United Brands Company Inc 11/17/10

Department of Health and Human Services

Public Health Service
Food and Drug Administration
College Park, MD 20740

NOV. 17,2010

WARNING LETTER

Via FAX and OVERNIGHT MAIL via UPS

Mr. Michael Michail
United Brands Company, Inc.
5360 Jackson Drive, Suite 208
La Mesa, CA 91942

Re: 134070

Dear Mr. Michail:

The Food and Drug Administration (FDA) has reviewed the regulatory status of the ingredients declared on the label of your products, "Joose" and "Max,"[1] each of which contains caffeine that has been directly added to an alcoholic beverage and packaged in combined caffeine and alcohol form. As it is used in your products, caffeine is an unsafe food additive, and therefore your products are adulterated under section 402(a)(2)(C) of the Federal Food, Drug, and Cosmetic Act (the Act) [21 U.S.C. § 342(a)(2)(C)]. Regulations on the general provisions for food additives are located in Title 21, Code of Federal Regulations, Part 170 (21 CFR 170). You may find copies of the Act and these regulations through links in FDA's Internet home page at http://www.fda.gov.

As defined in section 201(s) of the Act [21 U.S.C. § 321(s)], the term "food additive" refers to any substance the intended use of which results in its becoming a component of any food, unless the substance is the subject of a prior sanction or is generally recognized as safe (GRAS) among qualified experts under the conditions of its intended use. Under section 409 of the Act [21 U.S.C. § 348], a food additive is unsafe unless a regulation is in effect that prescribes the conditions under which the additive may be safely used, and the additive and its use or intended use are in conformity with that regulation. There is no food additive regulation authorizing the use of caffeine as a direct addition to alcoholic beverages, and we are not aware of any information to establish that caffeine added directly to alcoholic beverages is the subject of a

prior sanction. Likewise, we are not aware of any basis to conclude that caffeine is GRAS under these conditions of use.

FDA's regulations in 21 CFR Part 170 describe the eligibility criteria for classification of a substance added to food as GRAS. Under 21 CFR 170.30(a)-(c), general recognition of safety must be based on the views of qualified experts. The basis of such views may be either (1) scientific procedures or (2) in the case of a substance used in food prior to January 1, 1958, through experience based on common use in food. Further, general recognition of safety requires common knowledge about the substance throughout the scientific community knowledgeable about the safety of substances directly added to food.

FDA's regulations in 21 CFR Part 170 define "common use in food" and establish eligibility criteria for classification as GRAS through experience based on common use in food. Under 21 CFR 170.3(f), common use in food means "a substantial history of consumption of a substance for food use by a significant number of consumers." Under 21 CFR 170.30(c)(1), "[g]eneral recognition of safety through experience based on common use in food prior to January 1, 1958, shall be based solely on food use of the substance prior to January 1, 1958, and shall ordinarily be based upon generally available data and information." Importantly, however, the fact that a substance was added to food before 1958 does not, in itself, demonstrate that such use is safe, unless the pre-1958 use is sufficient to demonstrate to qualified experts that the substance is safe when added to food. See section 201(s) of the Act [21 U.S.C. § 321(s)]; see also Fmali Herb, Inc. v. Heckler, 715 F.2d 1385, 1389-90 (9th Cir. 1983) ("Under the statute, 'common use in food' of an ingredient does not automatically exempt the substance from pretesting requirements. Instead, 'common use in food' merely describes one form of evidence that may be introduced by a proponent for the purpose of meeting the ultimate standard... ").

Similarly, FDA's regulations in 21 CFR Part 170 define "scientific procedures" and establish eligibility criteria for classification as GRAS through scientific procedures. Under 21 CFR 170.3(h), scientific procedures "include those human, animal, analytical, and other scientific studies, whether published or unpublished, appropriate to establish the safety of a substance." Under 21 CFR 170.30(b), general recognition of safety based upon scientific procedures "shall require the same quantity and quality of scientific evidence as is required to obtain approval of a food additive regulation for the ingredient." Section 170.30(b) further states that general recognition of safety through scientific procedures is ordinarily based upon published studies, which may be corroborated by unpublished studies and other data and information.

FDA's regulations in 21 CFR Part 170 also define "safe" and "safety." Under 21 CFR 170.3(i), "[s]afe or safety means that there is a reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use." The regulations identify factors to be considered in determining the safety of a substance added to food. 21 CFR 170.3(i).

