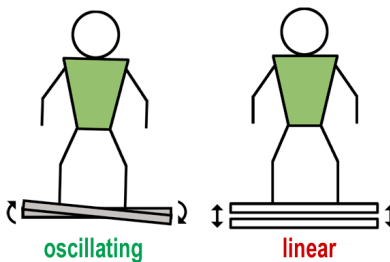




## Oscillating vs Linear



### Linear / Piston / Tri-Planar

While many whole body vibration machine companies claim their platforms move in “three dimensions”, these are still linear machines (like the Power Plate). Unless the machine has a fulcrum and an alternating pattern of movement, it is effectively using linear vibrations.

Any vibration machine that is not pivotal or oscillating needs to move in this three-dimensional manner, otherwise the pure vertical vibrations in the single direction (up and down) would act on the body like a pneumatic drill or jack hammer - an action associated with conditions like carpal tunnel syndrome. This up and down, piston-like vibration is the same that truck drivers receive when sitting for long periods, which can cause painful back problems. In addition, the jarring motion can cause damage to joints, ligaments, and tendons.

A linear vibration machine imitates a jump reflex in the user. The muscles on both sides of the body are contracted at the same time resulting in a very high impact on the body - up to 6X (or 600%) the body weight of the user. Repeating this sort of impact makes certain postures on the platform unsuitable, and those with joint or spine issues typically find this muscle contraction uncomfortable or painful. Also, under a linear pattern of movement not all muscles are engaged - it is mainly the larger muscles of the body, so you're not getting the all-over body conditioning that will bring you the results you want.

Linear vibration training is effective for improving “jump height”, which is why it's popular with football and basketball teams. However, as a non sports professional, you'll likely find more benefits from oscillating/pivotal vibration training.

## **Oscillating Vibration**

The premier Galileo machine was what helped the Russians set world records in space and athletics. The Russians preferred the oscillating, or pivotal, vibration system, just like the one used by T-Zone Whole Body Vibration machines. More research has been done on oscillating whole body vibration than any other type of vibration. Oscillating machines can support more weight, have a smaller impact on the body, are easier on the organs, and can keep the spine more supple and loose.

Oscillating/pivotal vibration makes a lot more sense, too. Your body is designed around your spinal column. When you walk you have to balance your weight from left to right like a see-saw. When using an oscillatory vibration machine, the affected muscles contract alternately, much like when you're walking, so the same muscles on both sides of the body are never engaged at the same time. A side-alternating vibration is an extremely important component to improving balance.

The oscillating vibration creates a pleasant rocking motion that causes the brain to tell the muscles of the body to actively contract to maintain equilibrium (balance), creating a therapeutic, muscle-toning and strengthening workout. This unique system provides all the benefits of whole body vibration with minimal risk of damage to the joints and tendons, making it a safe and efficient source of exercise, wellness, and therapy regardless of your age.

While both systems create an involuntary stretch reflex in the muscles, the oscillatory nature of the oscillating machine offers safety advantages that linear vibration training cannot achieve, even from a simple standing posture. You'll find oscillating platforms far more comfortable than vertical vibration platforms.

When people first step off vibration platforms they frequently report feeling lighter. This is a result of their standing weight being distributed throughout a larger area of the spine, and also in greater balance over their left and right side. A Spinal Analysis Machine used by chiropractors and other practitioners for postural exams involves twin scales that show the difference in weight distribution between the right and left sides of the body. Incredibly, spending just a few minutes on oscillating machines can help reduce imbalance in standing weight by up to 100%.

**Note: All T-Zone Oscillating Vibration Machines are CSA approved and Health Canada Class 2 Medical devices. These machines are not FDA approved medical devices in the US. If you have any medical condition whatsoever, consult a physician prior to using WBV.**

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