# NUTRITION CONCERNS: IRON DEFICIENCY ANEMIA (IDA) IN PREGNANCY

Pregnancy series

In India, Iron deficiency seems to be the most common micronutrient deficiency, with a very high prevalence of anemia among the population, including childbearing age women, pregnant and lactating women. 50% to 90% of pregnant women in India have anemia. (Nutriplanet, 2013)

#### **© Iron-Deficiency Anaemia (IDA) in Pregnancy**

#### What is Anaemia?

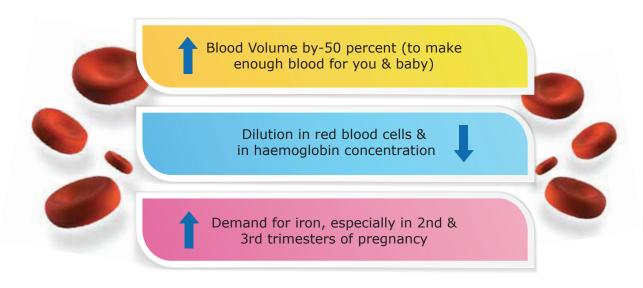
- A condition of too few red blood cells (RBCs) in the body, which can lead lack of oxygen carrying ability
- Symptoms inculde unusual tiredness, breathlessness and a lowered resistance to infections
- Occurs if there is a deficiency of essential nutrients e.g. iron, folic acid or vitamin B
   which are needed for the production of hemoglobin in the bone marrow

#### Your risk for IDA during pregnancy is high if:

- You start your pregnancy with a low body store of iron
- Your intake of iron during pregnancy is insufficient to meet your increased demand for iron

Therefore, eat well before and during pregnancy to ensure an adequate iron store and prevent IDA

# Iron-Deficiency Anemia or IDA is the most common type of anaemia in pregnancy because during pregnancy



#### • What are the causes of IDA?

IDA is caused by depletion of body's iron stores, due to

- Inadequate intake of iron- rich foods
- Recurrent infections
- · Menstrual blood loss
- Repeated pregnancies

#### • What are the health consequences of IDA for mums and babies?

- Poor pregnancy outcomes e.g. pre- term and low birth weight deliveries
- Complications during labour e.g. cardiac failure
- Babies with reduced iron stores at birth. This increases their risk for developing IDA and its consequences, e.g. a higher risk of long term and permanent impairments in both mental and physical development

#### • How much of Iron do you need during Pregnancy?

As per Reccomeded Dietary Allowance (RDA, 2010) for Indians a pregnant women needs around 35mg iron per day.

#### • How can you meet this high demand for iron during pregnancy?

1. Increase your intake of iron- rich foods Iron in food is available in two forms:

#### **Heme Sources of Iron (mg)**

- Mostly present in animal food sources, in a form that is more easily absorbed by the body
- Examples are red meats (pork, beef, lamb), fish, shellfish, chicken and duck







#### **Non Heme Iron**

- Less well-absorbed by the body than heme- iron source
- Usually found in plant food sources
- Examples are beans, bean products (e.g. tofu, tempeh), eggs, vegetables, dried fruits, nuts and iron fortified cereals











#### Things you should know:

- Iron bio-availability is poor from plant foods but is good from animal foods.
- Fruits rich in vitamin C like gooseberries (amla), guava and citrus fruits improve iron absorption from plant foods.
- Beverages like tea binds dietary iron and makes it unavailable. Hence, they should be avoided before, during or soon after a meal

## • Improve your iron status during pregnancy with an iron supplement

What Type? Iron in supplements comes in two forms- ferrous and ferric.

The ferrous form:

- Its better absorbed
- Is the preferred choice
- Examples are ferrous sulphate, ferrous fumarate and ferrous gluconate, containing varying amount of elemental iron



#### How much?

One that provides 30 to 60 mg of iron a day

#### For how long?

Should be continued for 2 to 3 months after childbirth to replace the depleted iron stores

#### When to take?

On an empty stomach because stomach acid will improve its absorption

Kindly Note: Nutritional supplements should be taken with doctor's advice. Do not self-medicate.

#### You might experience side effects, such as constipation with some types of iron supplements.

#### If this happens:

Increase your intake of fiber- rich foods such as fruits and vegetables

- Drink at least 8 glasses of fluids daily
- Consult your doctor if the problem persists



#### IMPORTANT INFORMATION

Breast milk is the best food for babies as it is the sole source of nutrition for the first 6 months of life and is recommended to be continued until 2 years, with introduction to appropriate complementary foods after 6 months of age.

# A. Following are the details of advantages, as also nutritional superiority of breast-feeding:

- i) Immediately after delivery, breast milk is yellowish and sticky. This milk is called as Colostrum, which is secreted during the first week of delivery. Colostrum is more nutritious than that of mature milk because it contains more protein, more anti-infective properties which are of great importance for the infant's defence against dangerous neo-natal infections. It also contains higher level of Vitamin 'A';
- ii) Breast Milk
  - a) Is a complete and balanced food that provides all the nutrients needed by the infant (for the first six months of life);
  - b) Has anti-infective properties that protect the infants from infection the early months;
  - c) Is always available;
  - d) Needs no utensils or water (which might carry germs) or fuel its preparations;
- iii) Breast-feeding is much cheaper than feeding infant milk substitutes as the cost of the extra food needed by the mother is negligible compared to the cost of feeding infant milk substitutes;
- **iv)** Mothers who breast-feed usually have longer periods of infertility after child birth than non-lactators;

### B. Details of management of breast-feeding, are as under:

- i) Breast-feeding
  - a) Immediately after delivery enables the contraction of the womb and helps the mother to regain her figure quickly;
  - b) Is successful when the infant suckles frequently and the mother wanting to breast-feed is confident in her ability to do so;
- ii) In order to promote and support breast-feeding the mother's natural desire to breast-feed should always be encouraged by giving, where needed, practical advise and making sure that she has the support of her relatives:
- **iii)** Adequate care for the breast and nipples should be taken during pregnancy;
- iv) It is also necessary to put the infant to the breast as soon as possible after delivery;
- v) Let the mother and the infant stay together after the delivery, the mother and her infant should be allowed to stay together (in the hospital, this is called "rooming-in");
- **vi)** Give the infant Colostrum as it is rich in many nutrients and its anti-infective factors protect the infants from infections during the few days of its birth;
- vii) The practise of discarding Colostrum and giving sugar water, honey water, butter or other concoctions instead of Colostrum should be very strongly discouraged;
- viii) Let the infants suckle on demand;
- ix) Every effort should be made to breast-feed the infants whenever they cry;
- **x)** Mother should keep her body and clothes and that of the infant always neat and clean,

