

Abstract

# Supplement Use during Pregnancy in Aotearoa, New Zealand †

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**Abstract:** Iodine is an essential micronutrient required for thyroid function, and is essential during pregnancy for growth and development. Manatū Hauora (MoH) recommends an iodine supplement of 150 µg/day during pregnancy and breastfeeding. To reduce the risk of brain and spinal cord birth defects, the MoH also recommends a folic acid (FA) supplement of 800 µg/day preconception (four weeks) and during the first trimester of pregnancy. A self-administered Qualtrics XM survey was designed for pregnant women between 20–23 weeks of gestation and advertised on Facebook between March 2021–June 2021 throughout Aotearoa. The aim of the survey was to ascertain supplement usage during pregnancy, with a particular focus on iodine and FA. In total, one hundred and sixty pregnant women completed the online survey. A total of 50% were of New Zealand/European ethnicity, 11% were Māori, and 3.2% of a Pacific Island ethnicity. Furthermore, 43% were educated to university level, and 80% were in either voluntary and/or paid employment. In addition, 66% consumed iodine-only supplements (Neurotab; 150 µg/day), 44% consumed FA-only supplements (800 µg/day), and 34% consumed multiple-micronutrient (MN) supplements containing iodine and FA, predominately Elevit or Blackmore pregnancy supplements. Concerningly, 11% of participants took no supplements, and only 45% of the FA supplement users reported taking the FA prior to conception. Furthermore, 13% took both folic and an MN supplement, putting them at risk of an intake over the upper level of intake (1000 mg/day). Additionally, 18% of the participants consumed both an iodine-only and an MN supplement. Only 37% of those using an iodine supplement planned to stop taking it when breastfeeding ceased, suggesting that many were not aware of the recommendation for continuation of use. Despite the high educational status, many did not adhere to the supplement use recommendations. Public health strategies are required to ensure that women of childbearing age are aware of these recommendations for supplement use pre-, during, and post-pregnancy.

**Keywords:** iodine; folic acid; supplement use; pregnancy



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