

Giving Blood – Help Others and Yourself

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We are all familiar with the recommendations for heart healthy living – exercise and avoid prolonged sedentary periods, eat fruits and vegetables, avoid unhealthy fats, get enough sleep, don't smoke, feel connected - but there is one action you can take that you may not have heard about. That is donating blood. Research published in 2015 and 2018 by the *American Journal of Epidemiology* shows an 88% reduction in heart attack risk in people who give blood at least once per year. The benefit comes from lowering the level of iron in the blood. This finding is backed up by similar studies in the *Journal of Transfusion* and the *Journal of the American Medical Association*, which both show strong evidence that blood donation lowers iron stores in the blood reducing blood viscosity, thus placing less stress on the blood vessels and slowing blood clotting that can cause heart attack and stroke. Wow!

Another benefit of reduced iron levels in your blood is lower risk of some cancers. Studies in the *American Journal of Epidemiology* and the *Journal of the National Cancer Institute* suggest that regular blood donation may lower the risk of cancer by removing oxidized iron from the bloodstream. Oxidized iron, which produces harmful free radicals, can build up in the bloodstream and cause cancers, particularly those of the liver, lung, colon, and esophagus. Additional research published in a July 2008 *Journal of the National Cancer Institute* showed a reduction in cancer risk for people with peripheral arterial disease (PAD), a common circulatory problem. PAD patients who regularly donated blood had a lower risk of developing cancer than those who did not.

Further benefits of lower blood iron levels are disclosed in a June 2022 article by Puja Gandhi, MD from Kelsey Seybold Clinic. She states that regularly donating blood can improve liver health by removing excess iron from the body. The liver's job is to remove toxins from the body, but it can't do this effectively when it has a buildup of oxidized iron. Excess iron can cause cellular damage in the liver. Donating blood on a regular basis can remove excess iron from the body before it has a chance to deposit into the liver. Dr Gandhi also states, "I'm not going to suggest that blood donation is the fountain of youth, but the fact that it does reduce free radicals in the bloodstream can possibly play a role in delaying the aging process."

But wait, there's more. The blood donation process has as its first step what amounts to a free mini-physical and blood test. While it isn't the same thing as a trip to the doctor, donating blood can be another way to keep an eye on your cardiovascular health. Before collecting your blood, someone will check your pulse, blood pressure, body temperature, and hemoglobin level. This can sometimes shed light on issues you didn't even know about. After donating your blood will also be screened for several serious illnesses.

Finally, selfless service to others can create "helper's high," a feeling of exhilaration, followed by a time of calm. It's a mental health benefit that many blood donors experience from knowing they're helping to save lives. This can, in turn, contribute to better physical health and longevity.

Such a nice surprise to find that helping others by donating blood may also be very healthy for you.