U.S. FOOD & DRUG ADMINISTRATION

Weiyin Zhou
GM Assistant
Willy Chemicals, Inc
10 Monona Court
Derwood, Maryland 20855

Dear Weiyin Zhou:

This letter is to inform you that the Food and Drug Administration (FDA) filed your notification that you submitted pursuant to 21 United States Code (U.S.C.) § 350b(a)(2) (section 413(a)(2) of the Federal Food, Drug, and Cosmetic Act (the Act)) on August 25, 2020. Your notification concerns the new dietary ingredient, "β-Nicotinamide Mononucleotide (NMN)", that you intend to market in a dietary supplement product you call "Reju-Me."

According to your notification, the conditions of use are: "taken under the tongue or in the buccal area. 618 mg [of the dietary supplement] for each tablet, 3 servings/day, interval > 4hrs, no more than 4 tablets per day. Each tablet [contains 125 mg of new dietary ingredient] dissolves in about 20 min in mouth of a typical adult." The maximum daily intake of the new dietary ingredient in your dietary supplement is 500 mg and the target population is "at age of 18-122."

Under 21 U.S.C. 350b(a), the manufacturer or distributor of a dietary supplement containing a new dietary ingredient that has not been present in the food supply as an article used for food in a form in which the food has not been chemically altered must submit to FDA, at least 75 days before the dietary ingredient is introduced or delivered for introduction into interstate commerce, information that is the basis on which the manufacturer or distributor has concluded that a dietary supplement containing such new dietary ingredient will reasonably be expected to be safe. FDA reviews this information to determine whether it provides an adequate basis for such a conclusion. Under 21 U.S.C. 350b(a)(2), there must be a history of use or other evidence of safety establishing that the new dietary ingredient, when used under the conditions recommended or suggested in the labeling of the dietary supplement, will reasonably be expected to be safe. If this requirement is not met, the dietary supplement is considered to be adulterated under 21 U.S.C. 342(f)(1)(B) because there is inadequate information to provide reasonable assurance that the new dietary ingredient does not present a significant or unreasonable risk of illness or injury.

The term "dietary supplement" is defined in 21 U.S.C. 321(ff). 21 U.S.C. 321(ff) as "a product (other than tobacco) intended to supplement the diet that bears or contains a vitamin, a mineral, an herb or other botanical, an amino acid, a dietary substance for use by man to supplement the diet by increasing the total dietary intake, or a concentrate, metabolite, constituent, extract, or combination of any of the above ingredients." In addition, 21 U.S.C. 321(ff) states that "dietary supplements are intended for ingestion in a form described in 21 U.S.C. 350(c)(1)(B)(i) or in compliance with 21 U.S.C. 350(c)(1)(B)(ii), are not represented as conventional food or as a sole item of a meal or the diet, and are labeled as a dietary supplement."

Your product is not a dietary supplement within the meaning of 21 U.S.C. 321(ff)(2) (in particular, section (A)(i) which states: "[a dietary supplement] is intended for ingestion in a form described in section 21 U.S.C 350(c)(1)(B)(i)." Section 21 U.S.C 350(c)(1)(B)(i) describes the forms being either a tablet, capsule, powder, softgel, gelcap, or liquid. The meaning of the phrase "intended for ingestion" is addressed by the court in United States v. Ten Cartons (Ener-B Nasal Gel, 888 F. Supp. 381,393-94 (E.D.N.Y.), aff, 72 F.3d 285 (2d Cir. 1995)).

An article that is delivered orally, but that exerts its effect prior to being swallowed (for example, taken under the tongue or in the buccal area) or that is a delivery system for a substance that is absorbed buccolingually is not "intended for ingestion." As stated above, the definition of dietary supplement in 21 U.S.C. 321(ff) states that a dietary supplement is a product "intended for ingestion." The term "ingestion" has been addressed by the court in United States v. Ten Cartons, which states:

> The ordinary and plain meaning of the term "ingestion" means to take into the stomach and gastrointestinal tract by means of enteral administration. See Stedman's Medical Dictionary (4th Lawyer's Ed. 1976) (defining ingestion as the "introduction of food and drink into the stomach.");
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> The interpretation of the term "ingestion" to mean enteral administration into the stomach and gastrointestinal tract is also supported by the language of the statutory sections immediately preceding and following section 350(c)(1)(B)(ii). Section 350(c)(1)(B)(i) states that the vitamin must be intended for ingestion in tablet, capsule or liquid form. Each of these forms denotes a method of ingestion that involves swallowing into the stomach. Section 350(c)(2) states that a food is intended for ingestion in liquid form under section 350(c)(1)(B)(i) "only if it is formulated in a fluid carrier and is intended for ingestion in daily quantities measured in drops or similar small units of measure." This elaboration of "liquid form" also denotes ingestion by swallowing the fluid.

Therefore, because the term "ingestion" means introduced into the gastrointestinal tract, a product that is intended to have its effect before it is ingested or that is a delivery system for ingredients absorbed prior to ingestion, is not subject to regulation as a dietary supplement because it is not "intended for ingestion" and may be subject to regulation as a food or drug. You should provide more information that would enable us to determine that your product meets this element of the statutory definition of a dietary supplement.

Because the information in your submission indicates that your product containing "β-Nicotinamide Mononucleotide (NMN)" is not a dietary supplement, we are providing no response with respect to whether there is an adequate basis of safety for your product of commerce under 21 U.S.C. § 350b(a)(2) (section 413(a)(2) of the Act). However, please note that, under 21 CFR 190.6(f), failure by FDA to respond to a notification under section 413(a)(2) does not constitute a finding by the agency that a new dietary ingredient or the dietary supplement is safe or is not adulterated under 21 U.S.C. § 342 (section 402 of the Act). Therefore, insofar as it might be argued that your product is a dietary ingredient, it could be deemed to be adulterated under 21 U.S.C. § 342(f)(1)(B) (section 402(f)(1)(B) of the Act). In any event, you are not prohibited from submitting a new pre-market notification for "β-Nicotinamide Mononucleotide (NMN)" under 21 U.S.C. § 350b(a)(2).

Your notification will be kept confidential for 90 days after the filing date of August 25, 2020. After the 90-day date, the notification will be placed on public display at www.regulations.gov as new dietary ingredient notification report number 1174. Prior to that date, you may wish to identify in writing specifically what information you believe is trade secret or confidential commercial information and include an explanation of the basis for this belief.

If you have any questions concerning this matter please contact CDR Jeanne Skanchy, R.Ph., Evaluation and Research Staff, at (240) 402-8790 and by email: NDITEAM@fda.hhs.gov.

Sincerely,

Ali A. Abdel-rahman -S

Digitally signed by Ali A. Abdel-rahman -S
Date: 2020.11.02 10:13:08 -05'00'

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