IMPORTANT INFORMATION FOR SWEETBEATTM USERS

The current version of <u>SweetBeat</u> (1.2.2) includes a refinement of the HRV calculation algorithm to fine-tune it for athletes. We made this change to accommodate some of you ultra-fit individuals who were "maxing out" the HRV reading at 100. The new algorithm fixes this with the result that the calculated HRV will appear lower than in previous versions of SweetBeat. When you see a lower HRV score, this does **not** mean that your HRV level has dropped; only the scale has changed. We have included some charts to illustrate what you can expect with version 1.2.2.

IMPORTANT: For SweetBeat users who have been measuring HRV for athletic training, your HRV will appear to decrease with version 1.2.2. For this reason we recommend starting with a new baseline taken on a day that you know you are fully recovered. We do apologize for any inconvenience this causes, though we believe this will provide more accurate results in the long run as your fitness levels improve.

For those of you interested in the technical description of this, please see the end of this email.

Below are a couple of charts that illustrate how your new HRV scores may differ from your previous scores.





How is HRV calculated? SweetBeat measures the RR intervals (the time between heartbeats) then calculates the HRV parasympathetic parameter rMSSD. We then run a scaling algorithm on rMSSD to create an HRV value. Typical values will be in the range of 0-100. rMSSD is the square root of the mean squared difference of successive RRs. Elite athletes will experience very high rMSSD scores compared to others.

If you want to see the raw numbers, look at the "Geek Screen" on the flip side of the ECG heart beat screen. To see the Geek Screen, press the button in lower right corner of the window where the animated ECG appears. You will see the summary numbers from your last session. Below are the same charts from above that include rMSSD.





As a reminder on how to use HRV for Training:

- 1. Take your HRV every morning prior to any activity.
 - a. This session can be measured sitting, standing or lying down, but be consistent in the position you select.
- 2. Do a 5 minute session.
 - a. HRV is time dependent so be consistent in the length of the session
- 3. If HRV drops significantly (more than 10 points) a low exertion or rest day is in order.
- 4. If HRV drops significantly 2 or more days in a row, a rest day is in order.

Questions? Please send them to <u>support@sweetwaterhrv.com</u>. We'd love to hear from you.