

# Iron Level Upkeep For Runners

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An iron deficiency is one of those nasty conditions that can disguise itself as being overtrained or under-rested. A drop in performance, an onslaught of fatigue, runners watch as their running takes a nose-dive and there seems to be no 'logical' reason as to why.

Getting a blood panel as soon as you notice a dramatic change in your running is typically one of the first suggestions from a coach, with iron levels being one of those red flags to watch out for, particularly for females. "For someone going through these types of situations, the first thing I would ask is about their sleep, nutrition, iron, etc.," says Kelly McDonald, assistant coach at Cal Poly.

For competitors asking their bodies to perform at one hundred percent, even a ten percent drop in how one feels is a lot — call it the athlete's magnification glass to the layman's perception of tired.

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Ferritin is an intracellular protein that stores iron in the body and releases it in a controlled fashion. The amount of ferritin stored is reflective of the amount of iron stored. For runners in training, the 'normal' recommended ferritin levels are markedly different from their sedative counterparts. If you don't have a physician used to working with athletes, they may wind up telling you that you are in the 'normal' range and have nothing to worry about when, in fact, an iron deficiency may be hampering your training. Thus, as a runner, you need to be informed of your unique needs and be sure to speak up to your doctor.

## What is 'normal'?

For the average person, normal ferritin levels are quantified as 12-300 nanograms per milliter (ng/ml) for men and 12-150 ng/ml for women. To put it bluntly, an athlete running with a 12 ng/ml ferritin level will be feeling the effects of anemia and their training will be suffering. Runners need to be much higher on that scale.

"Every athlete is different in terms of levels," says McDonald. "I've seen athletes build their ferritin level to above 20 and they feel great, while others don't perform well until 40." Still others elite athletes will aim for levels upwards of 70 or 100 ng/ml. Part of figuring out what your ideal ferritin level is involves getting your blood work checked regularly throughout your training phases. "As an athlete I liked to get checked prior to each season and also after, to see if my levels increased or decreased," McDonald said.

## How to Get Iron-Heavy Blood

The first place to start would be to seek out iron-rich foods such as spinach, red meats, clams, oysters, and liver. Even then, most runners should be supplementing on top of that. With the rigors competitive athletes put their bodies through in training, diet alone is typically not enough to reach adequate iron levels.

— **Pills:** This is the easiest place to start; iron pills can be found over the counter and may also be labeled as ferritin or ferrous glycinate. Talk with your doctor and coach to come up with a dosage that

fits your situation; dosages depend on gender, weight and iron level, but 1-2 doses of 65mg of elemental iron has worked for many runners when they are in maintenance mode. CAUTION: Ingesting too much iron too fast will leave you feeling sick and is potentially dangerous. Gradually increase your iron dosage and if you're taking multiples, spread them throughout the day. Vitamin C helps boost iron absorption and taking Calcium at the same time will inhibit it. "A plan that I've seen effective is taking iron daily an hour after dinner with orange juice, not with calcium!" explains McDonald.

— **Liquid:** Professional runner Sara Slattery turned to a liquid supplement when she was first diagnosed as anemic, "I started taking liquid iron, 2 teaspoons two times a day, and my levels went back up [from 13] to 45 within a few months." Eventually she switched to pills, "liquid iron was a pain to travel with and was really rough on my stomach."

— **Iron Infusions:** Those with extremely low iron needing to boost their levels quickly may ask their doctor about iron infusions. IV treatments are typically done in three successive days where the patient will sit for a few hours as the iron is gradually dripped in. From personal experience, IV infusions were able to bump my iron levels from the single digits and into the high 20s within just a few days and into the 30s soon thereafter. After iron IV's the patient will continue on iron pills, liquid iron or a combination of both to continue upping their levels and, from there, maintaining adequate stores.

## Iron Upkeep

Once anemic, no runner has any desire to feel the effects of even a slight dip in their iron levels ever again. Maintaining healthy, normal levels for runners is a combination of eating wisely, taking supplementation, and then checking their levels regularly with blood panels. "Every person differs as far as their style so as an athlete, it's a good idea to get into the same routine with your intake of iron," states McDonald.

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### About The Author:

**Caitlin Chock** set the then National High School 5k Record (15:52.88) in 2004. Still an avid runner, she works as a freelance writer and artist.