

# **REBALANCE**

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## ***impulse***

**Session indices: definitions and advice**

## **Presentation of the Rebalance Impulse® concept to clients**

Rebalance Impulse® is a non-invasive Mental Wellness & Neuro-Relaxation machine. This stimulation and cognitive training device based on applied neuroscience is mainly dedicated to fighting chronic stress, improving sleep quality, and increasing vitality.

- **Zero gravity position:** this posture allows the alignment of the ankles, knees, heart, and shoulders. Adopted by astronauts during take-off and landing. It is also recommended by ergotherapists and sports and health professionals. This posture offers many benefits.

In zero-gravity position:

- Muscle tension is reduced
- Less strain is placed on the heart
- Blood flow improves
- Lung capacity increases
- Blood circulation to the legs improves
- Joint pain is relieved
- The intervertebral discs are decompressed
- Stress decreases

- **Synchromotherapy®:** Synchromotherapy® is a new therapeutic discipline emerging from applied neuroscience. It mainly combines three techniques: innovative chromotherapy protocols using targeted wavelengths expressed in nanometers, pulsed light protocols expressed in hertz and lux, and dynamic light scenarios in the shape of an iris (patent registered) acting on targeted frequencies.

- **Sonotherapy:** During Rebalance sessions, there is what the client hears and what they do not hear. The sounds used during the sessions promote a state of relaxation, binaural sounds are notably part of the sound techniques used.

- **Meditation, Ericksonian Hypnosis:** guided mental imagery: the exercises in the sessions are a mixture of these cognitive therapies. Rebalance Impulse® is the only technology that combines all these applied neuroscience techniques in a single device.



Relaxation  
Index



OBF™ Optimal  
Brain Flow Index



Autonomic Nervous  
System Balance Index



Vitality Index



Muscle Soreness  
Sensation Index



Emotional  
Balance Index



Sleep  
Quality Index

## THE REBALANCE INDICES

Rebalance Impulse® indices have been developed to help identify which sessions are the most beneficial to the client.

Remember that the relevance of indices does not lie in the instantaneous analysis of a session. To erase any unusual event, they must be compared after a minimum program of 5 Rebalance Impulse® sessions.



### **RELAXATION INDEX:**

This index is used to assess the level of perceived stress.

The level of stress, mood, drowsiness, alertness and muscle pain are assessed through **Visual Analogue Scales** which have been scientifically designed and validated: **Feelingback®**.

The higher your relaxation index, the less you are subjected to chronic stress. This perceptual index is perfectly consistent with the results of the two clinical studies conducted in 2020, in terms of physiological markers of stress<sup>1</sup> and neurophysiological markers related to the Alpha wave increase (wave of relaxation in wake state)<sup>2</sup>, following a cycle of 10 Rebalance Impulse® sessions.

***Thus, the more Rebalance Impulse® sessions you do, the less you experience symptoms of chronic stress and your relaxation index improves.***

1 BeScored Institute (2020). REBALANCE study: Impact on physiological variables and sleep quality.

2 Cheron, G. (2020) Rebalance EEG Study: Mental Patterns and Identification of Neural Generators.



### **SLEEP QUALITY INDEX:**

How long you sleep, how long it takes to fall asleep, and how you feel when you wake up in the morning are all key indicators for finding the cause and assessing the magnitude of any potential sleep disorders. The questions and answers are assessed through **Visual Analogue Scales** which have been scientifically designed and validated: **Feelingback®**.

***The higher your sleep quality index, the better your sleep quality and your body's capacity for recovery. All Rebalance Impulse® sessions – but especially the sleep and anti-stress programs – will bring you spectacular results for sleep quality.***



### **EMOTIONAL BALANCE INDEX:**

Quantitative indicators of your emotional state and your mood are typically used in psychometrics and in biomedical research.

The emotional balance score is defined through 6 dimensions of your mood.

The questions and answers are assessed through **Visual Analogue Scales** which have been scientifically designed and validated: **Feelingback®**.

