



## RECOMMENDED GUIDELINES:

### ***Iodine Quantity in Multivitamin/Mineral Supplements for Pregnancy and Lactation***

#### **PURPOSE:**

Normal neurocognitive development in fetuses and breast-fed infants is dependent on sufficient maternal dietary intake of iodine,<sup>1</sup> and daily iodine requirements significantly increase during pregnancy and lactation.<sup>2</sup> Currently, many women of childbearing age in the U.S. and across the globe have mild iodine deficiency,<sup>3,4</sup> which may have adverse effects on cognitive function in children. In the U.S. only about 15 – 20 % of pregnant and lactating women take a supplement containing adequate iodine. Authoritative medical organizations, including the American Academy of Pediatrics, Endocrine Society, and American Thyroid Association, recommend that pregnant and lactating women receive a daily multivitamin/mineral supplement that contains 150 mcg of iodine. Similar to folic acid, adequate iodine is critical early in pregnancy when the fetal brain is growing rapidly. For this reason, many health care providers recommend iodine supplementation to women who plan to or can become pregnant.<sup>5</sup>

CRN supports science-based recommendations and encourages all manufacturers and marketers of multivitamin/mineral supplements for pregnant and lactating women in the U.S. to include adequate iodine to support normal cognitive development in children.

#### **VOLUNTARY GUIDELINES:**

CRN recommends that its members adhere to the following guidelines for the quantity of iodine in multivitamin/mineral supplements intended for pregnant and lactating women in the U.S. These recommended guidelines are based on U.S. data and recommendations of

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<sup>1</sup> de Escobar DM, Obregon MJ, del Rey FE. Maternal thyroid hormones early in pregnancy and fetal brain development. *Best Pract Res Clin Endocrinol Metab* 2004;18:225-248.

<sup>2</sup> Food and Nutrition Board, Institute of Medicine. Dietary reference intakes for vitamin A, vitamin K, arsenic, boron, chromium, copper, iodine, iron, manganese, molybdenum, nickel, silicon, vanadium, and zinc. Washington, DC: National Academy Press, 2000.

<sup>3</sup> Leung AM, Pearce EN, Braverman, L. Iodine Content of Prenatal Multivitamins in the United States. *NEJM* 2009;360:939-940.

<sup>4</sup> Anderson M, et al., Iodine Deficiency in Europe: a continuing public health problem. 2007. World Health Organization (WHO) and UNICEF. ISBN 978 92 4 159396 0.

<sup>5</sup> Council on Environmental Health, et al. Iodine deficiency, pollutant chemicals, and the thyroid: new information on an old problem. *Pediatrics* 2014;133:1163-1166.

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U.S.-based medical organizations. The need for iodine in products that are intended for sale outside of the U.S. should be considered on a case-by-case basis.

**A. Dietary supplement manufacturers and marketers should include a daily serving of at least 150 mcg of iodine in all multivitamin/mineral supplements intended for pregnant and lactating women in the U.S.**

Any safe and suitable iodine-containing dietary ingredient may be used as the source of iodine in such products when used in accordance with Current Good Manufacturing Practice (cGMP) regulations for dietary supplements, which will ensure that the product consistently meets label claim.

**B. Implementation**

Within twelve months of the effective date, CRN recommends that dietary supplement companies comply with these guidelines for products manufactured for sale.

*Effective Date: January 27, 2015*