

Information Brief

Wheat flour millers



FOOD FORTIFICATION PROGRAMME
FORTIFYING PAKISTAN'S FUTURE

Wheat flour fortification: Reducing vitamin and mineral deficiencies in our society

Wheat flour plays a significant role in the daily diets of people across Pakistan, providing people a staple ingredient that is used in many baked food items such as roti (chapatti), naan and cookies. It is an important part of a healthy diet and is a key source of the energy needed to perform everyday activities. Wheat flour millers have a social responsibility to provide fortified and high-quality flour to the public and, in doing so, help reduce the disease burden which result from the risks associated with vitamin deficiencies – especially in women, children and adolescent girls. Beyond this responsibility, wheat flour millers have a mandate to meet the edible oil and ghee fortification standards of Government regulatory authorities.

A nutrition crisis

Two to three percent of Pakistan's gross domestic product (GDP) growth is lost annually due to malnutrition. To address this urgent issue, Pakistan has joined 86 other countries in working towards making the fortification of wheat flour mandatory.¹

Pakistan faces a nutrition crisis that, if not addressed, will have severe implications for maternal and child health. The 2018 National Nutrition Survey (NNS) states that 42% of women of reproductive age in Pakistan are anaemic, 22.1% are zinc deficient and face multiple deficiencies in key nutrients. The problem repeats itself in children, with 54% of under-5 suffering from anaemia and 18.6 are zinc deficient.²

Why fortify?





Fortification involves adding vitamins and minerals to staple food to prevent nutritional deficiencies. These nutrients help prevent diseases, strengthen immune systems and improve productivity and cognitive development.³ In the milling process, many nutrients are removed. Moreover, the body has more chance of absorbing iron added through fortification than the naturally occurring iron wheat already contains. Fortified wheat flour is healthy as it contains four essential minerals and vitamins that our body requires on a daily basis. These include iron, folic acid, zinc and vitamin B12.

The role of wheat flour millers

Wheat flour currently contributes 72% of Pakistan's daily caloric intake, with per capita wheat consumption of around 96 kg per year.⁴ More than 1000 wheat flour registered mills in Pakistan are providing commercially processed wheat flour to the population. By fortifying the wheat flour produced in these mills, wheat flour millers can play a critical role in helping provide vitamins and minerals essential for our population.

Experts believe early entrants into the fortified food market will benefit as demand and consumption increases.

Millers will need to ensure they meet the standards set out by the government regulatory authorities about the type and quantity of vitamins to be added to wheat flour:

-  Iron: 15 ppm
-  Folic acid: 1 ppm
-  Vitamin B12: 0.008 ppm
-  Zinc: 30 ppm

The industry will benefit from zero-rated customs duties and taxes

In 2016, the Federal Board of Revenue exempted customs duties and taxes on the import of micronutrient premixes and their sales. The Finance Act of 2018 - 19, also provides exemptions on customs duties for the import of specialist micro-feeder equipment and sales. This is an opportunity for the wheat flour milling industry to contribute to the reduction of vitamin and mineral deficiencies in the Pakistani population and to capitalise on the growing market for fortified wheat flour.

Food fortification is highly cost-effective

A 2017 economic analysis indicates that fortification is a highly cost-effective intervention.⁵ In Pakistan, the cost is minimal:⁶

- The cost of fortification of wheat flour (iron, folic acid, zinc, vitamin B12) is Rs. 25 paisa per kg
- Total annual cost per person, according to the per capita consumption of 96 kgs wheat flour, is Rs. 25



FFP support to wheat flour milling industry

FFP is supporting the industry to transition to fortified food products in several ways:

- Training of wheat flour millers in fortification processes and internal quality assurance and control processes.
- Supporting tests of fortified wheat flour to examine the nutrient value of iron.
- Establishing cluster laboratories with testing equipment for a group of 25 wheat flour mills, placed in one central location, to ensure standards are achieved.
- Providing high quality micro-feeders, the equipment used in wheat flour fortification, to individual mills participating in the programme across the commercial wheat flour industry.
- Facilitating the initial supply and purchase of iron, folic acid, zinc and vitamin B12 premix (halal certified), to be added to wheat flour during the milling process.
- Helping to facilitate the decisions of the Federal Government to apply zero-rated customs duties and taxes on the import of micro-feeders and iron, folic acid, zinc and vitamin B12 premix.
- Providing quality assurance equipment to both mills and public testing laboratories for testing the nutrient value of iron, folic acid, zinc and vitamin B12 in fortified wheat flour.
- Testing and scaling up a media campaign about the health benefits of fortified wheat flour with the aim of creating demand and increasing sales.

What needs to happen now?



We need commercial wheat flour millers to:

- ✓ Participate in the Food Fortification Programme by signing the memorandum of understanding and ensure the installation of micro-feeders.
- ✓ Ensure fortified wheat flour meets the standards set by the Government regulatory authorities.
- ✓ Continue to maintain the micro-feeders and the purchase of iron, folic acid, zinc and vitamin B12 premix.
- ✓ Use labelling, such as Government approved fortified wheat flour logo, and advertise information about the health benefits of fortified wheat flour, maida and fine.

1 Food Fortification Initiative Network, http://www.ffinetwork.org/global_progress/index.php

2 National Nutrition Survey, 2018

3 Why fortify? http://www.ffinetwork.org/why_fortify/index.html

4 Grain and Feed Annual Report, 2017

5 <http://jn.nutrition.org/content/136/4/1068.long> ; Journal of Nutrition , 2017 by the American Society for Nutrition

6 Study on the fortification costing of wheat flour (wheat flour) and edible oil/ghee in Pakistan, May 2007. USAID/GAIN Pakistan Regional Food Fortification Project.

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About Food Fortification Programme; the UK Government's Department for International Development (DFID) is funding a five-year Programme to overcome micronutrient malnutrition in Pakistan, through sustainable improvement in food fortification. FFP will achieve this through sustainably improving access and consumption of wheat flour fortified with iron, folic acid, zinc, vitamin B12 and edible oil/ghee fortified with vitamins A, D.

For more information about Food Fortification Programme and its work on Food Fortification in Pakistan, please visit www.ffp-pakistan.org, follow FFP on **Facebook** @FFPpakistan and **twitter** @FFP_PK If you have queries, please write to us at info@ffp-pakistan.org and Laila.Rubab@ffp-pakistan.org

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