***The higher your emotional balance index, the greater your feeling of wellbeing.***

***Regular Rebalance Impulse® sessions will improve your emotional balance, and the anti-stress and emotions management programs are especially suited to this goal.***



### **MUSCLE SORENESS SENSATION INDEX:**

While it is normal to have some muscle soreness 24 to 72 hours after an intense workout or uncustomary physical exertion, muscle pain or stiffness on a daily basis is not desirable. It is a functional signal that may originate in a psychological, neurobiological or physiological disorder.

The questions and answers are assessed through **Visual Analogue Scales** which have been scientifically designed and validated: **Feelingback®**. The muscle soreness sensation index reflects your level of muscle soreness at a point in time. The various techniques used in the Rebalance Impulse® programs allow you to reach a deep calm that significantly increases your neuromuscular relaxation.

***The more your aches and pains are relieved, the better your muscle soreness sensation index will be. The anti-stress and pain management programs teach you techniques developed by applied neuroscience so that you can better manage chronic pain.***



### **AUTONOMIC NERVOUS SYSTEM (ANS) BALANCE INDEX:**

Your body's automatic processes (such as heart rate, digestion and temperature control) are regulated by the Autonomic Nervous System (ANS). The ANS is made up of two sub-systems that work in opposite directions: The sympathetic nervous system (or accelerator) activates a fight-or-flee response when faced with a danger or threat, but it is too powerful during situations of chronic stress.

Conversely, the parasympathetic nervous system (or brake) sets off internal "maintenance" functions that help your body regenerate and recover.

The ANS balance index is calculated using the biofeedback wristband, which assesses the relative level of activity of both systems.

One of the main targets of Rebalance Impulse® programs is to develop the parasympathetic branch (the brake), which is often impacted by modern lifestyles, so that the Autonomic Nervous System can be brought to a state of balance.

In this context, a balanced ANS is a clear sign of good health and a controlled stress level.

***Thus, the lower your level of chronic stress, the higher your ANS balance index will be.***



### **VITALITY INDEX:**

The vitality index is based on cardiac variability, as measured by the biofeedback wristband while you are in the Rebalance Impulse® Zero Gravity position. Heart rate is affected simultaneously by the sympathetic and parasympathetic branches. It varies constantly, meaning that the time between each heartbeat is never steady, even at rest. Typically, the heart rate slows down during exhale and speeds up during inhale.

High cardiac variability indicates good health, reflecting the heart's ability to adapt to outside strains and to resist stressful situations. Individuals suffering from psychological disorders such as anxiety, depression or the more general effects of chronic stress typically show a sharp decline in cardiac variability. Depending on your age and gender, high cardiac variability will correspond to a high vitality index score.

***Thus, the more resilient you are to stress, the better your vitality index will be.***



### **OBF® (OPTIMAL BRAIN FLOW) INDEX:**

The brain produces electric pulses named brain waves, measured in hertz (cycles per second) thanks to our neurofeedback headset. Brain waves are classified in five categories:

- DELTA waves from 0.5 to 4 Hz. These are mainly present during deep, dreamless sleep.
- THETA waves from 4 to 7 Hz. These are mainly present during deep relaxation, while awake, and are usually achieved by experts in meditation.
- ALPHA waves from 8 to 13 Hz. These are mainly present during slight relaxation and calm wakefulness.
- BETA waves from 14 to 30 Hz. These are mainly present during daily activities.
- GAMMA waves, above 30 Hz, indicate a high level of mental activity.

In our modern urban lives, our brains are affected by these streams of brain waves, often in the BETA frequency, which place the brain in a state of stress. One of the main objectives of Rebalance Impulse® programs is to restore a harmonious balance to the waking state between ALPHA and BETA waves, by slowing down the latter whose predominance leads to exhaustion.

Rebalance Impulse® sessions restore the ALPHA wave flows, which in turn modulate the BETA waves in waking state.

By developing your "ALPHA capacity" you bring your stress under control. This also lays the groundwork for better mental functioning that is key for all cognitive performance areas (reasoning, learning, problem solving and concentration – not to mention all sports activities).

