



**MEASURE  
YOUR HRV**

# **HRV for Training Guide**

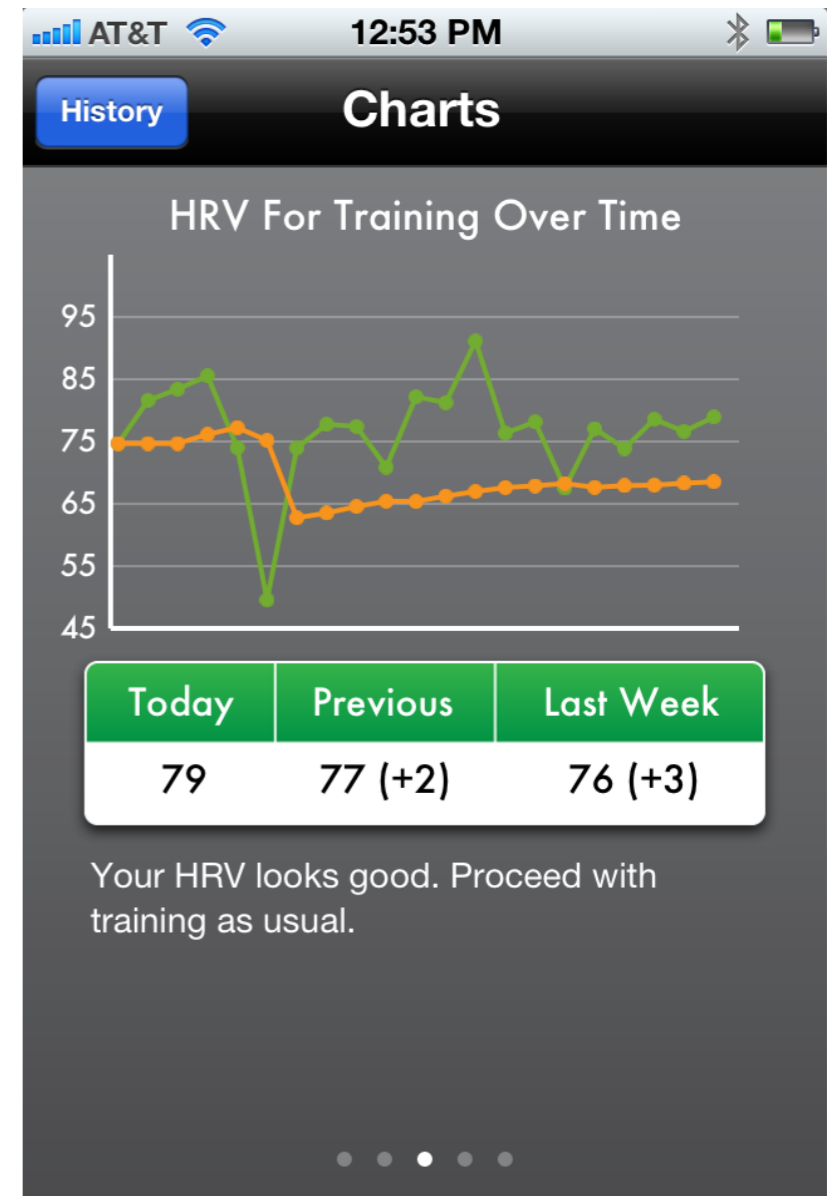
For use with SweetBeat HRV  
and other SweetWater Health Apps

# HRV is the best holistic biometric of health and fitness level

- Most athletes know that getting enough rest after exercise is essential to high-level performance, but many still over train and feel guilty when they take a day off. The body repairs and strengthens itself in the time between workouts, and continuous training can actually weaken the strongest athletes. In competitive sports, improved performance is achieved by alternating periods of intensive training with periods of relative rest. Rest is physically necessary so that the muscles can repair, rebuild and strengthen.
- While standardized training programs produce well documented results, they do not take individual responses into account. Age, gender, race, baseline fitness level, and genetic factors are known determinants of individual differences in responses to endurance training. In addition the status of the nervous system plays an important role in training response.
- Heart Rate Variability (HRV) is a view into the nervous system and can be used to guide an optimal training program. Never heard of the term? You are not alone. Measuring HRV, though long used in hospitals for treating heart patients, is a relatively new biofeedback concept for endurance athletes. Soviet Union sports scientists started keeping track of their elite athletes' HRV in the '70s. In the past decade, college sports teams and world-class athletes have been increasingly using HRV to monitor fatigue and recovery from workouts. There are numerous [clinical studies](#) on HRV and training.
- The introduction of athletic heart rate monitors that communicate with smart phones has enabled HRV monitoring capability to anyone who has a smart phone and wants to use it to guide training.
- [SweetBeat HRV is an iPhone app](#) by [SweetWater Health](#) that has custom capability for athletes to track their HRV. The athlete simply does a 3 minute HRV session each morning and is presented with a result that recommends “train as usual”, “low exertion day” or “rest day” based on the individual’s baseline trend. For more information about HRV, please visit the SweetWater Health [Library](#) and be sure to listen to the [Ben Greenfield podcast](#).