By letter dated November 12, 2009, FDA requested that, within 30 days, your company provide evidence of the rationale, along with supporting data and information, for concluding that the use of caffeine in your products is GRAS or prior sanctioned. The letter informed your company that if FDA determined that the use of caffeine in your alcoholic beverages is neither GRAS nor the subject of a prior sanction, the agency would take appropriate action to ensure that these products

are removed from the marketplace. FDA's letter also reiterated that it is the continuing responsibility of your company to ensure that the foods it markets are safe and in compliance with all applicable legal and regulatory requirements.

FDA acknowledges that, by letter dated December 11, 2009, United Brands responded through counsel to the agency's November letter. But, as discussed in more detail below, FDA has reviewed that response and continues to have safety concerns about your caffeinated alcoholic beverage products. Accordingly, the agency is issuing this warning letter.

To establish that the use of a substance in food is GRAS under its specific conditions of use (for example, the GRAS status of caffeine when directly added to an alcoholic beverage), there must be consensus among qualified experts that the substance is safe under its conditions of use, based on publicly available data and information. FDA is aware that, based on the publicly available literature, a number of qualified experts have concerns about the safety of caffeinated alcoholic beverages. Moreover, the agency is not aware of data or other information to establish the safety of the relevant conditions of use for your products. Therefore, the criteria for GRAS status have not been met for the caffeine in your beverages.

Based upon the publicly available literature, FDA has the following specific concerns about the safety of caffeine when used in the presence of alcohol:[2]

- Reports in the scientific literature have described behavioral effects that may occur in young adults when energy drinks are consumed along with alcoholic beverages (O'Brien et al., 2008; Thombs et al., 2010; Miller, 2008).
- Studies suggest that the combined ingestion of caffeine and alcohol may lead to hazardous and life-threatening situations because caffeine counteracts some, but not all, of alcohol's adverse effects. In one study, a mixture of an energy drink and alcohol reduced subjects' subjective perception of intoxication but did not improve diminished motor coordination or slower visual reaction times using objective measures (Ferreira et al., 2006). In a dual-task model, subjects co-administered caffeine and alcohol reported reduced perception of intoxication but no reduction of alcohol-induced impairment of task accuracy (Marczinski and Fillmore, 2006).
- Because caffeine alters the perception of alcohol intoxication, the consumption of pre-mixed products containing added caffeine and alcohol may result in higher amounts of alcohol consumed per drinking occasion, a situation that is particularly dangerous for naive drinkers (Oteri et al., 2007).

GRAS status is not an inherent property sofa substance, but must be assessed in the context of the intended conditions of use of the substance (section 201(s) of the Act [21 U.S.C. § 321(s)]). The assessment includes a consideration of the population that will consume the substance (21 CFR 170.30(b); section 409(b) of the Act [21 U.S.C. § 348(b)]). Therefore, the scientific data and information that support a GRAS determination must consider the conditions under which the substance is safe for the use for which it is marketed. Reports in the scientific literature have raised concerns regarding the formulation and packaging of pre-mixed products containing added caffeine and alcohol. For example, these products, presented as fruity soft drinks in colorful single-serving packages, seemingly target the young adult user. Furthermore, the

marketing of the caffeinated versions of this class of alcoholic beverage appears to be specifically directed to young adults (Bonnie and O'Connell, 2004). FDA is concerned that the young adults to whom these pre-mixed, added caffeine and alcohol products are marketed are especially vulnerable to the adverse behavioral effects associated with consuming caffeine added to alcohol, a concern reflected in the publicly available literature (O'Brien et al., 2008; Simon and Mosher, 2007).

It is FDA's view that the caffeine content of your beverages could result in central nervous system effects if a consumer drank one or more containers of your product. Therefore, FDA believes that the consumption of your products, "Joose" and "Max," may result in adverse behavioral outcomes because the caffeine is likely to counteract some, but not all, of the adverse effects of alcohol. The agency is unaware of any data that address the complex, potentially hazardous behaviors that have been identified in the scientific literature as associated with these beverages or that otherwise alleviate our concerns about the effects of consuming these pre-mixed caffeine and alcohol beverages. Moreover, FDA is not aware of any publicly available data to establish affirmatively safe conditions of use for caffeine added directly to alcoholic beverages and packaged in a combined form.

