

THE SIMPLE TRUTH

About vibration training

USEFULL INFORMATION FROM AND FOR THE VIBRATION TRAINING INDUSTRY AND THEIR USERS

ISSUED BY WWW.BODYCOACH.NET

SOME VIRTUES OF COMMON SENSE FOR THE NEW WORKING-OUT ERA

“ REAL / RIGHT / THREE-DIMENSIONAL... “ VIBRATIONS AND/OR FREQUENCIES

Vibration is a physical phenomenon, defined as an up & down going movement. It complies to determined parameters, mainly : frequency and amplitude. Obviously, vibration has nothing to do with wrong and right, false or true, good and evil, colour, taste...

⚠ There do occur slight lateral and frontal deviations on the vibration box of a Whole Body Vibration platform. These are deviations as a result of the cushioning of the (vertical) vibration.



You may encounter the designation ‘3 dimensional vibration’ in this respect. Be aware that this is principally a *contradictio-in-terminis* (vibration designates up&down only),

though a meritable effort to explain some typical symptoms of this technique. It is not typical for, or a distinguishing feature of a particular platform however.

WHOLE BODY VIBRATION

There are 2 relevant categories to distinguish in vibration after all :

1 = Whole Body Vibration

It’s easy to distinguish : it reaches upto the head (when in a stretched position).

2 = Local vibration

Which has many applications as well, but not the ones that are attributed to the 1st category.

OSCILLATING VERSUS VERTICAL

More and more manufacturers that want to take advantage of the interest in vibration training, supply so-called ‘oscillating’ (or ‘tilting’) vibration. This is a *contradictio-in-terminis* again of course, as oscillation does not comply to the definition of vibration. To the contrary, it

is a different kind of movement (balancing) and the sensation is completely different accordingly.

Nevertheless, oscillating movement can be usefull as such; but it is wrong to award the scientifically described impact and effects of Whole Body Vibration, based on the mere fact that those machines are look-a-likes of vertical vibration platforms.

Furthermore, the statement that oscillating platforms are to be used stand-alone, whereas vertical plates require obligate training guidance, does not make sense. This is a quality option that’s unrelated to the type of machine.

The real reason of the existence of those platforms, is that they are much easier (and thus cheaper) to motorise.

SCIENCE : THE ‘LABORATORY’ FACTOR

Science measures and describes the impact of Whole Body Vibration to the body. These effects are widely prooven and known as a fact. Scientists do not explore practical protocols, i.e. how to apply this Whole Body Vibration in daily use and how to achieve certain results with certain users. This belongs to the expertise of trainers, therapists, etc. The latter is a factor in which Body Coach invests thoroughly, as a spearhead of its strategy. And simply because there is a big lack of knowledge in the field. Vibration training is still a young method!

Scientific research is fundamental and independent results do not belong to a brand, unregarded with which machines a particular study has been fulfilled. Results on Whole Body Vibration’, apply for all machines that are able to produce and transmit this on the body. Scientists will be happy to stress this. Allocating scientific result to a brand name for that reason, is a false argument.

DID POWER PLATE INVENT VIBRATION TRAINING?

No, the concept of vibration training originates from science and professional sport. There did exist already vibration platforms in a similar format, before Power Plate appeared in the market. A big merit of this manufacturer however, is that they widely opened the interest for this concept, by intensive (and

undoubtedly expensive) marketing and communication.

WHICH SETTINGS TO USE FOR MY WORK-OUT?

Objectively, there are no ‘better or worse’ frequencies. This is basically a matter of personal sensation. If the position requires no effort, the vibration will cause no impact. If the position requires (maximum) effort of the body, vibration – even on low frequency – will resort (maximum) result.

THE IMPACT ON THE BODY OF VIBRATION, IS MOSTLY DEPENDANT OF THE POSITION OF THE USER. THE VALUE OF FREQUENCY IS A MUCH LESSER IMPORTANT FACTOR!

The advised frequencies that are put forward in training protocols, are a consensus that is coming out of training expertise. There are no scientific facts that prescribe specific frequencies for specific users/exercices. The only thing to learn from scientific litterature in this respect, is that the most frequently used parameters in studies, are 30 and 35 Hz. Also, it is for fact that the central nerve system that is supposed to react to the ‘bombing’ of vibration stimuli, has an upper limit as a responding interval. Generally, above 50/60Hz, there will be no usefull reaction anymore of the muscle fibre.

Personal sensation of a vibration is no indication of the objective value of a vibration. It is true that on each different vibration platform, each different user will have an individual experience. This is not related to the result however. Compare with cars : driving 120km/h in a truck, or in a sedan, will induce another sensation. The physical result (movement at 120km/h) is identical however. Those kind of differences between platforms / users, are subjective and therefor belong to the category of personal preference and taste. They do not reflect the quality of a machine, or obtainable result .

⚠ If you are used to a particular vibration platform : each vibration plate has a specific behaviour, with regard to the resonance and personal sensation of the produced vibration. It is normal that different platforms do not react identical, even if they are the same brand. This does not affect the training result however.

HARMFUL FOR HEAD / BRAINS....

Yes, Whole Body Vibration can be harmful, though only in two particular circumstances:
 1 = Use of low frequencies (1, 2... Hertz). Training platforms will generally use frequencies as of 25/30 Hz. In scientific literature, 20 Hz is regarded as the bottom border for non harmful vibration (this is a consensus, not based on factual proof).
 2 = Long exposure. This is limited to few seconds on training platforms.

