A Revolution in Fitness, Wellness and Healing

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Last year, a fitness instructor patient of mine introduced me to an amazing piece of equipment called the **Whole Body Vibration machine**. At first I thought it was just another typical new exercise invention geared toward the gym/fitness crowd. It was presented to me primarily as an exercise machine but with possible therapeutic and medical applications. Those possibilities drew my attention. As a holistic medical doctor with a wellness medical practice, I am always looking for new and better ways to improve fitness and health for myself as well as my patients. Of course, the search is based from a holistic perspective that must be consistent with the body, mind and spirit medicine that I practice and believe in! I investigated and learned more about the Whole Body Vibration machine machine and found it not only stimulated the neuromuscular and endocrine systems, but also improved fat metabolism.

The Whole Body Vibration machine is a sophisticated exercise and therapeutic wellness machine that uses vibrational technology based on decades of Russian research and development. During the first extended periods of time Russian cosmonauts spent in space, it was observed they experienced bone and muscle tissue loss due to a lack of gravity. In an effort to stop or reverse these degenerative conditions, researchers were led to the whole body vibration (WBV) technology. Since that first research decades ago, it has been well documented that vibrational technology does in fact repair the bone and muscle tissue loss experienced by the cosmonauts. Of course, this discovery inevitably led the way for the vibrational concept to be applied to the fields of athletics and fitness. The Whole Body Vibration machine is the latest "state of the art" vibrational technology machine designed for all around physical performance enhancement. It was designed and developed by the Dutch Olympic trainer Guus van der Meer. It is used widely through out Europe especially by Olympic and top sport athletes. Within the last year, its notoriety and popularity has spread in America as well. The Whole Body Vibration machine won the innovation award for fitness equipment at the 2002 FIBO fitness and health conference in Europe (the world's largest). Athletic superstars such as Los Angeles Lakers Shaquille O'Neil, 2002 Canadian Olympic Hockey gold medal winner and goalie Ed Belfour as well as the Oakland Raiders and Tennessee Titans are among the first users in America to recognize the incredible advantage of the Whole Body Vibration machine.

The Whole Body Vibration machine machine produces equal, if not better, results than conventional training methods such as weight lifting in far less time, with less effort and with much less stress on the joints, tendons and ligaments. Consequently, the Whole Body Vibration machine significantly reduces the chance for potential injury normally present with conventional training methods.

The Whole Body Vibration machine produces a vibration at varying hertz (times per second) through which energy is transferred to the human body. This mechanical stimulus produces a subconscious stretch reflex, which results in the muscles repetitively contracting and relaxing

vigorously over a preprogrammed time interval. The body rapidly adjusts to the stimulation, resulting in an increase in physical performance and total body neuromuscular balance. This phenomenon of rapid adaptation is called super compensation. Super compensation is the major healing force behind the machines' profound effects.

The Whole Body Vibration machine has a 20" x 32" vibrating base plate that the user can either stand on in various static or dynamic positions or can use for massage and other therapeutic applications. The plate vibrates at various vibratory levels ranging from 30 to 50 Hertz .

At this range, the body transmits the vibrational frequency efficiently through tissues, muscles and organs creating the positive stimulation necessary to mimic and supercede the effects of regular exercise. The plate utilizes a three dimensional vibration pattern moving from front to back, left and right, and up and down. It has handlebars affixed to the top front of the main shaft approximately four feet up from the plate. The handlebars stabilize the user as well as providing vibrational stimulation from the handles into the user's upper body through the hands. The top of the shaft houses a computerized LCD display panel which allows one to select settings ranging from time interval duration to varying hertz levels and low and high speeds. Two straps attached to the sides of the base are held by the hands in various exercise positions. The straps are made from a fabric that was found to best relay the vibrations from the base to the hands and into the body.

More than 150 different exercise and stretching positions have been developed specifically for Whole Body Vibration machine usage. The entire body musculature as well as internal organs and glands are affected by whole body vibration stimulation. Muscle spindles fire secondary to the mechanical stimulation produced by the Whole Body Vibration machine. Rapid firing of the muscle spindle causes an adaptive neuromuscular response leading to physiological changes to the brain and the entire body. Traumas and injuries, even if healed, can leave old cell memories in the brain or body tissue that still impede normal body movement or function. Whole Body Vibration machine usage allows the body and brain to rapidly de-imprint these old cell traumas and then re-imprint with positive healthy information. Physical therapists around the world have found the Whole Body Vibration machine to be better and more efficient at resolving injuries from sports or surgery than traditional methods of therapy.

At my wellness center, I incorporate a spectrum of different healing modalities ranging from Chinese Medicine to Homeopathy. The Whole Body Vibration machine fits right in with my other healing techniques because it enhances the modalities I am already using. Increased blood flow combined with mechanical cell vibration leads to improved distribution and bioavailability of vitamins, nutrients, herbs, minerals and even homeopathics. Once the correct compound is chosen, the most significant factor in getting it to work is getting that substance to those tissues, organs or glands that need the healing. Getting nutrients into devitalized tissue with poor blood flow is one of most difficult things a health practitioner faces after choosing the right compound to heal the problem. Vibration helps to move the nutrients through the cell membrane and into the cell. The Whole Body Vibration machine is the perfect tool to accomplish this job. Total body vibration causes the muscles, lymph, and cells in the body to contract and relax in a rhythmical fashion. If the right antioxidants, herbs and other nutrients are present in the blood prior to Whole Body Vibration machine usage, a powerful super perfusion of the organs, glands and tissues is the result. Increased circulation and better lymph system drainage combines to give more rapid toxin removal resulting in more rapid healing and less detoxification side effects.

