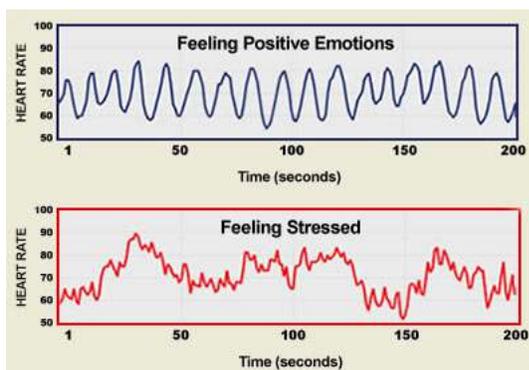


## Heart Rate Variability

Heart rate variability is the variation in time between each beat of your heart. It is a measure of the regulating systems in your body that keep you alive, and an indicator of your brain health. This variation is controlled by a part of your nervous system called the autonomic nervous system (ANS). The ANS regulates your breathing, blood pressure and digestion as well as your heart rate. It is divided into two subsystems known as the sympathetic and parasympathetic nervous systems.

The sympathetic nervous system is known as the fight or flight component. It takes over when you are stressed, think of it as having your foot on the gas. Alternatively, your parasympathetic nervous system comes into play when you rest, relax and digest. Think of it as having your foot on the brake. You can vary your heart rate variability by breathing, thinking and feeling.

Animals can read heart rate variability from a distance. They sense whether another animal means danger. You may have seen this in the behavior of your cat or dog. Humans can also read it in other humans. Sometimes you might feel the stress level of another person and it causes a reaction in you. This means that you are sensing their heart rate variability. When you are in a calm and relaxed state with someone you care for, your heart rate variability can match. This graph shows the difference in heart rates when a person is feeling positive emotions compared to stress.



The only way to heal from brain injury is to stay as much as possible in a parasympathetic state. This allows the brain to rest and recover, instead of being

in a constant state of alert. By controlling your heart rate variability you can reduce anxiety and depression. People who focus on this have more success in recovery, especially if you can make it a habit and a lifestyle. The Inner Balance/Heart Math monitor and app will help you to start a new habit. Using it will teach you how your breathing patterns affect your heart rate, and you will learn how to stay in a parasympathetic state more often.