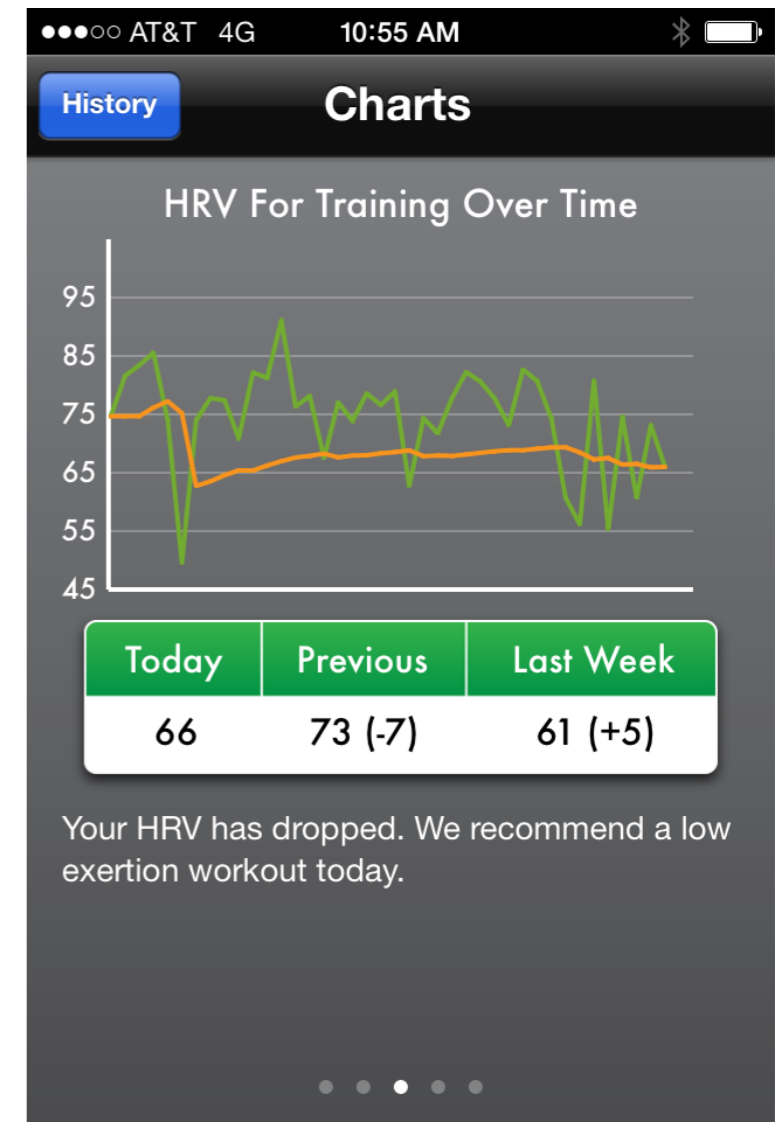
# Measure and track your HRV every morning

- HRV has a circadian rhythm over each 24 hour period. Most athletes measure their HRV when they wake up in the morning.
- HRV is dependent on body position, lying down, sitting up or standing.
- Preferably at the same time each day run a 3-minute HRV session
  - Start SweetBeat by pressing the Start button
  - Press the Stop button to end the session
  - Enter your session tag or use the standard HRV For Training tag
  - Save and upload session
- If you are using the Zoom fitness band, it is important that you remain perfectly still during the entire session to avoid artifacts in the HRV readings from movement of the optical sensor. Read the Zoom user guide in the SweetBeat HRV app.



