



## Team Telemark Core Strength Training V2.0

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**Key Points - Highly recommended to work with a Physiotherapist or other health professional to teach the correct techniques!!!**

**Cues:**

- Contract stomach muscles pulling the belly button towards the spine to engage core muscles throughout the exercises. The stomach muscles, especially the Rectus Abdominus should not bulge out.
- Keep breathing with each repetition and exercise, emphasize rib cage breathing.
- Controlled and smooth movement of the limbs
- If your back is arching the exercise is too difficult, there should be no low back pain with any exercise.
- Quality exercise technique is key

Lateral Abdominals	1 minute
Neutral Spine Crunches	1 minute
Oblique Crunches	1 minute
Heel Touches	1 minute
Side Plank Left	1 minute
Side Plank Right	1 minute
Quadruped Pointer	1 minute
Front Plank with Leg Lifts	1 minute
Sidelying Leg Lifts Left	1 minute
Sidelying Leg Lifts Right	1 minute
<b>TOTAL TIME</b>	10 minutes



## EXERCISE 1 LATERAL ABDOMINALS

Athletes and coaches can find which level of the exercise is most appropriate for their level of core strength, using the above mentioned cues. -1 minute.

Level 1 Start with both feet on the ground with knees bent to 90° lift one leg at a time, alternate leg lifting and lowering. 1 minute



Level 2 Start with both hips and knees bent at 90°. Lower one knee at a time, so the foot touches the ground, return to the leg to the starting position. Repeat with opposite leg. 1 minute



Level 3 Start position as above, touch one foot down then slide the heel on the ground to extend the leg, then return the leg to the start position. Repeat with the opposite leg. 1 minute

Level 4 Start position as above, with heel touch. 1 minute



Level 5 Dead-bug. Start with arms as well as hips and knees flexed to 90°. Lower opposite arm and leg to the floor. Repeat with opposite arm and leg. 1 minute



## EXERCISE 2 NEUTRAL SPINE CRUNCHES

- Hands under lower back to maintain 'neutral spine'
- Focus on ribs coming towards the pelvis / hips
- No rectus abdominus bulge
- Only raise high enough that shoulder blade comes off floor. Raise for 3 seconds, hold for 3 seconds lower for 3 seconds. 1 minute.





## EXERCISE 3 OBLIQUE CRUNCHES

- Focus on ribs coming towards opposite pelvis / hip
- No rectus abdominus bulge
- Only raise high enough that shoulder blade comes off floor
- Raise for 3 seconds, hold for 3 seconds, lower for 3 seconds. 1 minute.



## EXERCISE 4 HEEL TOUCHES

- Crunch motion so that shoulder blades come up off the floor, hold this position while side bending the trunk (through the thoracic spine) reaching towards the ankles with the hands, alternating sides. 1 minute.





## EXERCISE 5 SIDE PLANK

Athletes and coaches can find which level of the exercise is most appropriate for their level of core strength, using the above mentioned cues.

-Grade exercise by both knees bent or knees straight

-Watch that whole body stays in line the shoulder shouldn't pop forward

-1 minute.

Level 1 Support the body at the knees rather than the feet.

Raise for 2 counts, hold for 6 counts, lower for 2 counts and repeat.

Level 2 Support the body at the feet, trunk raise.

Raise for 2 counts, hold for 6 counts, lower for 2 counts and repeat. Work up to 1 minute hold.



Level 3 Supported at the feet, trunk raised arm overhead, The foot of uppermost leg slowly touches in front of and behind lower leg. 1 minute







Level 4 Supported at the feet, trunk raise plus slowly raise and lower the uppermost leg to the ceiling. 1 minute.



## EXERCISE 6 QUADRUPED POINTER

- Belly button into the spine
- No low back twisting or arching
- Alternating opposite leg and arm raises, bring opposite knee and elbow to touch.
- Alternate arms and legs hold for 6 counts. 1 minute



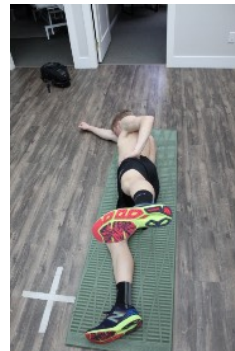
## EXERCISE 7 FRONT PLANK WITH LEG LIFTS

- Front support on elbows
- Keep back from arching by lifting belly button towards your spine.
- Alternating lifting each foot of the ground using the glut muscles, lift only 2" off the ground. lift leg for 3 counts, hold for 3 counts, lower for 3 counts.
- 1 minute



## EXERCISE 8 SIDE LYING LEG LIFTS

- Position yourself side lying with your spine and pelvis in neutral alignment.
- The lower leg is slightly flexed for support.
- The uppermost leg is extended and slightly outwardly rotated (toes to the ceiling).
- Lift the top leg to the ceiling keeping it straight.
- Avoid allowing the hip to flex forward (this is the most common source of error), avoid the trunk moving backwards, don't allow the pelvis to hike upwards.
- Lift for 3 seconds, hold for three seconds and lower for three seconds. Continue for one minute.
- 1 minute, repeat with opposite leg.





The whole program with 8 exercise should take 10 minutes, as the side plank and side-lying leg lifts take 1 minute per side.

Fundamental Stage – ages 12 and under. Core strength and stability exercises can be introduced to develop strength, stability and coordination. The neutral spine position can be introduced. The exercises can be reduced to 15-20 seconds and performed one time weekly during training sessions.

L2T – One set, with a break between sets. Do the exercises once or twice weekly.

T2T– One to two sets with a break in between sets. These exercises should be performed two to three times weekly during year. A competitive skier should reduce the exercises to once weekly during the race season

L2C / T2C - Up to 2-3 sets without breaks.

It is advisable that anyone starting a core stability/strength program that is not already doing strength training start at the T2T level.