Will Donating Blood Negatively Affect My Cycling Performance?

The local Blood Center called the other day and asked me to give blood again. So I gave blood. I have donated blood since I was in college and have given at least once each year since then. I like giving blood. I have lost track how much I've given, but it's over the 3 gallon mark. It's a chance to do something for others that requires giving of myself (literally!). You can't just write a check and have blood instantly appear. You have to donate your blood to help one or more people who are in need of it. Because giving blood means giving away my hard-earned red blood cells, is this something I should be doing as a competitive cyclist? Won't it negatively affect my cycling performance? After all, isn't gaining more blood cells what aerobic and anaerobic training is largely about, why people train at altitude, and why some unethical cyclists use erythropoietin (EPO)? Yes, yes, and yes. So why would I want to give away my precious red blood cells?

I used get several calls a year from the Blood Center asking if I would give. I must have good blood and they like it. I have a fairly rare blood type (A negative) so they kept calling. I am a competitive cyclist and didn't want to keep giving away all my hard-earned red blood cells every few months, so I finally told the Blood Center that I would agree to give once a year, in early November, after my racing season was over, so that I would have time to rebuild my red blood cell count back up before the next competitive season. Yes, it will reduce my aerobic fitness for a while because I have created a deficit of red blood cells. How long is uncertain. It may take up to 8 weeks to replace everything lost from a donation which is why the blood center doesn't let your give more than once every 8 weeks. A one pint donation represents about 10% of my total blood volume, so it represents about 10% of my red blood cells and the critical hemoglobin within. Removing 10% of my hemoglobin will decrease my body's ability to deliver oxygen to my working muscles by roughly this same amount when working at threshold. Some studies indicate that performance is only hindered for the first week or two after donating. If you are a fit athlete, your performance probably won't be affected in the sub-threshold performance range.

Obviously it is not a good idea to donate blood within 8 weeks of an important event, or even 8 weeks before the beginning of an intense training period. This is why I choose to donate in early November. I will not be competing for the next 8 weeks and although my training may be somewhat inhibited during this time, I won't be doing a lot of super hard training during this time anyway.

To restore my red blood cell count along with the accompanying hemoglobin as quickly as possible, I will make sure I consume food sources of iron, which is critical for hemoglobin formation. Because I don't eat red meat, I get iron from beans, tuna, spinach and raisins, which I eat often. I also take a multi-vitamin 3 times a week. I take a general vitamin which contains iron. If you take a men's specific vitamin tablet, these do not have iron because men do not need as much iron as women, and taking too much can have risk factors for health. Never take iron supplements without the oversight of a physician. I will also continue training, mainly in the threshold range but occasionally above, which will signal my body to create more red blood
cells. Finally, it's important to drink plenty of fluids after donating blood to replace the fluid suddenly lost.

It will be interesting to see how quickly my threshold power comes back after donating.

All the best in training, and in bloodletting!

Coach David Ertl

David Ertl is a USA Cycling Level 1 (Elite) Coach and NSCA Certified Personal Trainer. He coaches individuals interested in improving on their current cycling ability, whatever level that may be. He also provides cycling training plans and ebooks at his website: www.CyclesportCoaching.com
He can be contacted at Coach@cyclesportcoaching.com