I believe this machine is consistent with the full spectrum of fitness and therapeutic applications I employ at my clinic. The positive effects of vibrational training are equal to if not greater than a heavy workout regimen. Studies have shown that twelve minutes of training on the Whole Body Vibration machine are equal to an hour and a half workout with weights. This is accomplished with the least amount of stress to the joints, tendons and ligaments making it not only a perfect exercise machine, but an incredible therapy regimen for people with injuries (sports or other types), the elderly or those with disease conditions such as arthritis, fibro-myalgia or MS who are normally excluded or limited from a good fitness program. Long term Whole Body Vibration machine usage leads to structural and anatomic changes in the body that persist for extended periods of time even when the Whole Body Vibration machine is not being actively used.

Whole Body Vibration machine Benefits:

| Increased flexibility and Mobility |
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| Increased hormone secretion: IGF-1, |
| Testosterone, and HGH (human growth |
| hormone) |
| Enhanced bone and muscle building |
| Increased lymphatic drainage |
| Increased muscle strength – (Especially |
| explosive strength.) |
| Cellulite reduction |
| Increased circulation |
| Decreased Cortisol levels |
| Pain reduction |
| Increased secretion of Serotonin and |
| Norepinephrine, |
| Increased T cell count |
| Improved vitality and wellbeing |

Insert photographs of athletes, movie stars and Whole Body Vibration machine

Continued use of the Whole Body Vibration machine eventually leads to anatomic changes in the cardiovascular system resulting in increased blood flow to the tissues at therapeutically higher baseline levels. Every tissue in the body benefits from the bones to the hair follicles. A new double blind, placebo controlled study from Germany has demonstrated reversal of osteoporosis in a large sample of menopausal females. The results show that the effects of whole body stimulation are more significant at stopping and reversing bone loss than traditional weight bearing movement at a fraction of the time and effort. Taken to the next level, improved circulation to the brain would enhance mental acuity, improve sleep, and strengthen the entire endocrine system which affects growth hormone secretion and therefore increases longevity and aging as well.

Cosmetically, enhanced blood flow and increased cell stimulation improves the integrity of the collagen matrix. This leads to tighter, stronger and more beautiful skin, hair and nails. Many of my patients report improved appearance within weeks after regular usage. Increased oxygenation to the tissues improves the metabolic rate which increases fat and cellulite loss. Just three minute three times per week is enough to cause this fat burning effect.

Infertility specialists from Holland have used the Whole Body Vibration machine to treat infertility. They reported that a group of ten infertile females who failed all traditional drug methods of fertility treatment were instructed to use the Whole Body Vibration machine three times a week for three months. After three months, six out of the ten were pregnant and all carried to term. Increased blood flow to the ovaries, uterus, fallopian tubes, vagina, brain and the entire endocrine system is the most probable explanation for this outcome. The Whole Body Vibration machine is safe to use through out pregnancy. If the right nutrients, herbs and other modalities such as acupuncture had been added to the Whole Body Vibration machine treatment regimen, a much higher rate of fertilization probably could have been achieved.

Whole Body Vibration machine wellness system can be added to existing locations such as doctor's offices, fitness or health centers, spas, therapy centers as well as nutritional retail stores .

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About Dr. DeOrio

Dr. DeOrio is an internationally known expert in Integrative medicine. He is a graduate of the University of California/Irvine's College of Medicine. Upon graduation, he completed an internship at the Kaiser Fontana, Ca. Family Practice Residency Program. He attended the UCLA Medical Acupuncture Program and is a member of the American Academy of Medical Acupuncture. Dr. DeOrio received a degree from the British Institute of Homeopathy.

He is a specialist in nutritional and preventative medicine and recently published a book outlining four important nutritional paradigms of the 20th century titled <u>The New Millennium</u> <u>Diet Revolution</u>. Dr. DeOrio created a complete line of nutritional and homeopathic formulations designed to rapidly heal many of our present day, difficult-to-treat conditions. He is proficient in prolo and neural therapy, which is used to treat musculoskeletal and pain conditions that do not respond to traditional therapies.

The DeOrio Wellness Medical Center was featured in ALTERNATIVE MEDICINE MAGAZINES' Ideal Clinic Section. Dr. DeOrio hosted his own national radio show called Natural Health and Healing. He is featured as a guest expert on television and radio as well as print media. His most recent interview was for a segment on the Discovery Channel's "Inquiring Minds" documentary in which he presented a cured case of Lupus documented by laboratory testing and validated by third party medical experts.

Dr. DeOrio treats patients from all over the world and is known for his ability to integrate various treatments in a way that quickly brings vitality back to the patient's life.