

CONNECT THE CORE – 2

FIT TO PLAY

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3-D Upper & Lower Core Training

Connect the Core

The core is comprised of 4 deep muscles that work together to stabilize the lumbar spine and the pelvis. This deep muscle group works together with outer layers of muscles to form slings of support that

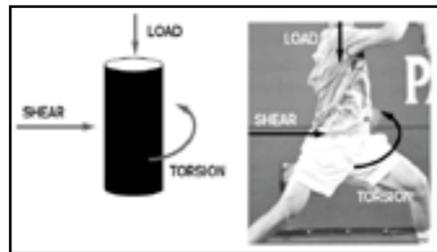


DIAGRAM 1

connect the lower extremities to the torso and to the upper extremities. They work 3 dimensionally to provide a strong base of support for the extremities to work off during your tennis game.

Many exercises like bicep curls or hamstring curls involve a single joint and are in one plane of movement. Also the treadmill, stationary bike and step machines work the body in only one plane of movement. Tennis strokes require the body to rotate around three different axes or planes of movement at one time. Tennis challenges the body to dynamically react to the

moving, changing environment we play in. Doing some Connect the Core exercises helps protect vulnerable joints against load, torsion and shear forces. (note the Diagram 1 in left column).

Connect your upper and lower core with these exciting, functional, sport specific and fun exercises.

Augment your normal strength workouts with exercises using a physio ball and stretch bands to help get and keep you Fit to Play in three dimensions. They are versatile, practical, transportable, affordable and strengthen the upper and lower core (trunk) muscles in all directions of motion.

Warmup Well

Before starting this or any exercise routine do some light dynamic warm up exercises. Part 1 went through leg swings, high knees and crossover runs. Part 2 will add in torso



twists and hurdlers high knees. A dynamic warm-up is important prior to beginning any activity and must be included as part of the training routine.

◀ **TORSO TWISTS**
Do 2 x 10 reps
front and back and
side to side.



▲ **THREAD THE NEEDLE**
Do 2 x 10 reps per side.

▶ **HURDLERS HIGH KNEES**
Do 2 x 10 reps.



Fire the Core

Ensure your core muscles are switched on by doing the following exercises.



▲ **PRONE BRIDGING**
Do 2 x 10 per side.



▲ **SUPINE BRIDGE CORD PULL**
Do 2 x 5 per side.

The following exercises are designed to Connect the Core by utilizing 3-Dimensional functional exercise in concert with ball and bands that challenge stability and add resistance in functional positions.

Ball Split Squats with Torso Rotation (ball at side)



Start in a split squat position with ball at hip height and bands crossed around thighs.



Squat down slowly at the same time rotating your torso. Hips should stay level. Repeat 2-3 sets of 10-15 reps.

Supine Ball Bridging with Rotation

Lay on your back with lower legs on the physio ball. Bridge your hips up and rotate your torso slowly so legs move right and then left (hold 4 seconds) repeat 2-4 times per side.

Prayer Holds

Kneel with elbows on ball. Start going straight out then progress to side to side



movements. Don't let back arch. Stop if fatigue sets in. Repeat 2-3 sets of 5-10 reps. Adding stretch bands for resistance adds an additional core component.

Ball Sit Downs



Sit on the ball slightly ahead of center. Have legs out in front, knees bent and feet flat on the floor.

Slowly lean back to 30 degrees letting the ball roll to support your lower back.

Repeat 2-3 sets of 5-15 reps. Adding stretch bands and smaller balls for resistance add an extra core component.



Batmans

Train the midback muscles to improve posture. Lay over the ball and raise arms up from the side of the ball to horizontal. Keep thumbs in line with ears and forearms horizontal to the ground. Hold for 2 seconds and repeat 2-3 x 10-15 reps.



Cooldown



▲ **HAMSTRING STRETCH**

Should include so me conform stretches. Try stretching all muscle groups used in the strength routine. Be sure to key in on those that tend to get short and stiff like the hamstrings, hip flexors, calves and pectoral muscles. Try holding each stretch for 15-20 seconds and repeat 2-3 times. Some stretches can be done with the physio ball. Use your imagination and the ball as a stretching partner.



▲ **HIP FLEXOR STRETCH**

You will find that training with the physio ball and the stretch bands can help turn any simple exercise into an exercise that challenges multiple systems. By providing an unstable base of support the ball helps to train not only the core but also balance reactions and co-ordination on a subconscious level. This facilitates these reactions to become automatic and helps to prevent injury and improve sport performance.

Have fun and stay Fit to Play.

FIT TO PLAY OR FIT TO SKI

2 New Training books by Physiotherapist & Fitness Coach Carl Petersen.

"This book is well organized and comprehensive. I would highly recommend this book to my colleagues, players, coaches, and parents."

– Marlene Nobrega BSC (PT)

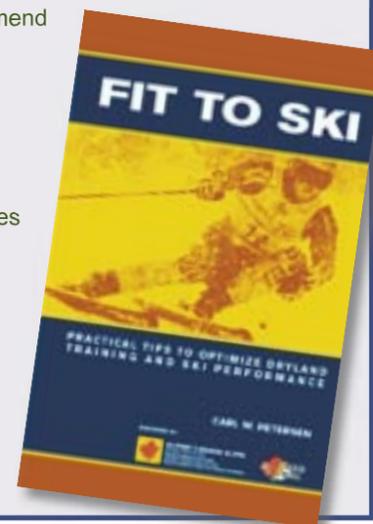
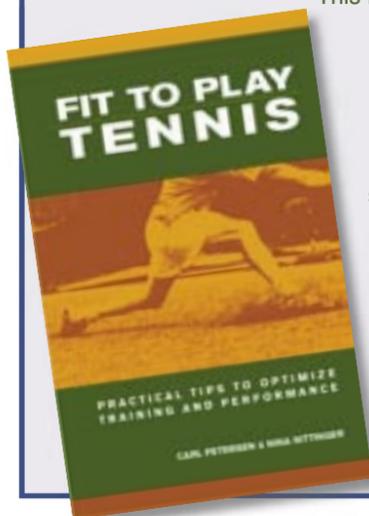
Davis Cup & Fed Cup Physiotherapist for Tennis Canada

"Fit to Ski, is easy to follow and includes numerous photos and diagrams to explain the concepts of sport specific training for skiing. Endorsed by Alpine Canada and the Canadian Ski Coaches Federation it is an excellent practical resource for all skiers, coaches, parents & therapists - a must have book every skier needs in his or her library".

– Ski Canada Magazine 2004.

Available at City Sports & Physiotherapy Clinic's
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