9, 2006
To: Isabelle Howes, U.S. Department of Agriculture Graduate School
From: Amelia M. Arria, Ph.D., Center for Substance Abuse Research
Subject: Summary of prepared remarks for FDA public hearing on "Functional Foods," on December 5, 2006

Remarks on Energy Drinks

Energy drinks, designed to deliver a rapid burst of energy with high doses of sugar, caffeine, and other stimulants such as ephedrine and guarana have grown increasingly popular in recent years among adolescents and young adults. Yet surprisingly little is known about how these beverages are used and their possible adverse health consequences.

Our research team at the Center for Substance Abuse Research at the University of Maryland, College Park, is conducting a large longitudinal prospective study of college students, entitled the College Life Study (CLS), funded by NIDA. Preliminary data from our study shows that one in five college students have used energy drinks in the year prior to being surveyed, and that use of energy drinks was associated with higher levels of alcohol consumption, involvement with illicit drugs, and non-medical use of prescription drugs. Another study from the literature observed that energy drinks were associated with lowered subjective alcohol intoxication. Concomitant use of alcohol and energy drinks is becoming more common.³ Albeit the preliminary nature of these findings, they point to a need for more research around energy drink consumption, particularly among college students.

There is also a lack of data regarding the possible physical consequences of energy drink consumption. Given what is already known about the health effects of caffeine and sugar-sweetened beverages,^{1,2} more research on how energy drink consumption is a contributor to weight gain is warranted.

Given their apparent popularity, the ways in which energy drinks are being used have important public health implications. We strongly believe that consumer trends around energy drinks need to be closely monitored through systematic research and surveillance, using standard methodologies similar to those already in place to monitor use of alcohol and other drugs. A clearer understanding of the reasons why young people use energy drinks, the contexts in which they are used, as well as the potential for adverse health effects (if any) will provide the foundation of knowledge needed to inform sound policies regarding the possible regulation of energy drinks.

1. Greenland S. A meta-analysis of coffee, myocardial infarction, and coronary death. *Epidemiology*. 1993;4:366-74.

2. Malik VS, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: a systematic review. *Am J Clin Nutr* 2006; 84:274-88.

3. Ferreira SE, Mello MT, Pompeia S, Souza-Formigoni MLO. Effects of energy drink ingestion on alcohol intoxication. *Alcohol Clin Exp Res*. 2006;30:598-605.