

Heart Rate Drift by Coach Daren

A drifting what?!?! Well then shouldn't I just put new batteries in my monitor to make the reading stop drifting? OK, it looks like its time for a little heart rate (HR) discussion.

Your heart is a pump. It pushes blood through arteries, capillaries, and eventually veins to all the body's organs. Leg muscles for running and cycling, and arm muscles for swimming are blood users and get their fair share of heart pumping in a triathlon. You can easily see the HR reading on your monitor increase as you engage muscles. This makes sense since the increase in the rate of muscle use also incurs an increased demand for blood to bring oxygen and fuel to the corresponding muscles.

In addition to fueling muscles for movement your heart also pumps blood in a closed loop cooling system similar to the cooling system. Your internal organs are happy when operating in a limited temperature range. When the actual operating temperature increases and approaches the upper allowable limit your body goes into cooling mode. Perspiration is released at the skin to provide evaporative cooling on the skin surface, and a few millimeters into the skin surface. The heart pumps extra blood to the skin (and the HR monitor reading goes up) so the blood can be cooled by the just-cooled skin. This cool blood is returned to the heart and circulates to other organs to cool them in turn. While passing through warmer organs the now heated blood is being pumped back to the skin to start the cooling cycle all over again.

This is a really great automatically engaging thermoregulatory system that you have onboard. And it works well...until you start to get thick blood. Thick blood? Sure! What do you think happens to your blood when you are dehydrated about halfway through the run course at a half Iron event? You may be sweating out two pounds of water per hour and only replacing maybe half of the loss. So now the already faster pumping heart has to work even harder to push the blood/sludge through your system. And you will likely see a corresponding increase in the HR reading on your monitor.

Seeing a HR reading higher than you normally would see for a given effort level is called HR drift. It is not surprising to see five beats of drift on a hot and humid course compared to the same course in cooler and/or drier conditions.

If you have a HR plan for a training session or a race –stick to it. If your HR is drifting because of heat and humidity issues you will see a reduced pace. I often tell my athletes that the pace is whatever it is, and they cannot control it, so don't worry about it. Just stick to their plan.

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Triathlon