

Iron (and more) For Lasting, Natural Energy

Iron for Energy and Endurance

It's probably a universal wish to have more energy and endurance. Many of us wake up to a fresh cup of coffee or tea "just to get going", or rely on an "energy drink" to get through the afternoon. But there is a far better approach to energy than revving up your system with coffee or other stimulants. It relies on the body's own need for strong, well-absorbed minerals to create the red blood cells that fuel our system.

In this *Terry Talks Nutrition*[®], we're going to explore the essential minerals we need for healthy energy that can keep us going the distance whether we're in a cross-country bicycle race, or simply racing against a busy schedule.

Everybody Needs Iron

Iron deficiency is the most common nutritional deficiency in the United States. Over 7 million women and 700,000 young children in America are estimated to be iron deficient. And, possibly due to the popular idea that men "don't need iron," middle-aged and older men have been found to have low iron levels as well.

That may come as a surprise. After all, we've been told for so long that iron is only conditionally necessary. Basically, that it's fine if you're pregnant or menstruating, or maybe a professional athlete, but other than that we should leave it alone. That's just not true.

Iron is a critical component of hemoglobin, the protein carried by red blood cells that delivers oxygen throughout the body for energy. We couldn't live without it. And yet, iron deficiency and anemia is one of the world's most common conditions. For athletes and anyone with an active life, the need for iron is even greater. Aside from hemoglobin, iron is a requirement for erythropoietin (EPO) production, a hormone needed by the body that also helps make energizing red blood cells.

Iron is the link in the way we sustain physical activity and energy. In some cases, professional athletes have injected EPO in order to boost performance and endurance. But there's no need to take such drastic, potentially dangerous, (and probably illegal) measures. The

highly-absorbable iron and other key minerals that I recommend help the body produce this hormone naturally.

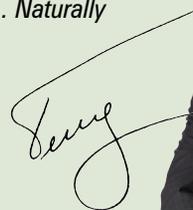
Iron is an essential trace mineral that helps transport oxygen in the blood, support cellular energy creation, and support proper neurotransmitter synthesis. Studies have shown that children, women and men require this essential mineral to create healthy red blood cells, build muscle tone, and keep energy levels going strong. In some cases, the need for iron is very strong. In fact, women who are pregnant require almost twice the recommended amount of iron per day! For men, women, and children, the dosages vary depending on age, but for men, the recommended level of iron is 8 mg; for women of childbearing age, up to 18 mg; and for children, up to 10 mg daily. However, those recommendations are often not met. And everybody who is active (or wants to be more so) needs this mineral – most likely in higher amounts. In fact, people who exercise intensively may have a **30% greater need for iron**.

On average, an adult loses one milligram of iron per day, and during exercise, people can lose that much in their sweat in one workout.

Some of our foods – coffee, tea, wine, fiber, and calcium – can inhibit iron absorption. And NSAIDs (non-steroidal anti-inflammatory drugs) can boost your need for iron, too. Considering that many people still use these potentially-dangerous pain-relievers, it would be no surprise if they were low in iron as well – especially if they are active.

The iron I recommend is a glycinate chelated form. Why chelated? Because minerals can be difficult for the body to absorb and use efficiently. A "chelate" is a bond between a mineral (often called "inorganic") and an organic molecule structure, called a "ligand" that helps the body absorb the mineral during digestion. The amino acid glycine is an excellent "shepherd" of minerals through the intestinal wall, because this form can be transported directly into the cells of the body, so it can get to work right away. But it is also a gentle form of iron. It doesn't cause constipation and is not harsh on the stomach

To your good health,
Terry... Naturally




TERRY'S BOTTOM LINE:

If you've been low on energy and endurance, you're probably low on iron. Most people have a deficit of iron in their diets, and that's because we've been told for years that iron is only appropriate for children, women of childbearing age, and professional athletes. Nothing could be further from the truth.

You need supplemental iron to keep you energized throughout the day. But you need the right form. The amino-acid chelated form of iron I recommend, combined with magnesium, copper and zinc, will help you:

- Stay active longer
- Recover from exercise faster
- Prevent muscle injuries and heal faster
- Stop headaches and PMS symptoms
- Beat fatigue and "afternoon slumps"

Here is the formula I suggest:

Iron (as ferrous bisglycinate chelate)	30 mg
Magnesium (as magnesium bisglycinate chelate buffered)	300 mg
Zinc (as zinc bisglycinate chelate)	10 mg
Copper (as copper bisglycinate chelate)	2 mg

Magnesium: Another Energy-Creating Mineral

Magnesium helps us metabolize B-vitamins, (in fact, vitamins couldn't work in our bodies at all without a full range of minerals), it

More...

provides our cells with energy, helps muscles recover after heavy exercise, helps our thyroid run smoothly, and helps keep us on an even keel emotionally.

