

Use of multiple micronutrient powders for home fortification of foods consumed by pregnant women**Summary**

It is estimated that 41.8% of pregnant women worldwide are anaemic. Approximately 60% of these cases in non-malarious areas, and 50% in malaria-endemic settings, are assumed to be due to iron deficiency. Vitamin and mineral deficiencies in pregnancy are associated with adverse health outcomes in both the mother and her newborn. Member States have requested guidance from the World Health Organization (WHO) on the effects and safety of the use of multiple micronutrient powders for home fortification of foods consumed by pregnant women in support of their efforts to achieve the Millennium Development Goals.

WHO developed the present evidence-informed recommendations using the procedures outlined in the [WHO handbook for guideline development](#). The steps in this process included: (i) identification of priority questions and outcomes; (ii) retrieval of the evidence; (iii) assessment and synthesis of the evidence; (iv) formulation of recommendations, including research priorities; and (v) planning for dissemination, implementation, impact evaluation and updating of the guideline.

The guideline development group for nutrition interventions, the Nutrition Guidance Expert Advisory Group (NUGAG), comprises content experts, methodologists, representatives of potential stakeholders and consumers. These experts participated in several WHO technical consultations concerning this guideline, held in Geneva, Switzerland, and in Amman, Jordan, in 2010 and 2011. Members of the External Experts and Stakeholders Panel were identified through a public call for comments, and this panel was involved throughout the guideline development process. NUGAG members voted on the strength of the recommendation, taking into consideration: (i) desirable and undesirable effects of this intervention; (ii) the quality of the available evidence; (iii) values and preferences related to the intervention in different settings; and (iv) the cost of options available to health-care workers in different settings. All NUGAG members completed a Declaration of Interests Form before each meeting.

Currently, there is no evidence available to assess the potential benefits or harms of the use of multiple micronutrient powders for home fortification of foods consumed by pregnant women with regard to maternal and infant health outcomes. Thus the routine use of this intervention during gestation is not recommended as an alternative to iron and folic acid supplementation in pregnancy (strong recommendation).

¹ A WHO guideline is any document, whatever its title, containing WHO recommendations about health interventions, whether they be clinical, public health or policy interventions. A recommendation provides information about what policy-makers, health-care providers or patients should do. It implies a choice between different interventions that have an impact on health and that have ramifications for the use of resources. All publications containing WHO recommendations are approved by the WHO Guidelines Review Committee.