

# Iron (Fe) Deficiency Anemia

## What is it?

- Inadequate intake of Fe, blood loss, impaired absorption, closely repeated pregnancies
- **Component of Heme (protein)**- hemoglobin-Fe containing protein in RBC's carries oxygen to the body cells, hemoglobin- 60-70% Fe in body, Hgb=Fe, Pro, Copper
- **Hematocrit**- measure of RBC's, volume of blood, RBC's= B12, Folic acid, amino acids
- **Transferrin**- carrier protein, picks up Fe from intestines, < 1% of Fe as is serum ferritin

## Signs and Symptoms:



- **Pica seen in 50%**- craving of dirt, ice, cornstarch/starch, flour, clay, candies, lettuce
- flatulence, abdominal pain, anorexia, glossitis, stomatitis, pale skin, ankle edema, **Symptoms**- Impaired exercise tolerance/cognitive function, blue sclerae, koilonychia, bowel changes, headache, weakness, fatigue, vertigo, heartburn, irritability, dysphagia, palpitations, tingling in extremities (American Diet has 10-20 mg. Fe/day, 10% absorbed)

## Medications:

- **Medications**- increase slowly, gastric irritation, constipation
- **Aspirin/Corticosteroids**- increase GI bleeding/peptic ulcer, decreases Vitamin C, etc...
- **Ferrous Salts (Feostat/Fergon/Feosol)**- 10-100 mg. 4 times/day (4-30 days to improve)
  - **Don't take with Tetracycline**- due to decreased absorption of antibiotic, infection interferes with absorption, overdosing does no good, body synthesizes 5-10 mg./day
- **Imferon**- given intramuscular if oral not tolerated- pain, skin discolor

## Facts:

- **90% Stored**- is reused, body replaces Fe losses through sweat, urine, feces
  - best absorbed in small intestine- increase all meats, liver, shrimp, beef, chicken
  - damage/surgery can lead to deficiency-infants, children, teenagers- 1 dose Vit. A to correct
- **Women become Fe Deficient**- more easily than men- menstruation, cardiovascular disease, surgery
- **Lead Poisoning**- reduces hemoglobin production with Fe deficiency

## What can I do?

- **See your Health Care Provider**- help as needed to correct constipation, increase fiber, increase fluids, Fe, Protein, and Vitamin C
- **See a Registered Dietitian**- for help with your diet
  - **Foods to Avoid**:- spinach, bran, legumes, soy, tannins in tea, coffee, red wine (polyphenols)
  - **Food High in Fe**- organ meats, lean meats, tofu, soybeans, potatoes, eggs, dried fruits, molasses, wholegrain or enriched breads and cereals, dark green leafy vegetables, legumes (dried peas and beans), enriched flour and flour products