Unfortunately, like so many of our mineral needs, we are often deficient in magnesium. One of the reasons for this is that our food just doesn't have the mineral content that it did in the past. Our topsoil gets washed out over time, and as a result, much of our fruits and vegetables have become nutritionally "dumbed down".

A deficiency of magnesium can lead to numbness and tingling, muscle contractions and cramps, and in severe cases, abnormal heart rhythms. As with iron, low levels of magnesium can lead to hypertension.

Magnesium is excellent at relieving pain, too. It does this by blocking a pain receptor called the NMDA receptor. It's great to have on board after a workout (or to take preemptively before one) to keep your muscles from tightening up. Other studies on the effects of magnesium have found that it helps people suffering from headaches and premenstrual syndrome, too.

But more to the point about magnesium and activity, our bodies tend to burn through these minerals at a very fast rate when we are physically active – so they aren't going to store up in the body as you might imagine. In fact, one endurance study showed that magnesium wasn't being stored in the bones, and another with ultra-endurance athletes showed that individuals in the study – and by extension anyone in heavy activity – was very likely to be deficient in magnesium and zinc.

This study found that while the participants' nutrient intake was generally adequate, they were deficient in magnesium and zinc – especially male athletes. They recommended better nutritional education for anyone engaged in strenuous activity. But, that brings up a question – if well-trained athletes have a tough time getting the nutrients they need, what about the rest of us? Is it any wonder that we're often tired and have a difficult time recovering from weekend chores around the yard?

Like the iron in this formula, I recommend a glycinate chelated form. It is extremely well-absorbed and used by the body, and doesn't

leave excess magnesium in the digestive tract which can attract water and create loose stools. Beyond that, you want to make sure your magnesium is a high-quality supplement, because poorly-absorbed forms can interfere with iron absorption as well.

Copper: A Valuable Health Resource

Copper is a must. Along with iron, copper helps build healthy blood cells, so it is a vital component in any supplementation for energy and endurance. Without copper, anemia is almost certain to follow, along with heart disease, blood sugar issues, and arthritis.

In fact, one of the first times copper showed scientifically demonstrated importance was when malnourished children in Peru didn't respond to iron therapy to treat their anemia. When copper was supplemented, their health turned around.

Aside from blood cell formation, copper is crucial for transporting iron in red blood cells, strengthening the immune system, and helping build strong bones.

The copper I recommend as part of this combination has been well studied for absorption and benefits. Like the others, it is an amino acid glycinate chelate form. Studies at the University of Nevada-Reno and at Yale have shown that it has 85% of the free-radical scavenging power of superoxide dismutase, an enzyme we produce naturally (but is available from a bovine source as a supplement) to neutralize oxygen reactive species.

In a study involving participants both with and without rheumatoid arthritis, the chelated copper helped boost levels of cellular superoxide dismutase, helping fend off potential cellular damage to muscles.

Zinc: A Healing Mineral

Generally, if a person is deficient in one mineral, they are deficient in many of them. Zinc is no exception.

Zinc helps the body heal muscles, tendons, and ligaments in the event of small muscle tears that often happen when we're active. Without adequate zinc, however, these tears can keep you from being active again. In models of

wounds or tissue stress, zinc concentration at the injured site peaks after a few days, usually around the time you notice the strain the most.

Zinc deficiency also means reduced blood glutathione levels. Glutathione is a natural antioxidant produced by the body that protects our cells from oxidative damage, which can be heavy during times of intense exercise, when the muscles require oxygen-rich red blood cells. Zinc deficiency has also been linked to depression and anxiety disorders, so boosting zinc intake may be part of a more natural treatment option that doesn't carry the risks and side-effects of conventional approaches. Zinc provides an excellent way to help support a healthy body *and* mind.

It's important to have a well-absorbed supplemental source, and a glycinate chelated form of zinc is the one I recommend for this combination.

Mineral Deficiencies Are Common

Research shows that mineral deficiencies tend to occur in groups. Even though the initial problem may be a lack of iron in a diet or supplement regimen, there are usually other missing minerals as well. A lot of times, when we think about people with poor diets, or inadequate supplementation, we say that they have vitamin deficiencies. That may be true, but it's probably more accurate to say that they have mineral deficiencies instead.

Don't be one of them! Be sure you have a solid foundation of iron, magnesium, copper, and zinc as some of your core nutrients, and you'll feel energized for the great days ahead! **TN**

When in doubt, always consult your physician or health care practitioner. This column is to provide you with information to maintain your health.

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