The agency is aware that your company received a Certification/Exemption of Label/Bottle Approval (COLA) from the Alcohol and Tobacco Tax and Trade Bureau (TTB) and that, as part of your application for the COLA, you informed TTB that your product would contain caffeine. A COLA does not constitute a food additive petition approval, a statement regarding GRAS status, or a prior sanction, and you are obligated to abide by the provisions of the Federal Food, Drug, and Cosmetic Act.

Your company's December 11, 2009, response discussed two human clinical studies in the peer reviewed literature that address the safety of the co-consumption of caffeine and alcohol (Ferreira et al., 2006; O'Brien et al., 2008), and purported to identify shortcomings in the design and interpretation of these studies. FDA notes that these alleged deficiencies were included in a letter from your counsel and were not endorsed, supported, or otherwise accompanied by the opinion of a qualified expert as to their significance. Even if certain studies in the scientific literature have limitations due to their design or the interpretation of their results, the peer-reviewed literature as a whole is sufficient to raise, among qualified experts, safety concerns about alcoholic beverages to which caffeine has been directly added. Similarly, even if the results from no single study are sufficiently comprehensive to characterize fully the potential responses to beverages containing caffeine added to alcohol, these studies are collectively sufficient to raise concerns about consumption of this combination and to support the conclusion that more research is required. Furthermore, FDA is not aware of any reports in the literature that refute the association between the co-consumption of alcohol and caffeine and adverse behavioral results or that otherwise affirmatively establish the safety of these beverages. Indeed, our review of this literature, as well as certain related studies in animals, shows that there are currently no studies or other information that refute the safety concerns or otherwise affirmatively establish the safety of caffeine directly added to alcoholic beverages. Therefore, we are not aware of a sufficient basis to support a conclusion that caffeine, when directly added to alcohol to form a single beverage, is generally recognized as safe.

In light of the safety concerns identified above, the use of added caffeine in the alcoholic beverage products "Joose" and "Max" does not satisfy the criteria for GRAS status outlined above. Further, FDA is aware of no other exemption from the food additive definition that would apply to caffeine when used as an ingredient in an alcoholic beverage product. Therefore, caffeine as used in your products is a food additive under section 201(s) of the Act [21 U.S.C. § 321(s)] and is subject to the provisions of section 409 of the Act [21 U.S.C. § 348]. Under the latter, a food additive is required to be approved by FDA for its proposed conditions of use prior to marketing. Because caffeine is not an approved food additive for its use in your products, "Joose" and "Max," those products are adulterated within the meaning of section 402(a)(2)(C) of the Act [21 U.S.C. § 342 (a)(2)(C)].

You should take prompt action to correct this violation and prevent its recurrence. Failure to do so may result in enforcement action without further notice. The Act authorizes the seizure of illegal products and injunctions and prosecutions against manufacturers and distributors of those products. Also, we want you to be aware that FDA did not conduct an all-inclusive review of your products, "Joose" and "Max" or any other products that you may manufacture or distribute. Under the applicable law, it is your responsibility, as a manufacturer of these products, to ensure that the foods your firm markets are safe and otherwise in compliance with all applicable legal requirements.

Please advise this office in writing within fifteen (15) days from your receipt of this letter as to the specific steps you have taken to correct the violation identified above and to assure that similar violations do not occur. Your response should include any documentation necessary to show that correction has been achieved. If you cannot complete all corrections within the 15 days, please explain the reason for your delay and the date by which each such item will be corrected and documented.

Please send your reply to Seyra Hammond, Food and Drug Administration, Center for Food Safety and Applied Nutrition, Office of Compliance (HFS-605), 5100 Paint Branch Parkway, College Park, MD 20740.

Sincerely,

/s/

Joann M. Given
Acting Director
Office of Compliance
Center for Food Safety
and Applied Nutrition

cc: Food and Drug Administration
Los Angeles District Office

References

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O'Brien, MC, McCoy, TP, Rhodes, SO, Wagoner, A, and Wolfson, M. Caffeinated cocktails: energy drink consumption, high-risk drinking, and alcohol-related consequences among college students. Acad Emerg Med 15, 453-460, 2008.

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patrons. Addict Behav 35, 325-330, 2010.

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[1] This letter addresses the following flavors of "Joose": green apple, raspberry lemonade, red, blue, orange, dragon, jungle, mamba, panther, watermelon, and lemon tea. This letter addresses the following flavors of "Max": green apple, watermelon, and vibe.

[2] As used in the discussion below, the term "energy drink" identifies beverages that contain a significant amount of calories and caffeine as well as other ingredients, such as taurine, herbal extracts, or vitamins (Heckman et al., 2010).