IRON/FERRITIN LEVELS IN FEMALE ATHLETES

It is estimated that 25-60% of competitive female runners and (up to 20% of male runners) have low iron stores or iron depletion. Low ferritin or iron levels may result in the condition call "anemia" where athletes fill chronic fatigue, weakness, dizziness, and difficulty while running for prolong efforts (over 5minutes).

Iron is an essential element used in blood production. Specifically it is used for the production of hemoglobin in your red blood cells. Runners are prone to lose more iron than non-runners due to the foot strike hemolysis (breakdown of red blood cells when the foot/heel strikes the ground). Iron affects your running because your red blood cells contain hemoglobin. Oxygen attaches to the hemoglobin of the red blood cells at your lungs and is then carried to your muscles and other tissues where it is used to produce energy aerobically. If you have low iron levels, you produce fewer red blood cells, your hemoglobin levels decrease, and less oxygen is transported to your muscles resulting in poor aerobic performance.

TREATMENT AND SUGGESTIONS

1) Runners should be getting their iron intake from both Heme and Nonheme and should be getting about 15-20mg per day.

Good food sources of iron include:

Food Sources of Heme Iron: chicken and beef liver, oysters, lean ground beef (hamburger), turkey, sirloin steak, tuna, chicken, poultry, fish, pork

Food Sources of Nonheme Iron: Ready to eat cereal (100% iron fortified), instant oatmeal (fortified), beans (white, red/kidney, black, navy, pinto, lima), spinach, tofu, quinoa, dried fruit,.

2) Increasing your vitamin C intake during meals will increase iron absorption.

3) Coffee and tea may reduce iron absorption and should be avoided.

4) *****SCHEDULE YOUR FERRITIN (SERUM FERRITIN) TEST TODAY** and become informed. Now is the time to determine if your daughter's diet is providing the necessary iron and it serves as a baseline for future tests. **THE COST IS ONLY $29**. Instead of going to your regular doctor and defending why you need a ferritin test, you can now schedule an appointment online at http://requestatest.com/ and chose from one of two locations in Arlington Heights. All you have to do is set up an account, order your test, and take your email confirmation to your location (no appointment needed). The results take only one business day and you are notified by email when your results are ready. To see your results login to your account and go to your test results section.

5) If you use an iron supplement, the ferrous forms (ferrous sulfate, ferrous gluconate or ferrous fumarate) are most easily absorbed. Iron supplements come in both pill and liquid form and may take some playing around with to see which is the best for your stomach. One of the better iron supplements for runners is "Ferrosequel."

****SCHEDULING A FERRITIN TEST****

You are strongly encourage to get your daughter's iron levels checked regularly (at least once a year) because low iron is a common injury to many female runners and it is nearly always preventable if we know in an advance your daughter's ferritin levels. The serum ferritin test measure the amount of iron being stored in the blood. Low ferritin levels are directly related to the onset of anemia, which can take weeks to overcome if you begin adjusting your daughter's diet immediately. Anemia, the clinical term for low iron levels, means the blood cannot carry oxygen to the muscles in the necessary and usual amounts and results in early fatigue and limits an athlete's ability to perform at their best.

Serum Ferritin levels below 30 indicates the levels are low and supplementation is needed.

A Serum Ferritin level below 20 indicates more concern and often times are affecting an athlete's performance. (see flow chart for more info)

See attached articles for more information on Iron and Ferritin.