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Filed electronically at:

Alexandria, VA 22302

Rockville, MD 20852

http://www.health.gov/dietaryguidelines/dga2015/comments/writeComments.aspx

RE: Consumer Understanding of Multivitamin and Calcium and/or Vitamin D Supplement Use

Dear Dr. Olson and Ms. Rihane,

The Council for Responsible Nutrition (CRN), the leading trade association representing dietary supplement industry, appreciates the opportunity to provide additional comments to the Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA). CRN has previously submitted comments to support that certain dietary

supplements provide a no-calorie, safe, and convenient way to fill nutrient gaps when recommended intakes are not first met through the consumption of food.

In the Scientific Report of the 2015 Dietary Guidelines Advisory Committee (DGAC), several conclusions and implications statements pertaining to nutrients of public health concern suggest U.S. consumers would benefit from a formal recommendation that certain dietary supplements can reduce nutrient shortfalls, especially for nutrients of public health concern.

Following an analysis of data, the DGAC concluded:

Dietary patterns among Americans, including typical use of fortified foods, rarely leads to overconsumption of folate, calcium, iron, or vitamin D. However each of these, as well as other nutrients, are overconsumed in some supplement users, especially those taking high-dose supplements (*Part D. Ch.1, page 18, lines 664-667*).

The DGAC noted the following implication:

The public may safely use dietary supplements containing RDA level of nutrients, so long as total intake from diet plus supplements does not exceed the UL. Use of products with high doses of nutrients, such that total intake exceeds the UL, should be discussed with a Registered Dietitian or other qualified health care provider.

Supplement users should seek guidance about factors such as whether the amount of nutrients in supplements exceeds the UL for those nutrients. Monitoring of dietary patterns in supplement users should continue to be done, with attention paid to the highest risk groups, such as children and women who are pregnant (*Part D. Ch.1*, page 18, lines 670-678).

CRN supported a survey to measure consumer comprehension and agreement of various statements regarding multivitamin, mineral, and calcium and/or vitamin D supplement use. The research was designed and analyzed by FoodMinds and was fielded October 10-14, 2014 using Toluna's On-line Omnibus. Survey quotas for the base sample were established based on census data for age, gender, and region. Responses were weighted where necessary to bring them into

line with actual proportions in the population for age, gender, race/ethnicity, education, region and household income. The base sample included 2,159 adult respondents (margin of error = 2%). Of the base samples, 1,639 reported themselves as a user of multivitamins (margin of error = +/- 2.3%) and 1,339 reported themselves as a user of calcium and/or vitamin D supplements (margin of error = +/- 2.6%). The results of this survey could be used to gauge consumer understanding of recommendations that certain dietary supplements can be used to fill nutrient shortfalls. CRN submits the results of our survey for the agencies to consider in drafting the policy document and messages related to dietary supplements that are easy to understand and helpful to consumers.

Consumer Understanding of Multivitamin Supplement Use

The CRN survey results show that consumers understand that multivitamin and mineral supplements are just one part of a healthy lifestyle. Eighty percent of U.S. adults agree that multivitamin and mineral supplements should not be used to replace healthful dietary lifestyle habits. Nearly 90% of U.S. adults agree that multivitamin and mineral supplements can help to meet nutrient needs when needs cannot be met through food alone. The statement, "to ensure nutrient adequacy, people may consider taking a multivitamin and mineral supplement when recommended vitamin and mineral intake cannot be met through food alone," was rated as **easy to understand** by nearly 85% of consumers and rated as a **relevant and an important reminder for health** by nearly 75% of consumers. Furthermore, 82% of adults **agree** that a healthcare provider should be consulted when considering taking a high dose, single nutrient supplement.

Consumer Understanding of Calcium and/or Vitamin D Supplement Use

The DGAC also addressed the questions: Can vitamin D EARs and/or RDAs be met with careful food choices following recommended amounts from each food group in the USDA Food Patterns? How restricted would food choices be, and how much of the vitamin D would need to come from fortified dairy and other food products? (*Part D. Ch.1*, page 24, lines 896-900). Through the use of food pattern modeling, the DGAC concluded that:

Through the use of a diet rich in seafood and fortified foods, EAR, but not RDA, levels of vitamin D can be achieved. Additional fortification or supplementation strategies would

be needed to reach RDA levels of vitamin D intake consistently, especially in individuals with low intakes of fish/seafood or fortified dairy foods, other fortified foods (e.g., breakfast cereals) and beverages (*Part D. Ch.1*, *page 24*, *lines 905-908*).

