

# Development of legislation and standards for wheat flour fortification in Indonesia

<b>Country:</b>	Indonesia	<b>Themes:</b>	Policy and budget cycle management	<b>Sub-themes:</b>	The review of relevant policy and legislation documents regarding fortification, including changes to standard documents
<b>Date:</b>	2023				



## Overview



Food fortification – adding vitamins and minerals to food staples – is a safe, low-cost, effective, and evidence-based public health strategy that can help ensure that everyone, including the most vulnerable, has access to essential micronutrients.

Fortification programmes implemented population-wide have been associated with a 24 per cent reduction in anaemia among women and a 46 per cent reduced risk of neural tube defects, according to a 2010 study published in the *International Journal of Epidemiology*. Some successful examples from among the Association of Southeast Asian Nations include the mandatory addition of micronutrients to flours and cereals, vitamins to cooking oil and iodine to salt.

The adequate intake of micronutrients can prevent infections, deficiencies in iron and other nutrients, and serious birth defects of the brain and spine. When consumed by pregnant and lactating mothers, flour fortified with folic acid and oil fortified with vitamin A have proven benefits for the health of infants through the improved quality of breast milk.

Recognizing this, the Government of Indonesia made the fortification of wheat flour with iron, zinc, folic acid and vitamins B1 and B2 mandatory in 2002. However, the guidelines did not align with the World Health Organization's guidelines on wheat flour fortification. The National Standard for Fortification of Indonesia did not specify the type of iron fortificant, leading most wheat millers to use electrolytic iron – the least expensive compound and the least bioavailable – which is not recommended by the WHO. Bioavailability refers to the ability of a nutrient to be absorbed and used by the body.

To boost the ability of the wheat flour fortification programme to reduce the high prevalence of iron deficiency anaemia in the country, Nutrition International, as the SUN Civil Society Alliance coordinator, together with development partners, advocated with the Government to align its National Standard for Fortification with the WHO guidelines.



## Objectives of the action brief

The objective of this action brief is to share the story of advocacy with the Government of Indonesia to revise the National Standard for Fortification to require the use of ferrous fumarate, ferrous sulphate or NaFeEDTA, the fortificants recommended by the WHO to reduce the prevalence of iron deficiency anaemia.



## Period covered

This action brief covers 2017, when advocacy began, to 2021, when the new standards were issued by the Government.



## What action was taken?

A series of key steps were taken. In 2017, Nutrition International started advocacy with the Government of Indonesia to change the flour fortification legislation and standard. They did this by collecting global evidence on wheat flour fortification and conducted an assessment on the effectiveness of different types of iron fortificants. In 2019, a risk assessment analysis was undertaken, and the Government of Indonesia revised.

In 2018, Nutrition International supported the Ministry of Industry and the National Standardization Agency in revising the fortification standards to include ferrous fumarate, ferrous sulphate or NaFeEDTA as iron fortificants.

In March 2020, during the COVID-19 pandemic, the Government of Indonesia relaxed the mandatory fortification of wheat flour, citing challenges related to the importation of necessary ingredients, or premix from Malaysia and India. With the prevalence of anaemia among women being at 28.8 percent and 48.9 percent among pregnant women, the relaxation of the law coupled with COVID19 put women and children at greater risk as it

weakens immunity and food fortification is a critical tool to deliver vital micronutrients.

In February 2021, the Government of Indonesia finally enacted the new bill on the mandatory fortification of wheat flour, with a six-month grace period for using the new fortificants, as recommended by the WHO. Full implementation occurred in August 2022, after the grace period to allow labellers and packagers to comply with the regulation.

This mandatory policy is essential to maximizing the effect of large-scale food fortification on vitamin and mineral deficiency in the general population. Nutrition International has continued to provide advocacy support by conducting health and economic assessments of the revised wheat flour fortification standard using the more bioavailable type of iron, including a cost–benefit analysis of the revised wheat flour fortification standard. The findings will be used to support the National Planning Agency in putting forth a stronger argument for the importance of increased funding for fortification regulation and enforcement.





## What would the country do differently?

During situations like the COVID 19 pandemic, the availability of premix is an important consideration. If a similar situation arises in the future, it will be important to ensure that the fortification of wheat flour is not halted. Maintaining close relationships and coordination with flour millers is important to motivate them to continue fortification, even during difficult situations.

Government agencies often have limited staff and equipment to collect samples and test premix and fortified wheat flour samples. Monitoring agencies also can be unable to inspect mills due to a lack of adequate knowledge on protocols, analysis methods to detect

the fortificant used, and guidelines for revised iron levels to ensure that the new iron compounds are used as a fortificant. It is important that training be provided for the laboratory personnel of monitoring agencies.

Hikes in prices of imported wheat due to ongoing global issues, such as the war in Ukraine and the unpredictability of the global market, have influenced domestic production availability and processing and the prices of fortified wheat. The price of imported wheat has increased by 30 per cent since December 2021, and this could be used by millers as a reason to seek relaxation or complete halting of mandatory fortification.



## Adaptation and Applicability

**Countries with a high burden of micronutrient deficiencies should have mandatory food fortification. Effective food fortification should:**

- Be applied in staple food
- Be set up as mandatory, not voluntary
- Have low-cost, scalable intervention that can ensure the majority of the population is provided with essential micronutrients



## Next steps

Nutrition International will continue to strengthen the monitoring and enforcements system and capacity building for millers' internal quality assurance and quality control.



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## Further information



<https://apps.who.int/gho/data/view.main.GSWCAH28v>



Combating consequences of pandemic with fortified food staples – Opinion – The Jakarta Post.pdf

This Good Practice was developed in collaboration with the SUN Civil Society Network (SUN CSN). For more information about the SUN CSN, please visit their website: <https://www.suncivilsociety.com/>

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