Iron / Anemia Patterns

Iron Deficiency Anemia – pattern also associated with microscopic intestinal bleeding from ulceration or ulceration due to neoplasm (order a reticulocyte count to help assess internal bleeding)

- Decreased serum iron
- Decreased serum Ferritin
- MCV decreased
- TIBC increased
- Transferrin increase
- Decreased % of transferring saturation
- Decreased serum ferritin

Iron Overload – the following laboratory patterns are present.

- % of transferritin saturation is > 50 percent
  - (% of transferritin saturation can be calculated by multiplying the total serum iron by 100 and dividing the result by the total iron binding capacity, TIBC)
- Ferritin above 200
- TIBC decrease
- Transferrin decrease
- Hematocrit (HCT) normal
- Hemoglobin (HGB) normal
- Serum Iron frequently increased above 220 mcg/ug
- Liver enzymes and serum bilirubin increased
- Blood lead sometimes increased
- Serum vitamin E decreased
- Serum triglycerides increased

TIBC = total iron binding capacity. It is a chemical approximation of transferritin. Transferritin is responsible for 50 to 70% of the iron binding capacity of serum.

Ferritin = the second most abundant iron-bearing protein in the body. It functions as an iron storage depot in the liver, spleen and bone marrow.

Increase Foods high in oxalic acid: (which inhibit iron uptake)

Listed are oxalic acid per 100 grams of food: Parsley (1.7 g), Chives (1.48 g), Purslane (1.31 g), Cassava (1.26 g), Amaranth(1.09 g), Spinach (0.97 g), Beet leaves (0.61 g), Carrot (0.5 g), Radish (0.48 g), Collards (0.45 g), Beans, snap (0.36 g), Brussels sprouts (0.36 g), Garlic (0.36 g), Lettuce (0.33 g), Watercress(0.31 g), Sweet potato (0.24 g), Chicory (0.21 g), Turnip (0.21 g), Broccoli (0.19 g)

Increase phytates: (except wheat) **which are** mainly found in whole grains and legumes. Phytates are the most potent natural inhibitors of iron absorption.

Decrease foods that will facilitate iron uptake:

Vitamin C, fructose, citrus, lysine, histidine, cysteine, methionine.

Decrease foods/lifestyles that are high in iron:

Drink only bottled water, do not use iron cooking utensils, restrict red meat, organ meats, spinach, soybeans, wheat, corn, and leaf lettuce.

Monitor every 4 weeks. If levels are not declining, refer to a physician trained in hemochromatosis that can utilize chelation (deferoxamine) or phlebotomy. The following may be used at the same time these therapies are utilized. This problem will need to be monitored the remainder of the patients life. If nutrient levels are depleted, which allows for an iron build up to occur, once it can happen again and should be monitored.

Nutrients may be used in combination to the above to assist the process:

Porphyra-Zyme™ 4 tid
Heavy Metal Detox 21st Century Homeopathics ½ capful bid
Iron free Multi-Mins™ 3 tid
Zinc taste test to assess for zinc & to begin zinc supplementation
(priming the pump so to speak)
BioProtect™ 2 tid
Magnesium to bowel tolerance

Additional Considerations:

It is important to assess individual minerals Zn, MO, MN, Cu, Cr and Vanadium and supplement as needed beyond the Iron Free Multi-Mins. Each of these minerals works to balance Iron levels and depletions could be the solo cause of iron overload. Depletions in Vitamins E, D, and B12 have also been discussed by Dr. David Watt's to be a factor in Iron accumulation. Dr. Watts feels the excess heavy metals AL, Hg Cd, will also encourage Iron accumulation, however Porphyra-Zyme will deplete these over time.

Reference

"More Than Just a Bunch of Number - Making Sense of Blood Chemistry Results", Eighth Revision-January 2014, Balancing Body Chemistry With Nutrition LLC