Keeping an *Eye on Iron* for Optimal Health

Iron, referred to as FE on the periodic table, is the most abundant of all metals on Earth. While many don't realize it, the iron used to make metal is derived from the same element as the mineral that is so critical to the function of our bodies. Considering the valuable role iron plays in the body and in the modern lifestyle, it's a good thing it's the fourth most common element on the planet. Iron is not only in what we eat, it's used to make the silverware we eat with, the pots and pans we cook with, and even many of the appliances we use in the kitchen.

Unfortunately, many of us don't get enough iron in our diets to keep things performing at their optimal levels. As the most common nutritional deficiency affecting millions of Americans, a lack of iron can cause serious health problems if left untreated. According to a 2014 issue of *Blood* medical journal, nearly one-third of the world's population suffers from anemia, which is a health condition caused by a deficiency of hemoglobin in the blood. A whopping 2.8 million doctor's visits annually in America are for this same problem. That's why it's important to keep an eye on your iron intake and levels for optimal health. But, how do you know if you're getting the right amount of iron in your diet, and further, how can you tell if your body is using it properly?

Hard-Working Iron

Iron is the element that literally never stops. This trusty mineral supports a number of important functions in the body, including the regulation of body temperature, digestion and gastrointestinal processes, and the immune system. It can also have a significant impact on energy levels and the ability to focus.

Arguably, iron's most critical function is its role in the protein hemoglobin, which is responsible for transporting oxygen throughout our bodies. Not enough oxygen in our bodies leads to unhappy organs that have to work extra hard. As a result, if your body is lacking iron, you may start feeling fatigued or experiencing memory or cognitive problems. Long-term effects could include organ trouble such as congestive heart failure, which is what happens when your heart is overburdened for too long.

Achieving an Iron-Rich Diet

Now that we know how important iron is, how do we make sure we're getting enough of it? While you can always take iron supplements, it's best to get the iron you need through natural sources. The great news is that iron's prevalence in many healthy foods makes it easy to get the amount we need just by knowing which foods provide the iron we need.

Top Foods Rich in Iron

According to the National Institutes of Health, adult men need 8 milligrams of iron in their diet per day. Women between the ages of 19 and 50 need 18 milligrams per day (it's higher for women due to blood loss associated with menstruation). Women over 50 only need 8 milligrams per day. Here are the top food sources to help you get there quickly.

- Fortified cereals, such as bran flakes
- Beef or chicken livers
- Shellfish such as oysters, clams, or mussels
- Dried fruit such as apricots, prunes, or peaches
- Beans, particularly large white beans, lentils, and garbanzo beans
- Certain veggies such as spinach and broccoli

Improving Iron Absorption

In addition to embarking on an iron-rich diet, there are several other ways to increase iron levels in your body without using supplements. Iron from plant sources, known as non-heme iron, is harder for your body to absorb. To improve absorption, try combining it with animal sources such as lean meat, poultry, or fish. Similarly, there are some foods that actually hinder your body's ability to absorb this critical mineral. These include dairy products, colas, tea, coffee, and high-fiber foods that may contain calcium, tannins, phosphates, or fiber – all of which are known to interfere with absorption. The most fascinating way to increase your iron intake? Cook with cast iron. That's right – according to a study found in a 2003 issue of the *Journal of Food Science*, cooking with iron pots and pans can actually increase the iron content of the food. Stock up on cast iron!

Blood Tests for Iron

If you're worried you aren't getting enough iron or that you're deficient, talk to your physician about your concerns. It may be important to get checked for a potential iron deficiency particularly if you're experiencing symptoms of anemia such as fatigue, heart palpitations, dizziness, pale skin, shortness of breath, or headache (especially with exercise). Those most at risk for deficiency include pregnant women, young children, and women with heavy menstrual cycles.

Fortunately, there are a number of tests that can be ordered to easily check your iron levels. They are simple blood tests that will verify how much iron is traveling through your blood, how much your body is storing, and how well your blood is carrying the mineral. Here's an overview of the tests you may undergo, all subject to what your healthcare provider recommends.

- A **serum iron test** is the most basic and simply measures the amount of iron in your blood.
- Measuring how much iron is stored in your body, a **serum ferritin test** will check your body's iron reserves.
- Knowing how much transferrin is available to transport iron throughout your blood can be determined with a **total iron-binding capacity (TIBC) test**. High TIBC occurs when you have low iron because more transferrin is free. Transferrin is a protein that transports iron in the blood.

- An **unsaturated iron-binding capacity (UIBC) test** provides a comprehensive analysis of how much iron is circulating in your blood, the blood's capacity to transport iron and how much is stored in your body.
- Finally, a **transferrin saturation test** measures the percentage of transferrin that is attached to iron.

It's also possible to have excessive iron levels in your body, although it's far less common. Having too much iron can cause liver problems, diabetes, arthritis, and certain cancers. These blood tests can help determine if your body has too much, too little, or just enough of this critical element.

In conclusion, iron is an abundant element that's essential for all living things. Making sure your body gets enough with an iron-rich diet will keep your organs functioning optimally and can ensure you have the energy you need to get through the day.

Sources

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