



INJURY PREVENTION PROGRAMME FOR REFEREES



CORE STABILITY EXERCISES

- The ability to control the position and movement of the central part of the body and to maintain good posture
- The core, (deep) abdominal and lower back muscles play a dominant role in controlling posture, spine stabilization and total body balance

<p>EXERCISE 1 BENCH</p> <p>Abdominal and lower back muscles</p>	 <p>Lie down in a prone position. Bring your elbows under the shoulders; keep facing the floor. Lift your pelvis off the floor. Head, shoulders, back and hips are in a straight line. Keep breathing!</p>	<p>Basic</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p>	 <p>Advanced</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p> <p>Variation 1: Lift one leg a few centimetres off the floor and hold this position. The supporting leg, back and shoulders are in a straight line. Don't lose your stability!</p>
<p>EXERCISE 2 BRIDGE</p> <p>Abdominal and lower back muscles</p>	 <p>Lie down on your back. Bring your elbows under the shoulders. Lift the pelvis off the floor. Shoulders, back, hip, knees and ankles are in a straight line. Keep breathing!</p>	<p>Basic</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p>	 <p>Advanced</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p> <p>Variation 1: Lift one leg a few centimetres off the floor and hold this position. The shoulders, hip, supporting leg and ankles are in a straight line. Don't lose your stability!</p>
<p>EXERCISE 3 SIDEWAYS BENCH</p> <p>Lateral abdominal muscles and hip adductors</p>	 <p>Upper shoulder, hip and upper leg are in a straight line. The elbow is vertical under the shoulders. From above, shoulders, elbow, hips and both knees are in a straight line. Hold this position and don't drop the hips!</p>	<p>Basic</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p>	 <p>Advanced</p> <p>W1: 2x10 sec W2: 3x10 sec W3: 2x15 sec W4: 3x15 sec W5: 2x20 sec W6: 3x20 sec</p> <p>Variation 1: Make controlled movements with the upper leg (10 cm up and down). Don't lose your stability! Keep breathing!</p>
<p>EXERCISE 4 CURL UP STRAIGHT and TWISTED</p> <p>m. Rectus abdominis m. External obliques</p>	 <p>Lie on your back, knees bent at 90°. Hands support the neck. Lift your shoulders off the floor. Go back slowly without losing abdominal muscle tension. Don't pull your head upwards! Keep breathing!</p>	<p>Basic</p> <p>W1: 2x20 W2: 2x25 W3: 3x20 W4: 3x25 W5: 4x20 W6: 4x25</p>	 <p>Advanced</p> <p>W1: 2x20 W2: 2x25 W3: 3x20 W4: 3x25 W5: 4x20 W6: 4x25</p> <p>Variation 1: Move your elbow to the opposite knee. Alternating left and right side. Lift your shoulders, not your neck! It is not required to touch the knee with the elbow.</p>

LOWER LIMB EXERCISES

- Specific injury prevention training is important to correct for muscular imbalances (in particular hamstring muscles and achilles tendon)

<p>EXERCISE 5 ANKLE RAISES</p> <p>m. Soleus m. Gastrocnemius Achilles tendon</p>	 <p>Stand with both ankles fully extended on a stair. Use both feet, push your body fully upward, and then slowly return on 1 foot only. The other foot does not at all support the landing phase. Change leg after each trial.</p>	<p>W 1: 2x10 W 2: 2x12 W 3: 3x10 W 4: 3x12 W 5: 4x10 W 6: 4x12</p>
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<p>EXERCISE 6 SQUAT DIPS</p> <p>m. Quadriceps</p>		<p>W 1: 2x10 W 2: 2x12 W 3: 3x10 W 4: 3x12 W 5: 4x10 W 6: 4x12</p>
<p>Stand on one foot with the leg extended (on a stair). Bent the knee slowly and control the movement while keeping the standing foot flat on the ground. Then return to the starting position. The other leg simply follows the movement up and down. Change leg after each trial. Don't let the knee buckle inwards!</p>		

<p>EXERCISE 7 HAMSTRING EXERCISE</p> <p>Hamstring muscles and moderate load of stabilizing muscles of the lower back</p>		<p>W 1: 2x4 W 2: 2x6 W 3: 2x8</p> <p>VAR. 1:</p> <p>W 4: 2x4 W 5: 2x6 W 6: 2x8</p>
<p>Ankles are pinned firmly to the ground by a partner. Slowly lean forward keeping your upper body and hips straight. Thighs, hip and upper body stay in a straight line. Try to hold this straight body alignment using the hamstrings as long as possible, then use both hands to control the fall.</p> <p>Var. 1: same exercise but instead of falling, return to the starting position with a straight body alignment</p>		

<p>EXERCISE 8 LUNGES</p> <p>m. Iliopsoas m. Quadriceps m. Gluteus maximus</p>		<p>W 1: 2x10 W 2: 2x12 W 3: 3x10 W 4: 3x12 W 5: 4x10 W 6: 4x12</p>
<p>Start from a straight upward position, both hands on the hips. Using one leg, make a big step forward, brake the movement and push the same leg back to the starting position. Change leg after each trial. Don't let the knee buckle inwards! Use your core stability to keep your spine in a neutral position!</p>		

PROPRIOCEPTION EXERCISES

- Proprioception refers to all the mechanoreceptors that are located around the joints, in particular of the knees and the ankles.
- Balancing exercises strengthen not only the joint-stabilizing muscles, but also the core muscles.

Starting position: Stand in an 'active' single leg stance. Keep the knee and hip slightly bent with weight on the ball of the foot. From the front, keep hip, knee and foot of the supporting leg in a straight line. Don't let the knee buckle inwards or outwards (see picture on the right).

Variation: Perform the exercises on a soft surface, using a towel under the foot or on a mat. Also specially designed balancing boards can be used to further increase the difficulty of these exercises.

Exercises: W 1 and 2: perform exercises 9, 10 and 11 as described below

W 3 and 4: perform exercises 9, 10 and 11 with the heel lifted off the floor

W 5 and 6: perform exercises 10 and 11 with the eyes closed (eyes open when catching the ball!)



<p>EXERCISE 9 ONE-HAND BALL PASS</p> <p>Pass the ball to each other using one hand while maintaining your balance. Each leg 10 times.</p>	<p>EXERCISE 10 PASS and TOUCH the GROUND</p> <p>After catching the ball, bring the ball to the ground while maintaining your balance and then pass the ball back. Each leg 10 times.</p>	<p>EXERCISE 11 FIGURE-8 BEFORE PASSING</p> <p>After catching the ball, first hand the ball in a figure-8 form around the swinging leg first and the standing leg, while maintaining your balance and then pass the ball back. Each leg 10 times.</p>