

Preventative and rehabilitation exercises of sports injuries

Diagnosis: Plantar Facitis



What is Plantar Facitis?

Plantar fascitis(PF) is a painful inflammatory process of the plantar fascia, the connective tissue on the sole (bottom surface) of the foot. It is often caused by overuse of the plantar fascia or “arch tendon” of the foot. It is a very common condition and can be difficult to treat if not looked after properly.

EXERCISES FOR TREATEMENT AND PREVENTION

Exercise 1

Goal Foot sole muscles strengthening

Repetitions 3x 1min

Important - Look forward and keep your body straight
- Pull strongly with your toes

- Feel strong tens in your foot sole muscles

- Move forward and back

Suggestions- It is easier to do when you sit



1

Exercise 2

Goal Foot sole muscles tension release

Repetitions 3x per day 5-7 min

Important - Press strongly and feel the ball pressure under your foot sole

 - Massage the whole are of foot sole

Suggestions- Make circular, back and forward, side to side movements



Exercise 3

Goal Improving elasticity of Plantar Fascitis,

 foot sole muscles tension release

Repetition 2-3x per day 5-7 min for both foot

Important - Make straight, side to side, circular movements

 - Massage painful area as well

Suggestions- Quit massage when you feel unexpected and strong pain

**Exercise 3**

Goal Foot sole muscles strengthening

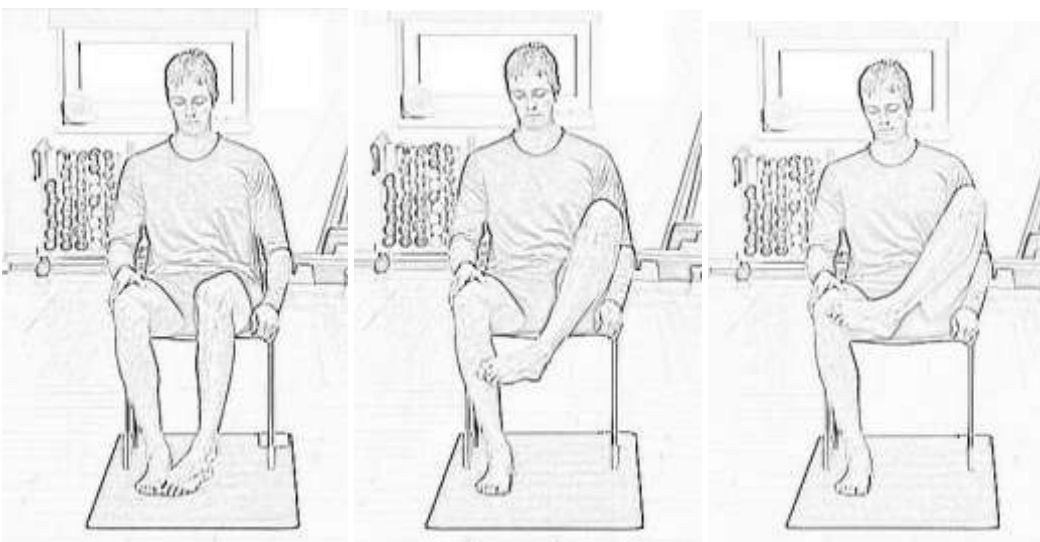
Repetitions 3x 1min

Important - Keep your body straight

- Keep supportive leg in 90 degree angle

- Feel tension in foot sole muscles

Suggestions- Avoid cramps in foot sole. If it happens, take a little brake.



Diagnosis: Achilles Tendinitis (tegelikult tuleks see asendada - Tendinosis)

ACHILLES TENDINOSIS/TENDINITIS

**What is Achilles Tendinitis?**

Achilles tendinitis(also Achilles tenosynovitis or Achilles tendinopathy) is tendonitis of the Achilles tendon, generally caused by overuse of the affected limb and is more common among athletes training under less than ideal conditions. It should not be confused with xanthoma of the tendon, which is the accumulation of cholesterol in patients with familial hypercholesterolemia.

