

Esteemed Members of the WHO Executive Board:

As organisations committed to ending the devastating global crisis of micronutrient malnutrition, **we urge your support for the resolution “Global Prevention of Congenital Malformations by 2030 by Prioritizing Food Fortification with Micronutrients,” which has been submitted for your consideration at the 152nd session of the Executive Board, 30 January – 7 February 2023.**

Colloquially referred to as “hidden hunger,” deficiencies in essential vitamins and minerals, specifically folate, iron, vitamin A, and zinc, affect 50% of all preschool aged children and 67% of all women of reproductive age (WRA) worldwide, according to [a recent study](#) published in The Lancet Global Health.ⁱ These deficiencies cause devastating birth defects, blindness, fragile immune systems, and death during childbirth. Iodine deficiency, still prevalent in many countries, impairs brain development in children, undermining their ability to learn and their eventual earning potential and productivity. Altogether, these preventable deficiencies are among the greatest global threats to human potential.

We already know how to tackle this problem. Large scale food fortification (LSFF) adds essential vitamins and minerals to widely consumed items, such as flours, rice, cooking oil, and salt during processing. These foods and condiments are consumed by nearly everyone and fortifying them is an inexpensive and incredibly effective way to improve nutrition across entire populations. Just one dollar invested in fortification brings 27 dollars on average in economic return through improved health and productivity, while sparing countless families the pain of disease, intellectual disability, miscarriage, termination of a wanted pregnancy, still birth, or the death of an infant or child.

The unacceptably high prevalence of congenital malformations, such as folic acid-preventable spina bifida and anencephaly is a striking example of preventable death and morbidity for which LSFF is part of the solution. These neural tube birth defects are among the top contributors to child morbidity without a cure and most affected pregnancies result in miscarriages, terminations, stillbirths, or under-five mortality. Children born with spina bifida require immediate specialized medical intervention as well as lifelong access to multidisciplinary care to reach their full potential while living with lifelong paralysis, incontinence, and other co-morbidities. Access to essential healthcare and support services is not the reality for most people with spina bifida and their families, especially in low-income countries, resulting in further preventable infant and child mortality and morbidity.

There are 30 years of unequivocal scientific evidence on the protective effect of folic acid to prevent neural tube birth defects. A [2019 systemic review and meta-analysis](#) found that food fortification with folic acid reduces the prevalence of such birth defects by 41% on average.ⁱⁱ Despite this evidence, mandatory fortification of cereal grains with folic acid and other micronutrients is implemented in only 91 countries, and many of these programs and policies are under resourced and insufficiently enforced, preventing less than 25% of the estimated cases of spina bifida and anencephaly worldwide.

A staggering 3 billion people worldwide cannot afford an adequately nutritious diet, one that supplies the vitamins and minerals that all humans need to be healthy and productive. But micronutrient deficiency is not exclusive to those who cannot afford a nutritious diet. A widespread lack of awareness persists regarding the importance of a micronutrient-rich diet and what foods should be considered

micronutrient-rich. Additionally for some micronutrients, such as folate and iodine, adequate consumption through diet alone is extremely difficult in most contexts.

Mandatory fortification of staple foods has proven to be the most successful policy in reducing the prevalence of congenital malformations such as spina bifida, anencephaly, and other neural tube defects, as well as conditions such as congenital hypothyroidism. Micronutrient deficiency is a crisis that affects all communities globally, be they low-income or high-income. Because micronutrients are so critically important to brain development and resilience, our failure to nourish women of childbearing age and young children undermines public health and will continue to haunt us socially, economically, and politically until the world makes micronutrient nutrition a higher priority.

Doubling down to improve the reach and quality of food fortification programs has huge potential to combat the global malnutrition crisis. Over 80 countries could benefit from new fortification programmes, and most existing programmes can and must be strengthened to reach more people with more nutritious food. As a global community we must rise to this challenge and quickly. In an increasingly volatile and fragile world, we cannot afford for the next generation to grow up without access to the nutrients they need to develop and thrive.

In recognition of the enormous amount of preventable suffering and disease currently caused by micronutrient deficiency and the existence of a cost-effective solution that has yet to be fully deployed, the undersigned organisations urge you to ensure that the resolution “Global Prevention of Congenital Malformations by 2030 by Prioritizing Food Fortification with Micronutrients” is put on the agenda of the 76th World Health Assembly for consideration and passage:

ⁱ Stevens, G, Beal T, Mbuya MNN, Luo H, Neufeld, L. “Micronutrient deficiencies among preschool-aged children and women of reproductive age worldwide: a pooled analysis of individual-level data from population-representative surveys.” *Lancet Global Health* 2022; 10: e1590-99.

ⁱⁱ Keats EC, Neufeld LM, Garrett GS, Mbuya MNN, Bhutta ZA. “Improved micronutrient status and health outcomes in low- and middle-income countries following large-scale fortification: evidence from a systematic review and meta-analysis.” *Am J Clin Nutr.* 2019 Jun 1;109(6):1696-1708. doi: 10.1093/ajcn/nqz023. PMID: 30997493; PMCID: PMC6537942.