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Having Fun with Balls Yet?

IN the early 1970s, the Swiss Ball (sometimes called FitBall, MediBall or DuraBall) was incorporated into therapeutic exercise programs by physical therapists in Switzerland. The Swiss Ball was introduced into the gym environment 20 years ago by Paul Chek of the CHEK Institute, USA and is now used by professional sports teams, world-class athletes, therapists, personal trainers, dancers, educators, fitness instructors and people looking for effective cross-training and exercise programs.

The simple act of sitting on the Swiss Ball, unconsciously activates your postural muscles in order to maintain balance. Just sitting on the Swiss Ball is an exercise that not only strengthens your postural muscles, but also helps align your spine, increase alertness and enhance respiratory and digestive systems.

The Swiss Ball can be used as a chair at a desk or computer to promote active sitting and when muscle tension occurs, it can be used as a tool to stretch over and relax at brief intervals during the work day. If a ball is used as a chair, there is no back support to lean against and it is a dynamic, unstable surface. More muscles are activated around the spine for postural support while the feet, legs, and hips have to work to maintain balance.

The Swiss Ball makes it impossible to sit totally still for long periods, leading to active, dynamic sitting. This allows circulation to the structures of the spine, making sitting more active like standing. Active sitting in a good posture will help prevent wear and tear caused by lack of circulation and uneven pressures on the spinal discs that occur in bad posture. Active sitting also promotes balance because, as a dynamic base, the body "drifts" when it is relaxed. Therefore the muscles in the ankles, knees, hips, lower back, and abdomen will have to return the body to center where the body is at its most efficient. These little muscle movements stabilize the spine and improve core control and, consequently, balance.

Due to the round surface of the ball, "cheating" by compensating with stronger muscles is

difficult, as you will lose your balance, thus forcing the stabilizers and fixators of your body to work hard at maintaining balance.

Good balance skills not only prevent accidental falls, they also improve the ability to perform a variety of sports. By destabilizing the training environment you will improve balance and agility which in turn enhances sports performance and everyday function. With your newly improved nervous system you will have increased stability in your work, home and sports environments.

Strength training utilizing the Swiss Ball will help to produce balanced muscles by improving the function of neutralizer and stabilizer muscles. Neutralizer muscles counteract the actions of prime mover muscles to coordinate smooth

that improved function of the core increases its ability to access more power from the extremities.

On the Swiss Ball you will develop strength in all planes of movement, i.e. Sagittal, transverse, and frontal, as opposed to machine training that strengthens mainly in the sagittal plane. Most injuries occur in the transverse or frontal planes, which is a sign that we should be developing more strength in these planes instead of avoiding them.

Who should train with a Swiss Ball?

- Children
- Bodybuilders
- Regular exercisers
- Pregnant Women
- Non-athletes
- Elite Athletes
- Weekend Warriors
- Back Pain Patients

The Ball also promotes cardiovascular fitness. Bouncing on the ball helps align your spine and increases the endurance component of your postural muscles. Adding movements of the arms and legs while bouncing challenges balance and coordination, tones the abdominals, back, thighs, buttocks and arms - all while improving the cardiovascular system.

Benefits of Using the Swiss Ball as part of your Exercise Program include

- Dynamic exercised for the whole body
- A great low-impact workout
- Strengthen & tone muscles
- Safe & effective stretching
- Improve balance,

coordination & quickness

- Heighten postural awareness
- Target core muscles
- Enhance respiratory & digestive systems
- Muscle balancing & alignment
- Effective cross-training
- Increase stamina
- Improve overall well-being
- Challenging & unique
- Fun for all ages & fitness levels

Sources:

1. *The FitBall Workout Book*, ©1994 FitBall USA Inc.
2. *Kids on The Ball*, by Anne Spalding, Human Kinetics 1999
3. *The C.H.E.K. Institute*, San Diego, 2000



movement patterns. Stabilizer muscles surround and support joints. Improved stabilization thus reduces the chance of injury, while also encouraging optimal nervous system training.

Training on a Swiss Ball increases core strength and development as the unstable surface requires constant recruitment from the core musculature; unlike machine training where you are stabilized by the equipment and work predominately the prime movers.

Since all movements emanate from the core it is essential to have strong and well-coordinated musculature. Therefore it is important to realize