EXERCISES FOR PREVENTION AND TREATEMENT**Exercise 1**

Goal Improving ankle flexibility

Repetitions 3x 20sec for both legs

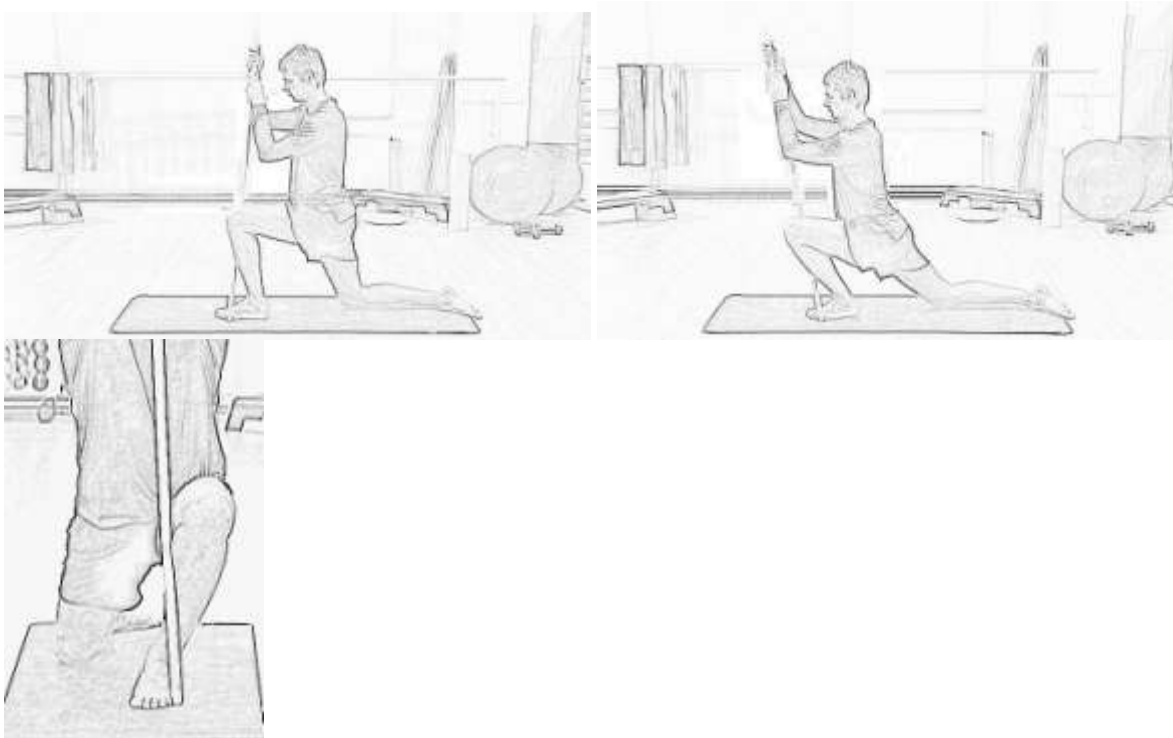
Important - Place pole next to small toe