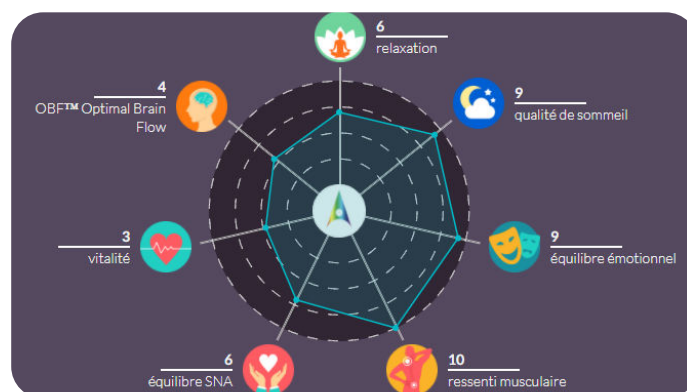
***The more your brain waves are in the ALPHA frequency, in magnitude and duration, the higher your OBF® (Optimal Brain Flow) index.***

Caution: Addiction, Pain, and Memory sessions strongly mobilize the BETA waves because they include hyper-concentration phases. In these particular cases, the OBF® may be very low and then return to a significant level after a few sessions.

***During the first Rebalance Impulse® session (discovery session), it is interesting to take the time to analyze the indices of the session with the client. This will allow you to understand the client's profile and to guide them in the best possible way in the continuation of their Rebalance Impulse® program and journey. Three elements must be taken into account in order to provide the client with the best advice:***

- **The feeling:** This is the most important information. The indices reflect a state at a given moment and not in a general way. The information that the client communicates is important. If the client has slept poorly the last two nights but usually sleeps well, it is important to know. Moreover, the important thing is how the client feels over the course of the sessions and not the result of the indices which can vary according to the events of the day which can stress the client at a precise moment without it calling into question their general well-being.
- **The indices:** Especially at the end of the discovery session, they will give an indication of the type of session that would be most beneficial to the client (see next page for interpretation)
- **Defining the profile:** It is recommended that this questionnaire be completed after the first discovery session. The top 3 recommended session themes generally confirm the interpretation made of the indices and thus allow the client to be advised on the path and sessions that will best suit them in order to reach their objectives (concentration, stress management, improvement of sleep quality, etc.)

### Example of a graph after a discovery session



For this client, the OBF, vitality, and ANS indices are low. A "neuro-relaxation" course or sessions will be adapted to promote letting go and better management of chronic stress.



In this case, the first thing to do is to ask the client if they have regular sleep problems or if they just slept badly last night.

In this example the client had been suffering from sleep disorders for a long time. The poor quality of their nights therefore had a direct impact on their vitality index. Their ANS index, which is above 6, confirms that the client is a bit stressed.

If there is still any doubt as to whether to choose a sleep program or an anti-stress program, simply have the client fill out the "define your profile" section to ensure that the first/top recommended session is sleep. In this case, a sleep program alternating anti-stress sessions and sleep sessions was conclusive in helping the client be less tired and therefore better manage their stress.



Here the client's indices indicate mental fatigue due to a slight emotional imbalance. In discussion with the client, they indicated that they were in the middle of a separation. After defining their profile, the emotions management course was recommended.

**Reminder of advice for clients:**

A course can only be effective if the client is consistent in completing their sessions. The client must do at least two Rebalance Impulse® sessions per week as part of a 10-session course/program.

It is not contraindicated to do sessions every day. We recommend limiting each user to a maximum of two sessions per day.

The optimization of the benefits also depends on the personal involvement of the client.

During a sleep program, for example, the client must: respect a healthy diet at dinner, make sure to perform a bedtime ritual by avoiding screens and by reproducing the breathing exercises learned during the Rebalance Impulse® sessions.

After a course of 10 sessions, the regularity of the following sessions will differ from one client to another. It is recommended to do at least one session per month until the client feels the need to do more regular sessions or even a new course.