Council for Responsible Nutrition 1828 L Street, NW, Suite 510 • Washington, DC 20036-5114 (202) 204-7700 • fax (202) 204-7701 • www.crnusa.org

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The Council for Responsible Nutrition (CRN) appreciates the opportunity to provide comments regarding the development of the 2015 Dietary Guidelines for Americans (DGAs). CRN respectfully requests that the Dietary Guidelines Advisory Committee (DGAC) consider the following question that can be addressed through an evidence-based review:

1. Can a multivitamin/mineral (MVM) supplement provide a no calorie, low cost way to fill nutrient gaps when nutrient recommended intakes are not first met through the consumption of food?

Maximizing nutrition from calories consumed is a public health goal, yet government research demonstrates that many Americans continue to fall short of their nutrient requirements because consumption of vegetables, fruits, whole grains, dairy products, and seafood is lower than recommended. The 2010 DGAC identified that intake of some nutrients is low enough to be of public health concern, including potassium, fiber, calcium, and vitamin D for most Americans; and iron, folate and vitamin B_{12} for specific population groups¹.

Current policy recommendations recognize nutrient inadequacies and recommend nutrient supplementation in targeted populations. For example, many women capable of becoming pregnant are deficient in iron and also do not meet the recommended intake for folic acid. The 2010 DGAs encourage women capable of becoming pregnant to "consume 400 micrograms per day of synthetic folic acid (from fortified foods and/or supplements) in addition to food forms of folate from a varied diet." The 2010 DGAs also states that "a substantial proportion of individuals ages 50 years and older may have reduced ability to absorb naturally occurring vitamin B12; however, the crystalline form of the vitamin is well absorbed. Therefore,

individuals ages 50 years and older are encouraged to include foods with added vitamin B12, such as fortified cereals, or take dietary supplements."

A study of data from the National Health and Nutrition Examination Survey (NHANES) for 2003-2006, published since the 2010 DGAs, evaluated nutrient intakes of over 16,000 people of all ages. This study reported that almost all Americans fall short of the estimated average requirement (EAR) for vitamin E, and more than half fall short of the EAR for magnesium, folate, and vitamin A. Almost half of Americans fall short on vitamin C, even though it would be easy to get vitamin C by consuming modest amounts of fruits and vegetables². Researchers analyzed nutrient intake data in different ways: (1) the amount of each nutrient consumed from food alone; (2) the amount of each nutrient consumed from foods, including enrichment and fortification; and (3) the amount of each nutrient consumed from all sources, including enrichment and/or fortification and supplementation, many Americans did not achieve the recommended micronutrient intake levels set forth in the Dietary Reference Intake². A summary of the NHANES 2003-2006 data are presented in Table 1 (attached).

The aforementioned evidence demonstrates that the consumption of dietary supplements reduces the percentage of the population that falls below the EAR for all nutrients. Importantly, the data also show that nutrient intake from fortification and dietary supplements does not present a meaningful risk for overconsumption. The NHANES 2003-2006 data demonstrate that the percentage of the population with total intakes of micronutrients greater than the tolerable upper intake level (UL) was very low; and these levels have not been associated with harm². Long-term clinical trials also support the safety of daily MVM supplementation. In the recent Physicians' Health Study II, a trial of over 14,000 male physicians that took a daily MVM for over ten years, no serious adverse effects were found³. Furthermore, a 2013 systematic review of available scientific evidence showed that supplementation with a MVM does not increase all-cause mortality, cancer incidence or mortality, or CVD incidence or mortality, and may provide a modest protective benefit⁴.

Evidence supports the use of a MVM as an effective way to achieve nutrient adequacy when recommended nutrient intakes are not first met through food. CRN thanks the DGAC for providing the opportunity for public comment.

Nutrient	% of Americans Falling Short of the EAR		
	Food Alone	+Enriched & Fortified Food	+Enriched & Fortified Food +Dietary Supplements
Vitamin D	100	93	70
Vitamin E	93	91	60
Folate	88	11	8
Vitamin A	74	45	34
Magnesium	59	55	45
Calcium	54	49	38
Thiamin	51	6	4
Vitamin C	50	37	25
Iron	22	7	5
Zinc	15	11	8

Table 1. Percent of Americans falling short of the Estimated Average Requirement (EAR)
for specific nutrients*

*Data derived from "Foods, fortificants and supplements: Where do Americans get their nutrients?" Journal of Nutrition 2011. 141:1847-1854.

Authors: Victor L. Fulgoni, III. Nutrition Impact LLC, Battle Creek, MI

Debra R. Keast, Nutrition Database Research, Inc., Okemos, MI

Regan L. Bailey, Office of Dietary Supplements, NIH, Bethesda, MD

Johanna Dwyer, Jean Mayer USDA Human Nutrition Research Center on Aging, and Schools of Medicine and Friedman School of Nutrition Science and Policy, Tufts University, Boston, MA

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