

DIET IN ANEMIA

More than 50 % of Indian women suffer from anemia - a condition in which the number of red blood cells (RBCs), and consequently their oxygen-carrying capacity, is insufficient to meet the body's physiological needs. Anemia due to reduced haemoglobin levels can result from different reasons ranging from defective red cell production and increased red cell destruction or blood loss. Iron is necessary for the synthesis of haemoglobin and iron deficiency is thought to be the most common cause of anemia globally. However other nutritional deficiencies (including folate, vitamin B12 and vitamin A), acute and chronic inflammation, parasitic infections, and inherited or acquired disorders that affect haemoglobin synthesis, can also cause anemia.

Further, anemia can also be attributed to dietary inadequacy due to poor purchasing power, illiteracy, ignorance regarding nutritional value of available cheap food, cultural taboos, superstition, etc. In a society where the status of women is poor, women often follow the custom of 'eating last' or eating only the food left over after the meals of male members of the family

Anemia results in impaired cognitive and motor development in children and decreased work capacity in adults. The effects are most severe in infancy and early childhood. In pregnancy iron deficiency anemia can lead to perinatal loss, prematurity and low birth weight (LBW) babies. Iron deficiency anemia also adversely affects the body's immune response.

Causes of Nutritional Anemia in Women

- Insufficient quantity of iron-rich foods and "iron enhancers" in the diet (foods rich in vitamin C such as citrus fruits), and low bioavailability of dietary iron (e.g., foods containing only non-haem iron)
- Excessive quantity of "iron inhibitors" in diet, especially during mealtimes (e.g., tea, coffee; calcium-rich foods)
- Iron loss during menstruation
- Poor iron stores from infancy, childhood deficiencies and adolescent anemia
- Iron loss from post-partum haemorrhage
- Increased iron requirement due to tissue, blood and energy requirements during pregnancy
- Teenage pregnancy
- Repeated pregnancies with less than 2 years' interval
- Iron loss due to parasite load (e.g., malaria, intestinal worms)
- Poor environmental sanitation and unsafe drinking water

Iron Rich Foods

To manage anemia, a diet rich in iron is a must. Iron that is obtained from animal foods and plant foods are the two forms of dietary iron. It is best absorbed when combined with vitamin C. The recommended dietary allowance for iron in adults is 8mg per day for men and 18mg per day for women. Some iron rich foods include

- Red meat: There is rich iron content in lamb, beef and other red meats. The heart, kidneys, and the liver of the red meats are those parts that contain high quantities of iron. It is also a great source of Vitamin B12.
- Spinach: a very popular leafy vegetable that helps in preventing anemia. It is a rich source of calcium, Vitamins A, B9, E and C, iron, fiber and beta carotene. It is found that half a cup of boiled spinach contains 3.2 mg of iron accounting for about 20 percent of the iron requirement for a woman's body.
- Beetroot: helps in repairing and reactivating red blood cells.
- Peanut butter or a handful of roasted peanuts are a rich source of iron.
- Tomatoes The Vitamin C in tomatoes helps in easy absorption of iron. Tomatoes are also rich in beta carotene and Vitamins E
- Eggs are a rich source of proteins and contain a lot of antioxidants that will help in stocking up vitamins in the body when one is suffering from anemia.
- Pomegranates contain a rich source of iron and Vitamin C. They help in improving the blood flow in the body and are also very effective in treating anemic symptoms like weakness, dizziness, exhaustion
- Soybeans are a great source of iron and vitamins; however they contain phytic acid that prevents the absorption of iron. Soybean is a low fat and high protein food that fights anemia. The beans need to be soaked in warm water overnight to reduce the phytic acid content.
- Fish and sea food are an extremely rich source of iron.

The consequences of anemia in women are enormous as the condition adversely affects both their productive and reproductive capabilities. Among women, iron deficiency anemia is higher than among men due to menstrual iron losses and the extreme iron demands of a growing foetus during pregnancies, which are approximately two times the demands in the non-pregnant state. First, anemia reduces women's energy and capacity for work and can therefore threaten household food security and income. Second, severe anemia in pregnancy impairs oxygen delivery to the foetus and interferes with normal intra-uterine growth, resulting in intrauterine growth retardation, stillbirth, LBW and neonatal deaths. Therefore, anemia is a major contributor to poor pregnancy and birth outcomes in developing countries as it predisposes to premature delivery, increased perinatal mortality and increased risk of death during delivery and postpartum.