

Heart Rate Variability: An Introduction To Your Test – A Bridge Between Chinese Medicine and Modern Science

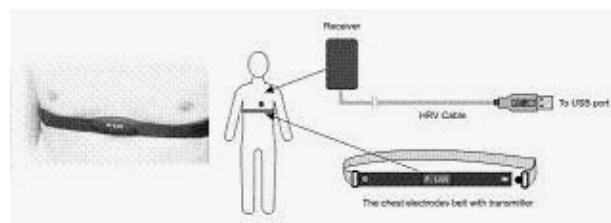
Heart Rate Variability, known as “HRV” for short, is a measure of how the nervous system is controlling the heart. It indicates how stress levels are affecting your overall health and fitness.

Technically, HRV measures how the times between heartbeats differ. These times are not rigidly the same, like a metronome’s constant clicks. Rather, they vary slightly according to changes in the workload of the heart as signaled from the brain by the Autonomic Nervous System (ANS). Medical researchers have determined that the more variable these times are at the millisecond level, the more robust is the Autonomic Nervous System and the greater is your overall health.

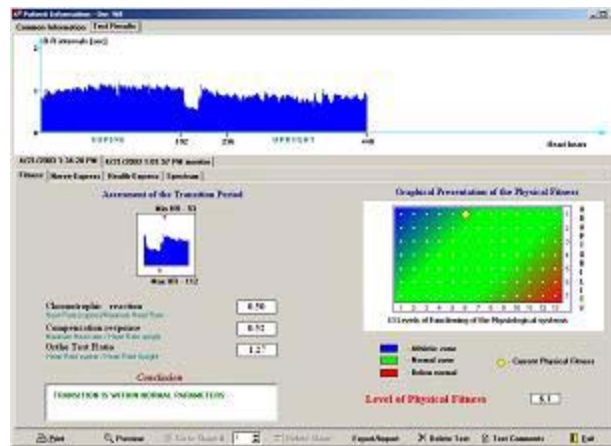
The ANS consists of two linked branches, the Sympathetic Nerves and the Parasympathetic Nerves. The Sympathetic Branch is in charge of increases in activity, including the “Fight or Flight” response required for emergencies and stress. It acts like the gas pedal of your car. On the other hand, the Parasympathetic Branch is in charge of quieting things down, including the “Rest and Digest” response for recuperation and non-emergency times. It acts like your car’s brakes. These two branches of the ANS are continuously responding to our outer and inner environments, trying to create balance and healing as long as we are alive. Ideally, the two branches respond appropriately.

For example, a person in a stressful situation may have a fast beating heart, sweaty palms and a dry mouth. These responses are caused by the Sympathetic “Fight or Flight” response. In ancient times, this response was appropriate when needed for survival to fight off wild animals or even human enemies. But nowadays, it gets triggered by the chronic daily stresses of modern life, causing unnecessary wear and tear to our health and longevity. HRV indicates the levels of Sympathetic and Parasympathetic activity: low, high, or balanced.

How is HRV measured? The test is entirely non-invasive, using a pulse sensor placed on the skin. A convenient Polar™ belt is firmly fixed around the patient’s chest, while a receiver transmits the signal to a computer.



The signal is evaluated using a computer program to calculate the results. Then a report is printed out for reference, analysis and comparison.



Why Does An Acupuncturist Measure Heart Rate Variability?

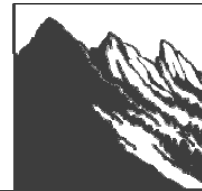
The Chinese medical science of acupuncture developed from the discovery that biologically generated electrical patterns guide the function of the human body. The ancient Chinese doctors called these signals the “Qi” (pronounced: “Chee”). When the flow and balance of the Qi was correct, there was health. When incorrect, any disease might develop.

Those Chinese doctors used natural treatments to balance the Qi using foods, herbs, and acupuncture, which physically adjusts the flow of Qi by stimulating the acupuncture points. These locations act like switches in your car’s electrical system. One way of describing the balance of Qi is with the words “Yin and Yang”, which are qualities of activity and function in living systems. (Yin and Yang are not things. They are concepts used to compare and evaluate.)

The chart in the next column sums up the qualities of Yin and Yang. There needs to be balance between them. It just so happens that these are parallel to the functions of the Parasympathetic and Sympathetic Nervous Systems. Thus, the measurement of Heart Rate Variability (discovered in the 20th century at Yale Medical School) can objectively monitor the improvements in the balance of Yin and Yang during treatment with the traditional methods of Chinese medicine.

An initial HRV measurement adds modern insights to a traditional Chinese diagnosis. Then after a period of treatment, a second HRV measurement provides a concrete indication of progress.

Here is a little history: In ancient Chinese, “Yin” meant the quiet, shady side of a mountain, while “Yang” was the active, sunny side. “Taiji” is the balanced area at the summit.



YIN	YANG
FRONT INTERIOR ABDOMEN/CHEST STRUCTURE	BACK EXTERIOR SKIN/MUSCLES FUNCTION
CHRONIC ILLNESS GRADUAL ONSET COLD FATIGUE WEAK VOICE	ACUTE ILLNESS QUICK ONSET HEAT ENERGIZED/RESTLESS LOUD VOICE
LONG TREATMENT HERBS MORE NEEDLES DISPERSE	SHORT TREATMENT ACUPUNCTURE/MOXA LESS NEEDLES TONIFY
DARK WATER PASSIVE INSIDE SLOW RIGHT DOWNWARD MATTER	LIGHT FIRE ACTIVE OUTSIDE FAST LEFT UPWARD ENERGY

Parasympathetic

Sympathetic

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