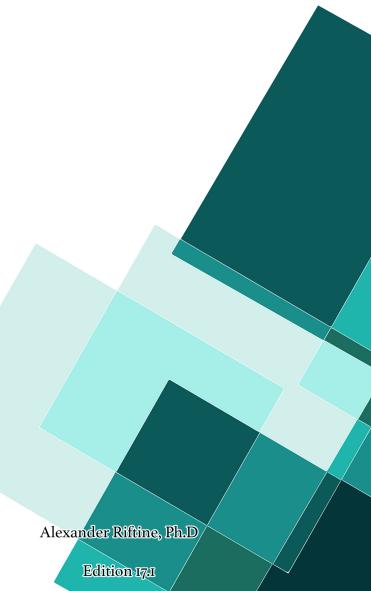# THEORETICAL REVIEW AND CLINICAL USE

Quantitative Assessment
of the Autonomic Nervous System & Level of Physical Fitness
Based on Heart Rate Variability Analysis

Alexander Riftine, Ph.D

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Contents

1. INTRODUCTION: THE INTELLEWAVE METHOD

HRV testing provided by Inellewave allows physicians to monitor the activity of both sympathetic and parasympathetic branches of the autonomic nervous system (ANS) in order to assess the state of a patient's autonomic function. On the one hand, testing with Nerve-Express can detect different specific types of autonomic dysfunction, which can be linked to a multitude of clinical diagnoses. On the other hand, Inellewave is a tool for overall, general assessment of a patient's physiology, and, as a physiologic monitor, it provides a comprehensive, in-depth patient evaluation, often missing in standard medical practice. This feature determines the wide range of clinical applications of the Inellewave system and makes it principally different from all other classes of diagnostic devices.

Heart rate variability (HRV), or variations of beat-to-beat intervals length, is regulated by both sympathetic and parasympathetic branches of the autonomic nervous system.

Clusterization of High and Low Frequency Components

- SUPINE
- UPRIGHT
- AVERAGE

LF

HF

Position of Average
3.0-HIGH FREQUENCY COORDINATE
3.5-LOW FREQUENCY COORDINATE