

Iron Deficiency



Iron deficiency is the most common nutritional deficiency worldwide. It is most common in infants, young children, the elderly and women of child-bearing age. Low iron stores have been reported in up to 1/3 of young children aged 1-3 years in Australia.

Why is iron important?

Iron is stored in red blood cells, and helps transport oxygen around the body. Iron is vital for brain development.

Why does iron deficiency occur?

Some of the risk factors for the development of iron deficiency in children include: prematurity, low birth weight, exclusive breastfeeding beyond 6 months, introduction of cow's milk as the main drink before 12 months, and high intake of cow's milk, delayed introduction of solids, low (or no) meat intake and general poor diet in the second year.

Dietary sources of iron:

1. Breastfed infants

Breastmilk has enough iron for babies until they are around 6 months.

2. Formula-fed infants

All infant formulas provide enough dietary iron for infants in a volume of formula around 700-1000mls per day.

3. Foods

The best sources of dietary iron for young children are red meats such as beef and lamb. Moderate amounts are found in fish and chicken.

Other foods with iron are fortified breakfast cereals, eggs, legumes, wholegrain breads and cereals, and some vegetables.

Foods rich in Vitamin C, such as oranges, mandarins, tomatoes or berries can help absorb more iron into the body.

Consequences of iron deficiency:

Symptoms of iron deficiency such as lethargy and poor development may occur before the blood levels decrease. Iron deficiency has been linked with problems such as mental delay and reduced immune function. A large number of iron deficient children will have no symptoms at all.

Summary

- Include red meat 3 to 4 times per week.
- Offer young children between a half and one serving of meat or meat alternatives per day. A sample serve is 65-100 g cooked meat or chicken, half a cup of cooked dried beans, lentils, chick peas or canned beans, 80-120g of cooked fish fillet, 2 small eggs, one-third of a cup of nuts (or nut paste).
- Include oranges, mandarins, berries or tomatoes with non-meat sources of iron.

- Encourage young children who are reluctant eaters to try minced meats, fortified breakfast cereals, smooth nut pastes and eggs.
- Limit cow's milk to 600 millilitres per day.
- In some cases a child multivitamin and mineral supplement may be recommended for a poor dietary iron intake, whilst longer-term feeding strategies can be introduced.

Links

Meat & Livestock Australia www.mla.com.au

Dietary Guidelines for Children & Adolescents; search the National Health & Medical Research Council website www.nhmrc.gov.au

Australian Iron Status and Advisory Panel www.ironpanel.org.au