

Supplementary Online Material

Kiani A, Hellquist E, Ahlqvist K, Gedeberg R, Michaëlsson K, Byberg L. Prevention of soccer-related knee injuries in teenaged girls. *Arch Intern Med.* 2010;170(1):43-49.

eAppendix.

This supplementary material has been provided by the authors, and is used with their permission, to give readers additional information about their work.

WARM-UP

(at least 10 min)

3. High knee skipping

(~ 30 sec)



Wrong



1. Jogging

(≥ 4-6 min)



Wrong



4. Defensive pressure technique

(~ 30 sec)

5. 1 and 1

(≥ 2 min)

Wrong

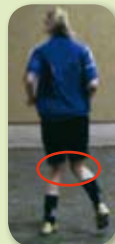


2. Backward jogging

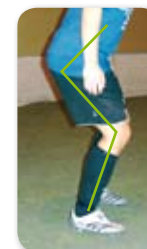
(~ 1 min)



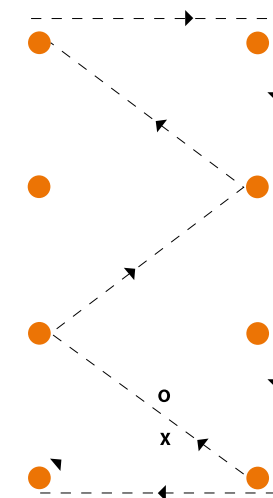
Wrong



Defensive pressure technique



1 and 1



X = attacker
O = defender

MUSCLE ACTIVATION

(~ 2 min)

1. Activation of calf muscle



2. Activation of quadriceps muscle



3. Activation of hamstring muscle



4. Activation of hipflexor muscle



5. Activation of groin muscle



6. Activation of hip and lower back muscle



BALANCE

(~ 2 min)

1. Forward and backward double leg jump

(~ 30 sec)



Double leg jump with or without ball
(optional)



Wrong

2. Lateral single leg jump

(~ 30 sec)



Wrong

3. Forward and backward single leg jump

(~ 30 sec)



Wrong

STRENGTH

(~ 4 min)

1. Walking lunges

(~1 min)



Wrong

2. Hamstring curl

(~ 1min/player)



Wrong

3. Knee squat with toe rasies

(~ 1 min)



Wrong

CORE STABILITY

(~ 3 min)

1. Sit-ups

(~ 1 min)



2. Board

(~ 1 min)



3. Bridging

(~ 1 min)



Wrong



Wrong



Wrong

PROPER AND IMPROPER PATTERN OF MOVEMENT WHEN:

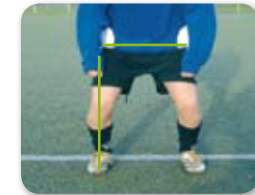
Take off

Landing

Cutting

Proper (right)

- Slightly flexed knees
- Straight line hip-knee-foot
- Low body-centre of gravity



Improper (wrong)

- Straight knees
- Kissing knees
- Straight upperbody

