Faces Of Anemia

Afidra Ronald
Children

- Iron-deficiency anemia affects 114.7 million children worldwide
- It impairs physical and cognitive development which later in life limits earning potential

Istockphoto
Women

- Iron-deficiency anemia affects:
  - 16.2 million pregnant women
  - 243.2 million non-pregnant women of child-bearing age
If women of reproductive age with anemia related to iron deficiency stood head to toe, they could reach the moon and circle it.

Distance to the moon and around it is 395,317 kilometers. If 243,187,000 women, each 1.65 meters tall (5.41 feet), stood head to toe, that would be 401,259 kilometers.


Photo from NASA Earth Observatory on Flickr
Consequences of anemia

- Causes debilitating fatigue
- Reduces work capacity and lower national gross domestic product (GDP)
- Contributes to 20% of all maternal deaths
It was like having jet lag. I always fell asleep in class.

I had to quit the cross country team.

I thought it was normal fatigue.

I couldn’t run to catch a bus.

I couldn’t do my work.

I felt dizzy and on the verge of fainting when I was pregnant.

It was like having jet lag.
It was astonishing to learn that many of my friends, colleagues, and neighbors had experienced anemia at some point, and this in Switzerland; a country of abundance. It is time to give a face to anemia worldwide!

- Peter Böhni, Managing Director EPFL Innovation Satellite and Head Corporate Technology Value Nutrition for Bühler AG, and member of the Food Fortification Initiative Executive Management Team
Does fortifying flour with iron help?
Fiji’s Success with Wheat Flour Fortification

Reduction in prevalence of iron, folate and zinc deficiency and anemia in women of child bearing age

<table>
<thead>
<tr>
<th>Deficiency</th>
<th>2004 (Before fortification) %</th>
<th>2010 (After fortification) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron</td>
<td>22.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Folate</td>
<td>8.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Zinc</td>
<td>39.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Anemia</td>
<td>40.3</td>
<td>27.6</td>
</tr>
</tbody>
</table>

National Food and Nutrition Centre 2010
Fortification reduced iron-deficiency anemia in Costa Rica

**Prevalence of Iron-deficiency Anemia in Children 1-7 Years**

- **Pre-fortification**: 6.2
- **Post-fortification**: 0

Wheat flour, maize flour, powdered milk and liquid milk fortified with iron

Martorell 2015
Each year of flour fortification is associated with a 2.4% decrease in anemia. 

Successful iron fortification programs:

✓ Are well implemented and monitored

✓ Optimize coverage and consumption

✓ Use recommended iron compounds and concentrations