Here’s a wellness update. Researchers are acknowledging a new indicator for the early screening for breast cancer. So what's the indicator? High levels of iron in your blood, commonly called iron overload. Researchers are concluding an early breast cancer detection based on the tendency of cancer cells to accumulate the mineral iron.

One of the more well-known dangers of excessive iron is its ability to favor cancer cell growth. The mineral iron is dangerous in excess because it is: a powerful oxidant inhibits healthy white blood cells, feeds rapidly growing cancer cells. For instance, in animal studies, rats fed an excessive amount of iron had a significantly increased number of mammary carcinomas as compared with rats fed a level of iron adequate for excellent growth and health. Additionally, in a recent study, exposure of breast cancer cells to excess iron has been shown in mice to enhance invasiveness and metastases.

Although the studies are more recently gaining credibility, actually, breast cancer in women has been associated with elevated iron for the past 30 years. For example, in a study of 229 women with early breast cancer as compared with 250 healthy women of similar age, the mean serum ferritin of the cancer patients was 97 ng/mL; of the healthy persons, 57 ng/mL. Moreover, cancer patients with serum ferritin levels greater than 200 ng/mL had a significantly greater recurrence rate than patients with lower serum ferritin values.
Indeed, the possibility that these striking differences could have resulted from chance is less than one in one thousand!

Cancer cells accumulate iron to increase the energetics of the tumor. Cancer cells, including breast cancer cells, have more transferrin receptors on their membranes, needed for the import of iron into cells, and higher levels of ferritin, a protein that binds to iron, inside the cell membrane. Estrogen in breast cancer cells significantly increase transferrin production in order to obtain more iron for the cancer cells to feed on.

Another interesting piece to the puzzle is the fact that breast cancer patients absorb more iron from food than non-breast cancer patients, even when both eat the same type and amount of food. This would make sense as cancer cells try to sequester more iron for their growth by mutating normal iron absorption pathways.

Interestingly, research supports the correlation that cancer patients have low zinc levels. Relative to this, increasing levels of zinc can help with lowering levels of iron. Iron and zinc have a push-pull effect. If levels of zinc become depleted, the opposing mineral iron naturally accumulates.

Since B6 is necessary for zinc absorption, having low levels of zinc can also be a sign you need B6. Remember, zinc is a necessary mineral. For people with high levels of iron, it is important to have your B6 and zinc levels monitored by your clinician.

Over 90% of iron absorbed from your diet is normally bound to protective proteins such as ferritin and transferrin.

Recent studies show genetics can be a contributing factor; however menopause, lifestyle and exposure to toxins may cause too much iron to be released into surrounding tissues. If this iron exists as free iron, it can trigger intense inflammation, free radical generation and lipid peroxidation.

If researchers are saying an overload of iron is an indicator for breast cancer, it's a red flag and we should pay attention. Having high levels of iron can be linked to many symptoms including fatigue, joint pain, liver disease, irregular heartbeat and more. Ask your clinician about blood tests for iron. Have a conversation about B6 and zinc deficiency, iron levels and other indicators for breast cancer.

Wellness is about nurturing and monitoring the factors that keep you well. That's where a professional can help, contact your wellness clinician.

This is a transcript from a “video magazine” we send out each week called the Wellness Minute, if you’re not getting our Wellness Minute videos each week, sign up at the front desk.