

*The GVMH Rehab and Wellness Department is nationally ranked at the 93rd percentile for patient satisfaction and 99th percentile for friendliness of staff.*

## Helping in the Fight Against Obesity

Did you know that October is National Physical Therapy month? To recognize this month, the American Physical Therapy Association (APTA) is looking at ways to prevent and fight obesity through activity. According to the Department of Health and Human Services physical activity guidelines, children should get 1 hour or more of physical activity a day. Adults should do 2 hours and 30 minutes a week of moderate intensity or 1 hour and 15 minutes a week of vigorous intensity aerobic physical activity. The APTA has released a list of ideas to help families achieve these goals called “Smart Moves for Families.” Examples on this list include helping your child plan physical activities with friends and neighbors, such as skating or softball and becoming your child’s ‘exercise buddy’ by planning daily walks or bike rides and setting goals together. For a complete list, see the website at [www.apta.org](http://www.apta.org). Physical Therapists can also help establish individualized exercise programs for any age and physical ability to work on increasing strength, range of motion, flexibility and endurance.



The GVMH Rehab Team

## Standing Frame Improves Patient Care

The GVMH Auxillary Department recently donated funds to the Rehab and Wellness Department for the purchase of a standing frame. A standing frame is a piece of equipment that uses a harness system to assist patients with decreased mobility from a seated position to a standing position, and allows them to remain standing for a prolonged period of time. This allows for patients to increase lower extremity strength and endurance. Patients are also able to perform upper extremity activities while standing in this equipment, making the treatment very functional.

The standing frame is utilized for physical and occupational therapy treatments in the inpatient setting. Appropriate patients include those who have difficulty standing, transferring, and walking. Diagnoses that may benefit from use of the standing frame include: stroke, spinal cord injury, cerebral palsy, Multiple Sclerosis, spinal stenosis, neuropathy, or simply patients with poor endurance and strength that suffer from a variety of primary diagnoses.



# Toning Shoes-What are the benefits and risks?

The toning shoe has become one of the most talked about products in the footwear industry. Toning shoes are sometimes called wellness shoes, fitness shoes or rocker bottom shoes and the market is predicted to reach \$1 billion in the next few years. At the high end, price-wise, is MBT (Masai Barefoot Technology) and another 15 manufactures are adding toning models almost weekly.

Simply put, these are shoes that were designed to simulate walking around barefoot in the sand. Designers also looked to East African Runners noticing they trained barefoot for marathons and presumed that lack of injury was due to a lack of footwear. Since this is a natural condition for the foot – as opposed to wearing shoes – there is thought that these newly designed shoes would be able to create a more healthful step.

Advertising messages tout the benefits of the toning shoes as improving muscle strength, balance, posture, burning more calories, relieving stress on joints and even eliminating back, foot or leg pain. With all of the back injuries and problems that plague our sedentary lifestyle, these shoes seem to be the antidote to our office job lives. While there are studies supporting some of these claims, toning shoes are not a panacea for gait problems or foot pain. And research does not suggest that increased muscle activation with their use is adequate to replace other fitness activities. As is typical in advertising, some manufactures greatly overstate the benefits and do not fully disclose the risks associated with toning shoes.

The design concept of toning shoes is based on a rocker bottom outsole. As you know, Rocker bottom outsoles are not a new invention. Podiatrists, Pedorthists and other medical professionals have been prescribing them for decades to treat impairments and deformities. Rocker bottom outsoles are purposely unstable. They are designed to facilitate sagittal plane motion, or motion from heel to toe. By rounding the outsole, the foot and lower leg are “rocked” forward as weight is transferred from heel to toe in instances when forward progression is restricted or otherwise limited by impairment or deformity. Studies show increased flexion at the hip, knee and ankle during mid stance and if you have ever worn a pair you appreciate the net effect of altered weight distribution, specifically a posterior center of mass and the ultimate instability that results during stance phase. Increased dorsiflexion during stance and during initial contact and greater plantar flexion at toe-off are all well documented.

The same features that provide benefits in some users (mainly forefoot conditions) may have undesirable consequences in others. For example, the unstable design may improve balance in efficient asymptomatic users and they may increase the risk of falls in others. Those with a history of falls, chronic ankle instability, limited dorsiflexion; vertigo, poor balance or restricted joint or soft tissue mobility may not be candidates for toning shoes.

Altered foot and ankle mechanics impact efficiency in both the presence and absence of pathology and interventions to alter the arthrokinematics of the foot and ankle can best be made by informed professionals.

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