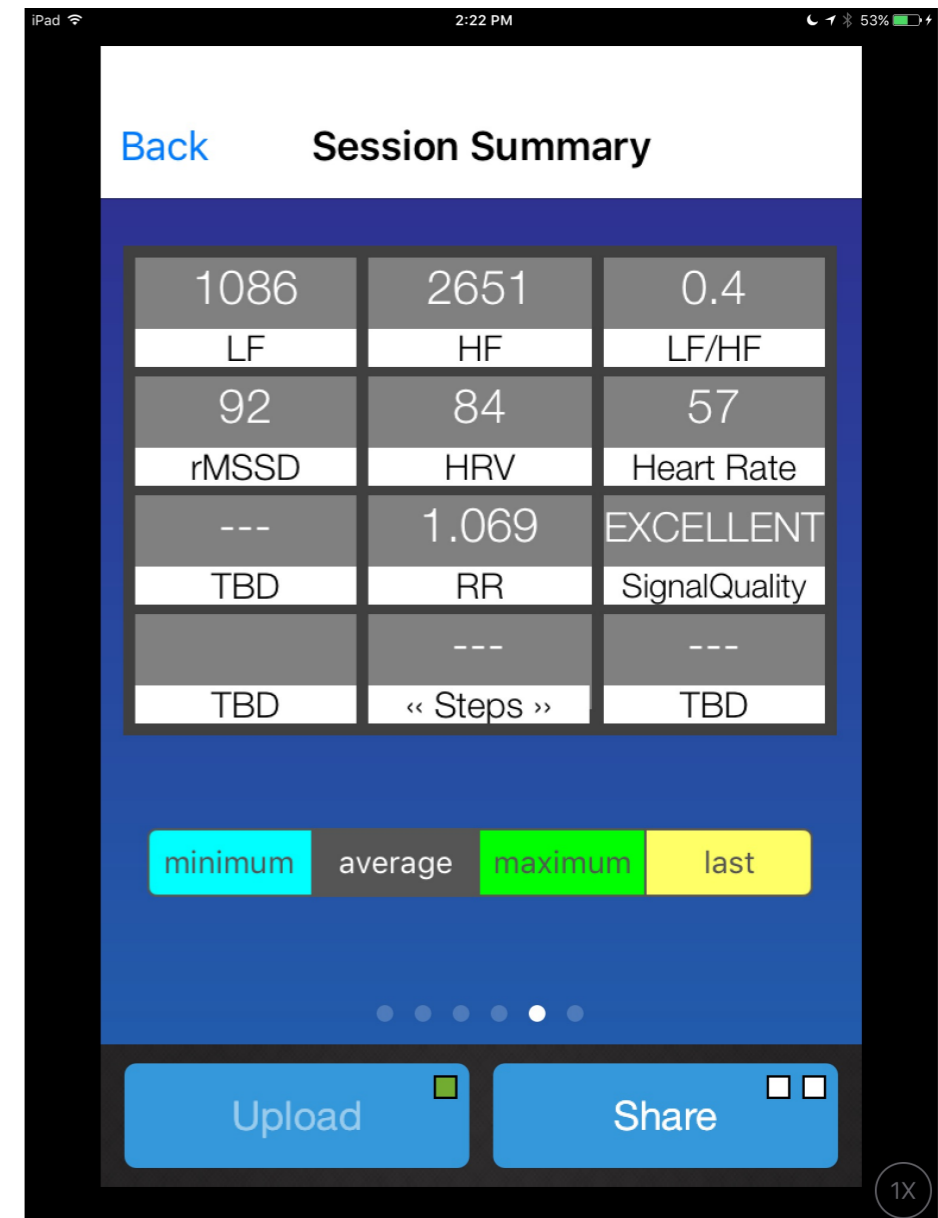
# Reduce injuries that occur from overtraining

- In competitive sports, improved performance is often achieved by alternating periods of intensive training with periods of relative rest. This is because after the body has been exposed to a stressful situation, providing that adequate recovery has taken place, it will adapt and become stronger. The alternating periods of intensive training and rest help an athlete avoid physical fatigue caused by overtraining.
- To better understand this, consider the function of the autonomic nervous system (ANS). The ANS has two branches, the sympathetic and parasympathetic. The sympathetic branch increases heart rate, blood pressure, cardiac output and a diversion of blood flow to the muscles. The parasympathetic branch decreases heart rate, lowers blood pressure and generally creates an environment for the body to repair itself. Not surprising the parasympathetic branch is very active during restful sleep.
- Heart Rate Variability, or HRV, is in essence a view into the ANS. By measuring your HRV, you can detect when the sympathetic branch is in overdrive and inhibiting the recovery and repair capabilities of the parasympathetic branch. Overtraining can create a sustained imbalance between the two branches of the ANS and can lead to a multitude health issues.



# Measure and track your Power Levels, LF and HF

- Measure your HRV each morning so you can view your power levels, LF and HF, on the geek screen.
- When you are recovered from the previous day's training your power levels will be high and balanced.
- Elite athletes have power levels in the 1000s. Your power levels reflect the strength and resilience of your nervous system.
- As you track your HRV for Training over time make note of the nutrition, supplements and sleep patterns that raise your power levels so you can POWER UP to ready yourself for harder training and competition.



# Recovery is the key to better performance

- When your HRV has dropped two consecutive days in a row the app recommends a rest day.
- Keep moving with recovery activities that stimulate and restore the Vagus nerve like Yoga, meditation, breath work, forest bathing and Tai Chi.
- Get a full night's sleep and your HRV will improve the next day so you can resume your workouts.
- You can use a Bluetooth low energy chest strap or the Zoom fitness wrist band with the SweetWater Health apps.
- Download the SweetBeat HRV app at [www.beathealthy.com](http://www.beathealthy.com). Go to [www.zoomhrv.com](http://www.zoomhrv.com) and use promo code ZOOMSB10 for \$10 off the Zoom.
- Outside the United States go to Amazon and use the same promo code for the Zoom.
- The SweetBeat HRV app with the Zoom is the best way to reach your fitness goals.

