

# EVERY FOOTSTRIKE, CRANK, AND STROKE BREAKS DOWN RED BLOOD CELLS

• • • BY RICH BACHUS

**E**ndurance athletes suffer blood damage from footstrike, cycling pressure points, and oxidation. While many of us take supplements for muscle, joint, and electrolyte recovery ... elite runners, cyclists, and triathletes are discovering a new way to accelerate blood recovery that's both legal and safe.

Imagine placing a microscopic camera into an elite athlete's blood stream during a race, and controlling its location within the body. What could you learn from the pictures from such a camera?

Craig Howie, a pro triathlete, long-distance runner, and endurance coach, agreed to serve as a test subject for this journey through the circulatory system. Like hundreds of triathletes, runners, swimmers, and cyclists, Howie recently discovered an all-natural supplement called EPO-BOOST that has appeared in several magazines and dozens of websites and blogs. Safe, easy, and effective to use, this supplement helps to repair blood damage caused by competition and training. In as little as two weeks of taking patent-pending EPO-BOOST, Howie began seeing phenomenal results.

## "I SHAVED 15 SECONDS OFF EACH KILOMETER!"

Howie, a self-described "math geek," monitored his performance precisely by graphing his progress with spreadsheets. He ran the same 11k loop weekly, keeping his heart rate at 140 beats per minute. "After taking EPO-BOOST, my test sets dropped from 4:35 per kilometer to 4:20. Not only am I running faster ... but all my heart-rate zones have shifted down."

Like many athletes, Howie started taking EPO-BOOST because he was "looking for an edge." Howie knew that Erythropoietin (EPO) is the hormone responsible for stimulating the production of red blood cells in bone marrow. The greater the red blood cell production, the greater the body's ability to absorb oxygen, which in turn gives an athlete more strength and endurance. Thus giving athletes that extra edge they are looking for.

The one thing Howie didn't understand was how footstrike hemolysis was affecting his performance. In order to gain insight into what was happening in

Howie's body before taking EPO-BOOST, it's useful to get an inside look at an athlete's body with the hypothetical micro-camera mentioned above.

## AN INSIDE LOOK AT FOOTSTRIKE HEMOLYSIS

As an endurance athlete, even before your race starts, the micro-camera reveals that your red blood cell (RBC) count is already low. That's because your body hasn't recovered from recent blood damage incurred during training. The clinical name for this cell destruction is hemolysis.

In a study of triathletes, researchers at the University of Tennessee found that some triathletes were anemic before they even began their races. So, what's happening to all your RBCs?<sup>i</sup>

*"Footstrike is the major contributor to hemolysis during running," according to studies published in Journal of Applied Physiology.<sup>ii</sup>*

Even swimming and biking cause RBCs to rupture – due to chemical and mechanical stresses on the cells. In swimming, the cause is mostly "oxidative damage." In cycling, the pressure points on hands, feet, and seat can cause hemolysis. But "footstrike" during running accounts for four times as much hemolysis. When running, your feet typically hit the pavement at a force of about 2 times your bodyweight. With each footstrike several RBCs pop like water balloons, squirting out hemoglobin, leaving damaged membranes floating in your veins. The harder and more often you run, the greater the amount of damage caused by footstrike.

The number of ruptured RBCs levels-off as you find a steady pace, but an inside look into the blood would reveal fewer healthy RBCs than when you started your run. A few thousand more passes like this with RBCs bursting on every footstrike, and you cross the finish line with about 10% less RBCs than you started with.

## EPO = MORE RBCS = GREATER ENDURANCE

A few weeks after taking EPO-BOOST, the picture inside your blood stream is significantly healthier than it was prior to the start of your previous marathon. Your RBC count is now at about 100% normal, even though you ran many training miles in the weeks prior to the marathon. As you run the race, you will still be afflicted with cell damage from "footstrike," but you will be able to run faster and longer because you started with your RBC fuel tank topped off, instead of starting on a deficit.

EPO-BOOST isn't a quick fix. The body can't produce new RBCs during the stress of a long-distance race to replace the ones damaged by footstrike hemolysis. And EPO-BOOST can't provide instant gratification.

Most athletes see the benefits after two to four weeks of taking EPO-BOOST. But with EPO-BOOST, athletes run faster without pushing harder because they are making more RBCs quicker than ever before. And more RBCs equal more oxygen, and greater endurance and speed.

## WHAT'S INSIDE EPO-BOOST?

The all-natural herb *Echinacea purpurea* has been clinically shown to increase EPO production.<sup>iii</sup> The amount of *Echinacea* you find in stores isn't nearly enough to have any real-world effect, but EPO-BOOST uses a proprietary *Echinacea* extract that has a concentration, and potency not found in stores. EPO-BOOST also includes other ingredients that enable athletes to absorb more iron, reduce inflammation, and prevent cell damage from oxidative stress. EPO-BOOST can be ordered at [EPOBOOST.com](http://EPOBOOST.com) or 1-800-780-4331, and comes with a 100% money-back guarantee. A company spokesman confirmed a special offer: if you order this month, you'll receive FREE ENROLLMENT into the company's Elite Athlete Club where you'll qualify to receive a full 25% discount on all your bottles of EPO-BOOST.

<sup>i</sup>O'Toole, et al. (1988) Med Sci Sports Exerc. 20:272-5.

<sup>ii</sup>Telford et al. (2003) J Appl Physiol. 94:38-42.

<sup>iii</sup>Whitehead et al. (2007) J Sport Nutr Metab. 17:378-9.