

Heart Rate Variability Analysis

Heart rate variability (HRV) is a cutting-edge measurement of cardiovascular health. More HRV means your heart is better able to adapt to changing circumstances. Less HRV means nerves and heart muscle can't respond easily to change, potentially leading to out-of-rhythm beats or an abrupt, fatal stop.

Measures:

1. **SDNN:**_____ (Standard Deviation Normal to Normal)
Reflects our ability to respond quickly, dynamically and effectively to a crisis
Poor=<30 **Fair** =30-50 **Good**=51-100 **Optimal**=>100

How to improve SDNN:

- Abstaining from smoking
- Participating in regular physical activity
- Decrease toxins (food & Environment)
- Omega 3 fatty acids showed a significant increase in HRV

Time Domain Analysis		
	Result	Ref
Mean HRT (bpm)	60.62	[59.5 - 95.5]
Mean NN (ms)	989.84	[1008 - 628.2]
SDNN (ms)	123.72	-
RMS-SD (ms)	58.96	-

2. **TP**_____ (**Total Power**)
Overall activity in the ANS across all frequencies

Normal = 7.2-9.1

Decrease: decreased ability to cope with external/internal stress
Increase: Hyper-stimulated state

3. **VLF**_____(Very low Frequency)
Not well defined in a 5 min. test

Normal= 6.6-8.6

4. **LF**_____ (Low Frequency)
Reflects both sympathetic and parasympathetic activity

Normal= 5.9-8.0

Decrease: internal fatigue, energy loss, lethargy, sleeps deprivation

5. **HF**_____ (High Frequency)
Maintains a stable heartbeat—prevents heart from beating too quickly

Normal 3.7-7.1

Decrease: chronic stress, cardiopulmonary aging, heart disease
Increase: Increase Vagal Tone (Brake)

Frequency Domain Analysis			
	Res (Power)	Res (Log)	Ref
TP (ms2)	6871.00	8.84	[7.2 - 9.1]
VLF (ms2)	4676.00	8.45	[6.6 - 8.6]
LF (ms2)	929.35	6.83	[5.9 - 8.0]
HF (ms2)	1196.94	7.09	[3.8 - 7.1]
LF Norm (n.u)	42.34	-	
HF Norm (n.u)	54.53	-	
LF/HF Ratio	0.78	-	[0.6 - 2.4]

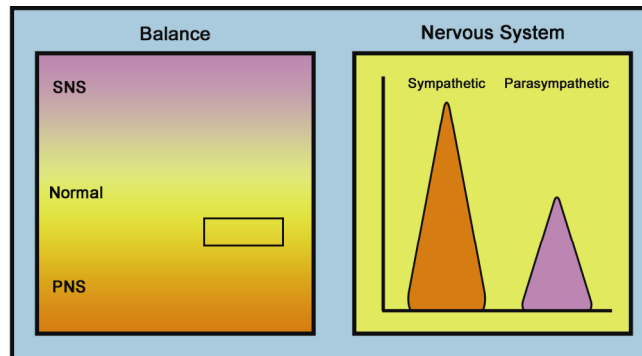
6. **LF/HF Ratio** _____
 Reflects the Balance of the sympathetic and parasympathetic systems

Normal 0.6-2.4

Decrease: Parasympathetic dominance
Increase: Sympathetic Dominance

7. **SNS/PSN** _____ : _____ (Sympathetic & Parasympathetic Balance)
 Balance between the “accelerator” and “brake”

Normal 6:4 ratio



Higher SNS: nervous, anxiety, agitation, excitement, increase blood pressure, headache
Higher PNS: depression, sluggish, lethargy, dizziness

8. **ABD** _____ (Autonomic Balance Diagram)
 Indicates the active status of the autonomic nervous system (SNS / PNS)