The DGAC noted the following implication:

Diet is an important aspect of achieving vitamin D targets. The U.S. population should be encouraged to choose foods and beverages fortified with vitamin D. When needed, supplementation can be considered to achieve RDA intakes of vitamin D (*Part D. Ch.1*, page 25, lines 911-913).

The DGAC reviewed dietary intake data from What We Eat in America (WWEIA) and found that intakes of calcium were often far below the EAR, especially among adolescent girls and adults (*Part D. Ch.1*, *page 15*, *lines 552-553*). The DGAC went on to state that:

Even though a reliable biomarker for calcium does not exist, because of its strong link to health outcomes and the risks associated with osteoporosis, the DGAC designated calcium as a nutrient of public health concern for underconsumption. In addition, the DGAC also notes that calcium is an underconsumed nutrient of public health concern among pregnant women. This conclusion concurs with the FDA's review that designated calcium as a nutrient of "public health significance" in its recent review of evidence in publishing a Proposed Rule on the Nutrition Facts label. The subgroups of particular concern with regard to intake are preadolescent and adolescent females, pregnant females, and middle aged and older females (*Part D. Ch.1, page 15, lines 553-568*).

Furthermore, in the analysis of evidence, the DGAC found that use of calcium supplements does not appear to pose a health risk related to overconsumption of calcium (*Part D. Ch.1, page 19, lines 704-705*). CRN suggests that the 2015 Dietary Guidelines for Americans (DGA) affirmatively recommend to Americans who do not consume the recommended amounts of calcium and vitamin D through food sources to consider calcium and vitamin D supplements to help support bone health.

The CRN survey results demonstrate that the message, "Americans who do not consume the recommended amounts of calcium and vitamin D through food sources should consider a calcium and vitamin D supplement to help support bone health" was considered **easy to**

understand by nearly 90% of consumers. When consumers were asked to rate their perception of taking a calcium and vitamin D supplement to support bone health when intake cannot be met through food sources, 75% of Americans felt that this information was an important reminder for their own health. Nearly 90% of U.S. adults agree that calcium and vitamin D supplements can help support bone health when adequate calcium and vitamin D are not consumed through food sources.

Evidence demonstrates that few individuals are at risk of exceeding the UL, while significant portions of the populations do not meet the EAR for several key nutrients¹. It is for these reasons that CRN believes the 2015 DGA should make the following recommendations:

1) Americans should consider taking a multivitamin and mineral supplement when recommended vitamin and mineral intake cannot be met through food alone.

For the 2015 DGA, the agencies may consider language such as: "Americans are encouraged to consume vitamins and minerals through adequate intakes of vegetables, fruits, whole grains, low- or non-fat dairy, lean proteins, and nuts and seeds; however, when nutrient intakes cannot be met through food sources alone, a multivitamin and mineral supplement should be considered to fill nutrient gaps."

 Americans should consider calcium and vitamin D supplements to help support bone health if they do not consume the recommended amounts of calcium and vitamin D through food sources.

For the DGA 2015, the agencies may consider modified language from the 2010 DGA²: "In the United States, most dietary calcium and vitamin D is obtained from dairy, fortified foods, and dietary supplements. Foods and beverages, such as breakfast cereals, orange juice, and soy beverages are commonly fortified with these nutrients. Natural sources of vitamin D include some kinds of fish (e.g., salmon, herring, mackerel, and tuna) and egg yolks, which have smaller amounts. Calcium and vitamin D are available in the form of dietary supplements. Americans who do not consume the recommended 3 servings of low/non-fat dairy per day should consume 300 mg of supplemental calcium for each absent serving. In addition, Americans who do not consume the recommended 600-800 IU of vitamin D per day from food should consider supplemental vitamin D to ensure optimal bone health."

CRN's survey results show that consumers find these messages easy to understand and agree that they are important reminders for taking care of their own health. We would be happy to provide further information or clarification if needed. Thank you for the opportunity to provide comments.

Regards,

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References:

- 1. Fulgoni VL 3rd, et al. Foods, fortificants, and supplements: Where do Americans get their nutrients? J Nutr 2011;141:1847-1854.
- U.S. Department of Agriculture and U.S. Department of Health and Human Services.
 Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.