



Iron Deficiency Anaemia is a condition in which the number of red blood cells (and consequently their oxygen carrying capacity) is insufficient to meet the body's physiologic needs.

Prevalence of Iron Deficiency in India (CNNS 2016-2018)

Pre-schoolers - 41%, School-age children - 24%, Female adolescents - 40%, Male adolescents - 18%

CAUSES

- Low intake of bio available iron
- Increased physiological iron requirements
- Infections
- Impaired absorption of iron
- Other causes: Surgery, trauma

SIGNS & SYMPTOMS



Spooning of the nails, Fatigue, Dizziness, Pale skin, Pica, Soreness of the tongue

AT RISK POPULATION

- Infants and Adolescents
- Women of reproductive age
- Pregnancy
- Inadequate access to foods rich in absorbable iron

INTERVENTION STRATEGIES

Food diversification, Supplementation, Fortification, Bio fortification

FOOD SOURCES

Bio-availability of Iron from heme (non-veg) sources is higher than the non-heme sources.

BIO AVAILABILITY OF DIETARY IRON

- ✓Heme iron- (15%-35%)
- ✓Non-heme iron- (2%-20%)

HEME

- Chicken / goat liver
- Eggs
- Red meats
- Dried fishes

NON-HEME

- Bajra, wheat bran, poha - rice flakes, Puffed rice
- Dried fruits like dry dates, dried anjeer, dried apricots
- Dried beans
- Green leafy vegetables
- Kakvi, Jaggery (Liquid Jaggery)
- Gardencress seeds (halim)

ENHANCERS

- Iron deficiency • Heme iron • Vitamin C rich diet

DIETARY INHIBITORS

- Phytates, oxalates and tannins
- Calcium rich food



CAUTION : GARDENCRESS SEEDS IS NOT RECOMMENDED IN PREGNANT WOMEN

References

1. WHO. Haemoglobin concentrations for the diagnosis of anaemia and assessment of severity. Vitamin and Mineral Nutrition Information System. Geneva, World Health Organization, 2011)
2. Ministry of Health and Family Welfare (MoHFW). Government of India, UNICEF and Population Council. 2019. Comprehensive National Nutrition Survey (CNNS) National Report. New Delhi
3. NIN, 2010

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