



## Fact Sheet 22

## Iron Deficiency Anaemia

### What is the issue?

Iron deficiency is the most common nutritional deficiency in Australia and throughout the world. Iron deficiency causes anaemia but many people can be iron deficient but not anaemic. Iron deficiency anaemia is a serious issue for refugees in Australia that can have significant repercussions on their ability to be able to settle and establish new lives.

### What are the causes of anaemia in refugees?

Refugees are at high risk of developing anaemia for a number of reasons including:

#### Malaria and Worms

Parasitic worms and malaria are endemic in many parts of the world. Amoeba, bilharzia, giardia and hookworm can all be common. Parasites cause anaemia due to the internal bleeding they cause and the amount of blood they consume.

#### Inherited blood disorders

Sickle cell and thalassaemias are relatively common in the refugees arriving from Africa and some parts of the Middle East. Thalassaemia minor is characterised by chronic mild anaemia. Thalassaemia major is a life threatening progressive hemolytic anaemia. Thalassaemias can be present with or without underlying iron deficiency anaemia. If there is no underlying iron deficiency anaemia then supplementation with iron is not appropriate. If any of these conditions are present, management should be left to a haematologist.

#### Bleeding

Bleeding from gums due to gum disease and internal bleeding due to a variety of reasons are common causes of anaemia in refugees and can be related to an overall poor nutritional status.

#### Pregnancy/Breastfeeding

Some women from refugee backgrounds are pregnant at a relatively young age, which already places them at risk of iron deficiency. Women are also at high risk when they have multiple pregnancies close together, concurrently breastfeed and/or breastfeed for an extended period.

#### Poor access to food

Many refugees have been in camps for considerable periods of time. In many of these camps the supply of food was limited in amount and quality. Some refugees have had long term poor access to iron rich foods. In addition, high levels of food insecurity, that is, not having enough money to buy food means that this limited access can continue in Australia (see the information on Food Insecurity).

#### Late introduction of solids in infants and irregular meal patterns for children

Some refugee women have been known to exclusively breastfeed their children until two or more years of age. In refugee camps especially, the giving of food before this time could cause

diarrhoea, illness and possible death. Exclusive breastfeeding is also used as a form of contraception. Women with this life experience may be reluctant to introduce solids (especially meat) and, therefore, will need to be encouraged and supported to do so. They may also need to be supported to find more reliable contraceptive measures. Mothers should be encouraged to breastfeed for as long as possible but should also be encouraged to introduce iron rich foods at an appropriate time. The World Health Organisation recommends that children be breastfed exclusively for the first six months of life with the introduction of solid foods from six months. Breastfeeding should be continued to at least two years of age, if possible.

### **What are the symptoms of iron deficiency anaemia?**

The most common symptoms of iron deficiency anaemia are:

- poor immune function resulting in recurrent infections and/or poor wound healing
- feeling tired, lethargic and possibly irritable
- loss of appetite

It is important to stress that loss of appetite, lethargy and feeling tired can also be related to depression and posttraumatic stress. It is not uncommon for refugees, especially those who have been through significant trauma and possible torture, to suffer from depression and/or post-traumatic stress. Large numbers of children display no symptoms at all. Iron deficiency in children is regarded as a serious illness, potentially resulting in physical and intellectual impairment that may NOT be reversible.

### **What can be done?**

#### **Testing:**

Two tests are used to establish iron status:

- Full blood count: to determine whether the iron deficiency is severe enough to have haematological effects (anaemia, microcytosis, hypochromia).
- Serum ferritin is a more sensitive test of iron deficiency and measures the stores of iron in the body.

Both tests should be undertaken to determine an individual's iron status.

#### **Treatment**

Encouraging intake of high iron foods and foods high in Vitamin C as well as continuing with iron supplementation will improve overall nutritional status. Relying on supplements alone will not have the same effect.

#### **Supplementation**

Oral iron supplements often take from between 6-12 months to work. There is considerable difficulty in ensuring long term continuation of a daily dose of iron. This is due in part to the side effects of iron supplementation which can include constipation in some people. There is evidence to suggest that iron supplementation every second day, or in some cases a weekly dose improves compliance by reducing side effects without any detrimental effect on iron stores (Viteri et al, 1999).

#### **Diet**

The iron found in food is divided into haem and non-haem sources. Haem iron sources are easily absorbed while non-haem sources require the addition of Vitamin C or small amounts of meat to improve absorption.

Haem sources of iron include; red meat, chicken, pork, fish and shellfish.

Non-haem sources of iron include; eggs, beans/lentils, spinach, broccoli, dried fruit (in particular dried apricots and prunes), Milo®, fortified breakfast cereals, wholemeal bread and other wholegrain cereals.

Foods rich in vitamin C, such as oranges, tomatoes, capsicum, fruit juice, increase the

absorption of non-haem iron.

Tea consumption is high in many refugee communities especially in those who have not had access to safe drinking water supplies; it can form a significant part of fluid intake. Tea drinking contributes significantly to the social fabric of communities and often all members of the family, including children and infants will drink tea. Ceasing tea drinking will be almost impossible for many. However, discouraging the consumption of tea until two hours after eating will help iron absorption.

### **Resources**

A range of resources is available on the Good Food for New Arrivals website  
[www.asetts.org.au/nutrition/](http://www.asetts.org.au/nutrition/)

This includes flipcharts, client information and reader (targeting South Sudanese families)

### **References**

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