TRAINING ON A PROFESSIONAL PLATFORM, IS NOT HARMFUL.

Examples of situations in which both conditions do exist: drills, cranes...

⚠ We advise not to use the 'High' amplitude for training purposes, in order to avoid unnecessary (it doesn't improve the result) high impact on the body. Use the 'High' amplitude only for massage (relaxation) positions.

MOTORISATION, POWER OF A MACHINE

The one and only objective factor to evaluate a vibration platform, is whether it produces a (up&down) vibration that reaches the whole body (uptill head if standing with stretched knees on it), unregarded how or with which brand of motor it is powered.

GRAVITATION

This is another physical phenomenon that has been introduced to explain about vibrations and its effects. It is a good thinking pad and a comprehensible parallel as a matter of fact: the acceleration of the body mass as an indicator of the workforce that is induced from the muscular system. As a matter of fact, more recently the designation connected to this "acceleration" has showed up as well in communication about vibration training. All this terminology does not distinguish particular platforms from others however. Natural mechanisms do not belong to a specific brand !

Moreover, gravitation values that are given, are the result of a mathematic formula in which the main parameter is the body mass of the user. So it has nothing to do with the machine in the 1st place!

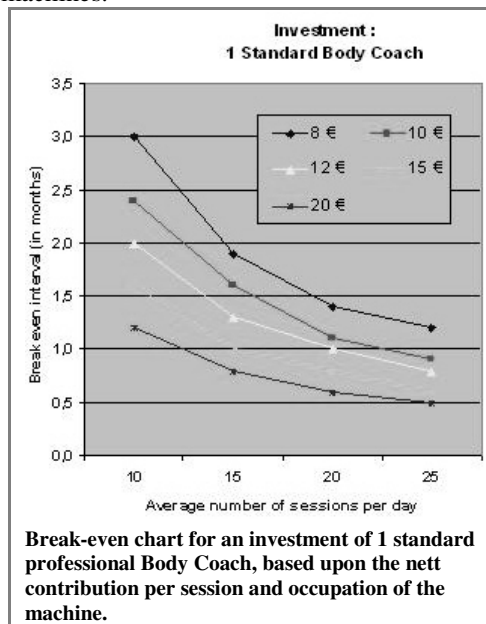
DOMESTIC MACHINES

Our philosophy is that all domestic machines are in fact inferior equipment. A recent development is that some of the leading manufacturers issued domestic machines that do produce Whole Body Vibration in fact. But, due to the other vital usage features (size of the surface, stability of the machine, set of possible adjustments to vary and evoluate your training,...), those machines are not suitable for durable and complete training purposes. The solution is simple : Body Coach offers a fully professional device in the same price category.

⚠ Don't walk into the trap : some domestic and professional machines of a same brand, turn out to be real look-a-likes. Consequently, many customers believe in vain that they're buying a professional device.

THE PRICE OF A MACHINE

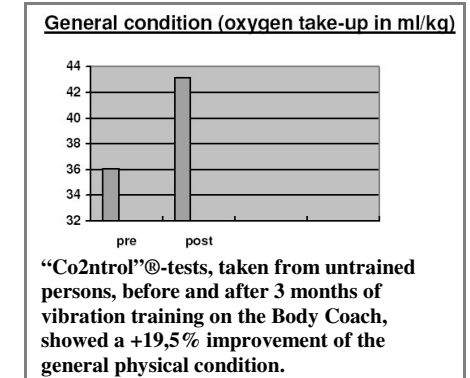
Ex-works prices of the main suppliers, are situated more or less in the same category. The value of those machines can be said equally as a result, and is not reflected in the catalogue end-user price. A Body Coach is 20% to 50% (depending on the model) less priced, in comparison to similar high-end machines.



WHY VIBRATION TRAINING INSTEAD OF TRADITIONAL FITNESS?

Vibration training is time-effective, accessible (upto 80% less time), result proof, user-friendly, joint-friendly, varied, easy to keep up... Also you can achieve specific result for particular body zones, that you'll never obtain

with running, spinning, etc. The latter are good examples for endurance training. However, Body Coach did demonstrate in empiric research, to gain an upto 20% better general condition as well.



NO RESULT WITHOUT EFFORT

Vibration training is not passive and does require effort from your body. Moreover, as a result of the mechanically stimulated muscle reflex, the frequency and the reach of the muscular activity is considerably higher in comparison to traditional training methods.

VIBRATION TRAINING IS A TEMPORARY CRAZE

Vibration training is complementary to all other forms of body care, sport and leisure activities. It is a contemporary concept that shows a bright perspective for unreclaimed possibilities. In addition, vibration training is diverse as such and the mental effects improve long term practice. This guarantees a remaining result.

WHAT SHOULD I KNOW IF I WANT TO PURCHASE MY PERSONAL PLATE?

There are two crucial criteria to verify:
 1. Does the platform produces Whole Body Vibration (does the vibration reaches the head when standing upon it with stretched knees). This will never be possible in a compact machine that is underpriced (less then 3.000€ à 2.500€).
 2. Is the usefull training surface at least 40x80cm and does it offer good stability.

A further quick checklist encompasses:
 - mode of operation and comprehensible adjustment
 - sufficient paramaters (frequency, time settings...)
 - durability (chosen materials)