

Dear Runners and Parents,

The coaches asked that I share the following information with you regarding the impact that low iron has had on several of our cross-country runners. These runners struggled with the following: fatigue – both during running and in the classroom, feeling like “I’m running through quicksand”, and the coaching noticing that the runner “looks tired.”

In the past we have suggested runners have their iron levels tested, specifically serum **ferritin**. Ferritin is a measure of the amount of iron being stored in the blood. Low ferritin levels can be an indication of anemia. As it can take many months to build low levels up to acceptable levels, early testing in the season can help. During a sports physical, a hemoglobin (finger prick) test is typically done to test iron. However, with several of our runners, this test was normal, while the ferritin was low, and iron supplements were needed. Collegiate runners’ ferritin levels are regularly tested.

Runners are at a risk for low iron due to the following reasons; see the link to read the entire article:

***Through your feet** – First, a process called foot strike hemolysis occurs in runners, especially those who run high mileage. Foot strike hemolysis is a process where red blood cells are damaged when the foot hits the ground, thus reducing your hemoglobin levels.*

***Through sweat** – Iron is lost through sweating. While the amount of iron loss isn’t staggering, for a runner working out in hot and humid conditions, the losses can easily add up.*

***Through the intestines** – Loss of iron through the GI tract (primarily the stomach or large intestine) is a problem for some athletes. Iron loss through the GI tract is fairly minor, but there may be a cumulative effect over months of running that leads to iron deficiency.*

***Female runners** – Finally, female runners have an especially difficult time maintaining proper iron levels since they also lose iron during menstruation.*

<https://runnersconnect.net/running-nutrition-articles/iron-deficiency-in-runners/>

As mentioned, low ferritin can lead to fatigue; and it may increase a runner’s chance of injury. According to the following article ideal levels for runners at the high school age are at least 50:

<http://www.runningwritings.com/2011/11/ferritin-hemoglobin-and-iron-deficiency.html>

Talking to your doctor about iron can be tricky; a lot of doctors may not be familiar with low iron in runners and will order basic blood work which does not include ferritin, only hemoglobin.

I found information about ordering a ferritin test from the Naperville North Cross Country site. This test is a simple and inexpensive way to check ferritin levels (\$29), and then you can discuss the results with your doctor. http://www.napervillenorthgcc.org/Iron_Letter.pdf

The link below takes you to the site to order a ferritin test. <http://requestatest.com/>. Then you select the lab where you want the order filled - the closest lab to Geneva is Labcorp at the NW corner of Rt. 31 & Fabyan in the north side of the medical building. Results are usually emailed to you within 24 hours.

I would not advise taking iron supplements without talking to your doctor, because too much iron can lead to problems due to risk of iron toxicity.

If you don't want to order the ferritin test a way to mitigate some of the risk of low iron would be to take a Flintstones children's multi vitamin with iron. The vitamins contain 18 mg of iron. While it probably won't raise a really low Ferritin number to an adequate level, it may stave off some symptoms.

<https://www.flintstonesvitamins.com/products/iron-vitamins/>

Please see the following examples of iron rich food that will help maintain runners iron levels.

http://www.napervillenorthgcc.org/Iron_Guide.pdf

I hope this information is helpful and please note I am not qualified to give actual medical advice. I am just sharing some information I found on the topic of low iron in developing runners. If you have any general questions about ferritin in runners please talk to your doctor about ferritin test results and iron supplements.

Thank you.