GLOBAL AND INDIAN EVIDENCE ON FORTIFIED RICE
RICE FORTIFICATION

SUMMARY OF SCIENTIFIC EVIDENCE

Rice fortification is a proven method to curb micronutrient malnutrition. It’s a cost effective and proven intervention. There is an available pool of international scientific studies including India, conducted on infants, children and women demonstrating the efficacy and effectiveness of fortified rice in improving micronutrient status.

Key findings from these studies support the efficacy of fortified rice in improving various micronutrient deficiencies:

1. Anaemia is defined as Hb level: <11.5g/dL in children 5-11 years; <12g/dL in children ≥12 years; <11 g/dL during pregnancy

2. Iron deficiency (ID) is when serum ferritin levels fall <15mcg/

---

1Anaemia is defined as Hb level: <11.5g/dL in children 5-11 years; <12g/dL in children ≥12 years; <11 g/dL during pregnancy

2Iron deficiency (ID) is when serum ferritin levels fall <15mcg/
GLOBAL EVIDENCE

Perignon (2016) CAMBODIA

- Study conducted for 6 months among 6-16 months children who were fed Multi-Micronutrient Fortified Rice (MMFR - FORISCA - UltraRice + NutriRice) through WFP School meal programmes for 6 weeks 6 days a month. It with significant increase in Hb level and Vitamin A levels at 3 months for children with low Hb.

Arcanjo (2012) BRAZIL (MOREANOSL)

- A study done for 18 weeks among 10-23 month old infants showed increase in their haemoglobin levels and a decrease in anaemia prevalence.

Angeles - Agdeppa (2011)

- PHILIPPINES
  - A study done for 9 months among 6-9 year children showed increase in their haemoglobin levels and a decrease in anaemia prevalence.

Beinner (2010)

- BRAZIL (BELO HORIZONTE)
  - A study done for 5 months among mildly anaemic 6-24 month children showed increase in their haemoglobin levels, serum ferritin and a decrease in anaemia prevalence.

Bagni (2009)

- BRAZIL (RIO DE JANEIRO)
  - A study done for 4 months 1-5 year old children showed increase in their Haemoglobin Levels, and decrease in anaemia prevalence.

Angeles - Agdeppa (2008)

- PHILIPPINES
  - A study done for 6 months among 6-9 year old children showed increase in their haemoglobin levels, and decrease in anaemia prevalence.

Hotz (2008)

- MEXICO
  - A study done for 6 months among 18-49 year old non pregnant and non lactating women showed increase in their plasma ferritin levels, iron stores and Hb levels, decrease in anaemia.

Graham (2007)

- NEPAL
  - A study done for 6 weeks on 106 night blind pregnant women showed decrease in iron deficiency anaemia, increase in erythrocyte riboflavin levels and increase in plasma ferritin levels.

Haskell (2005)

- NEPAL
  - A study done for 6 weeks among 18-45 year old pregnant women showed significant increase in plasma retinol.
Thankachan (2012)

BENGALURU
A study done for 6 months among 6-12 year old children showed increase in haemoglobin levels and decrease in anaemia prevalence.

Radhika (2011)

ANDHRA PRADESH
A study done for 8 months among 5-11 year old children showed increase in haemoglobin levels and decrease in anaemia prevalence.

Moretti (2006)

BENGALURU
A study done for 7 months among 6-13 year old children showed increase in serum ferritin, increase in body iron stores.

Zimmerman (2006)

BENGALURU
A study done for 4 months on 5-9 year old children showed increase in serum ferritin and decrease in iron deficiency.
REFERENCES


