



### Protect your Back with Stabilization

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#### Clinic Hours

##### Waukesha Clinic

Monday: 8:00 AM - 5:00 PM  
Thursday: 10:30 AM - 6:00 PM

##### Mukwonago Clinic

Tuesday: 11:00 AM - 6:00 PM  
Wednesday: 6:30 AM - 5:00 PM  
Friday: 7:00 AM - 11:00 AM

For decades, therapists and doctors have recommended back and abdominal exercises for their patients with back pain. Unfortunately, the exercises recommended were standard crunches and back strengthening exercises. Over time, we saw a lot of clients start to note increased back and neck symptoms. Over the past five years knowledge of the spine and its muscles have improved, allowing successful exercise programs for back related pain.

Our spinal column is a series of 25 separate spinal bones called vertebrae connected by ligaments and discs. The linking together of these structures produces a flexible column allowing multi-directional movement. Unfortunately the spinal column is a relatively weak structure. Our muscles provide a

good portion of the stability for our spine. Without muscle, the spinal joints would not remain stable.

The back as a structure consists of three layers. Each of these three layers - the deep, the middle and the outer - has a specific role to play in overall spine function.

The deep layer consists of the vertebrae, the spinal discs and ligaments, and a series of small muscles which run from one vertebrae to the next.

The middle layer consists of four key muscles and provides the bulk of the stability required to keep our lower back working effectively and without pain. Two of these are back muscles  
CONTINUED ON PAGE 2.....



# tranquility

## Protect your Back with Stabilization

### Continued

and two are abdominal muscles.

The outer layer consists of the large, thick and long muscles which are found just below the skin. These muscles create a large amount of power while lifting, sitting up, and bending.

In this article we are going to concentrate on the middle layer because this layer provides the majority of stabilization to keep our back functioning properly. Until recently we failed to appreciate the importance of this layer.

We require proper activation of our middle layer when performing simple tasks such as raising our arm overhead and when performing larger more powerful tasks such as lifting 25 pounds from the floor. If we don't have proper activation of this layer then we have an unstable platform and other areas of our body need to work harder to accomplish a given task. Typically, this instability can lead to overuse injuries and muscular strains.

Whenever we have back pain, especially chronic, we lose the ability to properly activate the middle layer and start utilizing the more powerful outer layer. This eventually will lead to further instability of the spine, increased back pain, and could lead to injuries in other areas including shoulders and knees.

80% of us will experience a back injury in our lifetime. Our focus for exercises initially focused on the large power muscles of the trunk, which left us unprepared for activity. It is critical during treatment to re-train our bodies to properly activate the middle layer, which will in turn provide optimal stabilization.

Over the years, I have realized that a lot of shoulder, hip, and knee injuries are due to poor stabilization of our spinal column. A proper stabilization program is beneficial for every injury.

Call today and we can start you on the road to a healthier you through stabilization.

Source: Spinal Stabilization by Jemmett

## Recipe Corner

### *Energy Bars*

- 1 Can (20 oz) crushed pineapple (in own juice)
- ¼ C crushed almonds
- 2 C old fashioned oatmeal
- 3 scoop protein powder
- 1 C chopped dried fruit

#### **Directions:**

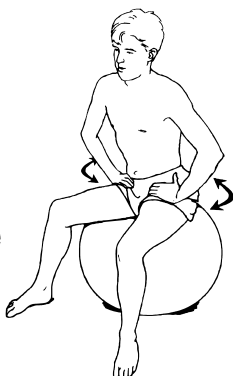
1. Combine all ingredients.
2. Spread in 13 x 9" pan that is sprayed with olive oil.
3. Bake at 200° for 1 ½ hours.
4. Store in fridge.

# Renew yourself for a day...

## Exercise Corner

Try this exercise to improve pelvic mobility.

Gently rotate  
pelvis clockwise  
10 times, then  
counterclockwise  
10 times.



## Fitness Scoop

### Stability Ball

Stability ball training is very popular in fitness and therapeutic settings. A primary reason to use the ball is to help achieve and enhance an individual's functional movement.

**Functional movement** is defined as the ability of the body to move and respond without restriction, to meet the everyday needs and challenges

of individuals. For example, functional movement involves having enough muscle strength and endurance to: correctly lift strenuous loads, play with your children, perform yard work, as well as all recreational activities.

At least eighty percent of our population has, at some time or another, experienced some degree of low back pain. Low back pain can be caused by poor posture, incorrect body mechanics, and an imbalance of flexibility and strength in key postural muscles. Stability ball training focuses on

- The health and balance of the trunk region as a whole unit.
- Utilizing trunk stabilization through proper posture and enhancing the health of the trunk.

Stability ball training requires balance! You can isolate, strengthen, and stretch every muscle of the body in a functional and effective way. Because the ball demands balance, you'll work

muscles you never knew that you had. The ball will challenge the whole body to participate in maintaining proper posture and balance.

The stability ball is very versatile. It can be adapted to all ages, all fitness levels and special populations. The ball is portable, lightweight, and inexpensive.

Stability balls are one of my favorite pieces of exercise equipment due to their functional use and cost.

Are you interested in finding out more about stability ball training? Call today so I can answer all of your stability ball questions, get you fit for the right ball size, and write your individualized program.

**Source:** Total Stretch on Ball

"Accept - then act. Whatever the present moment contains, accept it as if you had chosen it. Always work with it, not against it. Make it your friend and ally, not your enemy. This will miraculously transform your whole life."

Ekhart Tolle

# relaxation

# rejuvenate

mind, body & soul

## Comfort at Your Computer - Zone 1 (Head/Neck/Back)

This will be the first part in a series of five discussing proper workstation set-up. This information can be used at your home or office workstations. Zone 1 will discuss the head, neck, back, and upper body.

### What to look for...

Is your back straight and buttocks pushed to the rear of chair? Are your ears, shoulders, and hips in a straight line and facing forward?

### Correction...

Avoid slumping at waist or shoulders. Keep your head balanced over your shoulders with your neck straight. Never force proper posture positions.

### What to look for...

Is your lumbar spine (small of back) supported in the natural forward curve?

### Correction...

Adjust your chair's backrest up/down or forward/back to provide

appropriate lumbar support. If you can't adjust the backrest on your chair, add a small cushion/pillow for support in the small of your back.

### What to look for...

Are your upper arms vertical to the floor?

### Correction...

When used, armrests should be adjusted for upper arm length and shoulder width to support the upper body and neck muscles.

### What to look for...

Are your shoulders raised toward your ears?

### Correction...

Soften shoulders to allow shoulders to drop. Lower armrests or desk height so elbows/shoulders remain relaxed.

### Stretch Breaks:

I recommend taking stretch breaks throughout the day. Take a mini stretch break at least every 30 - 40 minutes. During your stretch break, stretch one part of your body (i.e., neck, wrist, etc.). Take advantage of changing

positions or tasks frequently throughout the day. For example, if you have been working at your computer for 30 minutes, change positions by standing to write orders or staple paperwork.

## Why do you treat my whole body rather than my specific area of pain?

Traditional doctors and therapists were taught to try to "fix" symptoms instead of looking for the cause of the problem. Also, they usually overlook the effect that the consciousness has on the healing process. The myofascial release philosophy is to look at the entire being, not to just focus on where the symptoms are. This way the therapist can focus on finding the root of the problem, and facilitate true healing in their client.

*Paoli Myofascial Release Center*