### Iron rich Food Item.

The human diet contains two types of dietary iron – Heme Iron and the other Non-Heme Iron.

The Heme Iron which is found in Animal Products gets readily absorbed by the body.

The Non heme Iron found mainly in plant products would get absorbed in the body easily, by including Vitamin C rich food.

So consuming Iron rich food will improve Hemoglobin level in the blood

All green leafy vegetables are rich in Iron.

### **Heme Iron**

Animal food products are the main source of heme iron.

Consists of haemoglobin and myoglobin.

Heme Iron is well absorbed.

## Non-Heme Iron

Non-Heme iron is found mainly in plant sources.

Cereal and Pulse-based diet contain non-heme iron.



# **ANAEMIA**





NATIONAL INSTITUTE OF NUTRITION (Indian Council of Medical Research) Jamai Osmania PO, Hyderabad Andhra Pradesh, INDIA Anaemia is a major global health problem which is characterized by low level at haemoglobin in the blood. Haemoglobin is necessary for transporting oxygen from lungs to other tissue and organs of the body. Anaemia is associated with an increased risk of morbidity and mortality especially in pregnant women and young children.

It is a disease with multiple causes:
Vitamin and mineral deficiencies
No Nutrient – Infection, that is frequently
co – occurring

It is observed that data about global prevalence of anaemia are as follows:

Pre-school children ... 47.4%
Pregnant women ... 41.8%
Global prevalence of anaemia in non-pregnant women ... 30.3%

(Source: The Guide Book Nutrition Anaemia-sight and Life 2007)

If we look at the Indian condition, the recent 2006 NFHS Report indicates that 6-59 month age children, 70% of them are anaemic. Out of this, 26% are mildly anaemic, 40% moderately anaemic and 3% are severely anaemic. In the case of women, 43% are moderately anaemic and 2.7% are severely anaemic.(NFHS 2007)

Hemoglobin helps in transporting oxygen through the blood cells to the

entire Body. It is very essential in keeping a person active, so it is important to include Iron Rich food in our daily diet.

The level of haemoglobin below normal will be considered as anaemia.

Normal level ... 14-15g/dL Anaemia ... <12 g/dL Moderate anaemia ... < 10 g/dL Severe Anaemia ... <7 g/dL

### **Negative effects of Iron deficiency**

Cognitive impairment decreased physical activity and reduced immunity. Iron Deficiency in school going children leads to poor memory power, attention span and poor scholastic achievement.

Anemia during pregnancy would lead to poor foetal development and some time under weight babies, and there are also chances of affecting the health of the pregnant women also.

Hook worm infestation also leads to Anemia, Hook worm gets into the body through the skin, and reaches the intestines and absorbs all the blood in the body leading to Anemia. So we should follow all personal hygienic practices like washing hands with soap, wearing footwear, and using Toilets instead of Defecating in the open to prevent hook worm infection.

### Optimum iron Requirement for Different Age groups

Age Group	Microgram/day
4 -12 Months	120
13-14 months	56
2-5 Yrs	44
Pregnant women	24
Menopause age women	43

# Iron rich food Items and their Nutritive Value

Iron rich food items	Iron content in mg/100g Edible portion
Bajra	8.00
Ragi	3.9
Wheat	5.3
Chana Dal	5.3
Peas	7.05
Amaranth	27.3
Sheep Liver	6.3
Mutton	2.5

Source Nutritive value of Indian food, NIN (ICMR) Hyderabad

