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Topic: Malnutrition treatment and prevention

Title: Iodised salt and iodine supplements for prenatal and postnatal growth: a rapid scoping of existing systematic reviews

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Introduction: Iodine deficiency can adversely affect child development including growth. However, the effect of iodine supplementation/fortification on prenatal and postnatal childhood growth is unclear, and a rigorous systematic review could contribute to this evidence base. To avoid duplication and inform a possible new review, we undertook a rapid scoping of existing systematic reviews.

Methods: We searched TRIP and Epistemokinos databases (15 December 2014). All English systematic reviews (of experimental or observational studies) reporting iodine supplementation/fortification (any form, dose, regimen) for iodine-related health outcomes (including but not limited to growth), in pregnant or lactating women or children to age 18, were included. Duplicate extracted data allowed examination of the scope of questions, including: author, publication year, most recent search date, participants, pre-specified treatment/exposure and comparator, pre-specified outcomes and those relevant to our question, number and type of studies included. Methodological quality was assessed using the validated AMSTAR tool.

Results: 976 records were screened and 10 reviews, mostly of moderate methodological quality, included. Outcomes included thyroid function, iodine deficiency disorders, mental development and growth in pregnant women, preterm infants and children into adulthood. Although five reviews pre-specified growth outcomes, none provided synthesised evidence on effects of iodine supplementation or fortification on prenatal and postnatal somatic growth.

Conclusions: Our rapid scoping demonstrated a gap in the evidence with no up to-date systematic reviews on the effects of all forms of iodine supplementation/fortification in relevant populations on growth and growth-related outcomes. A new systematic review examining this question will assist in addressing this gap.