- Keep knee outside of the pole

- Keep back straight

- Hold pole with two arms

Suggestions- Do it for both legs



Exercise 2

Goal Improving ankle flexibility

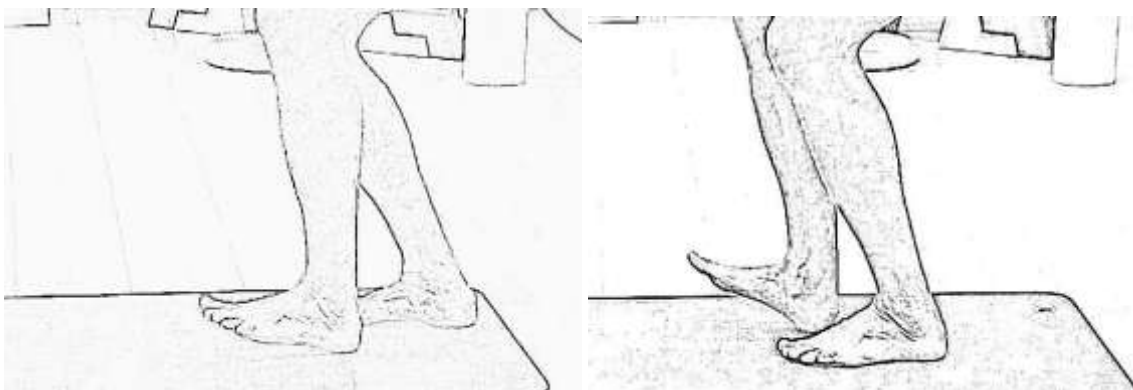
Repetitions 3x 5-7 meters

Important - Bent your knees

- Slide foot over the heel

- Keep the heel in contact with the ground at all times

Suggestions- Move back and forward



Exercise 2

Goal Improving ankle flexibility

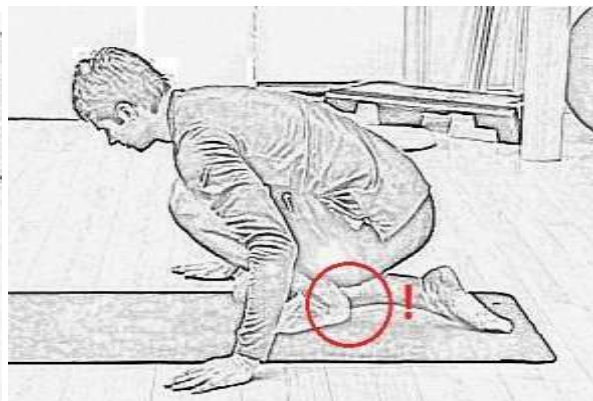
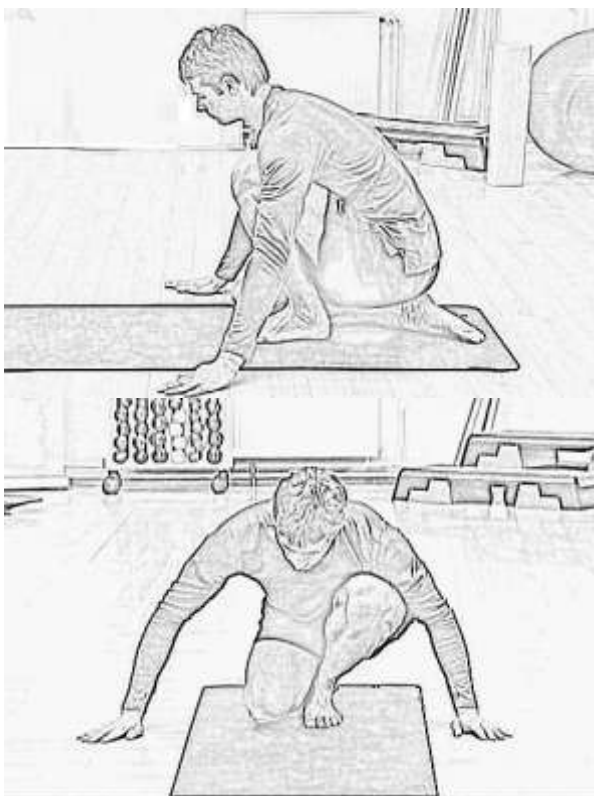
Repetitions 3x 20 sek for both legs

Important - Keep heel on the ground

- Feel the stretching of achilleus

- Hold your bodyweight outside of leg

Suggestions- Quit exercise, if you feel pain



Exercise 2

Goal Preventing and healing of Achilles Tendinitis

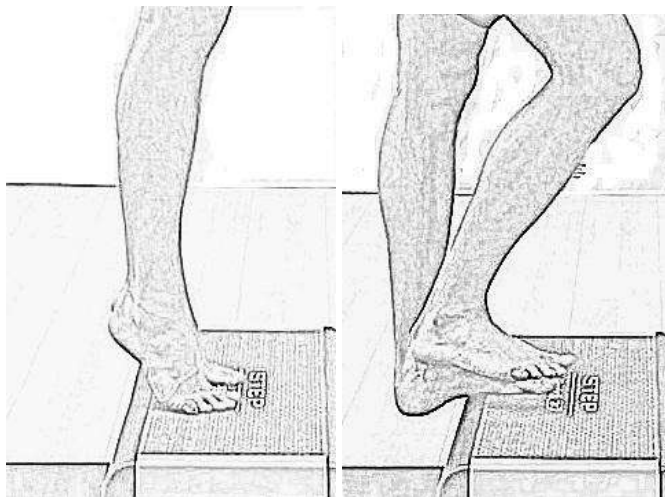
Repetitions 3x 10 for both legs

Important - Rise on your toes with two legs

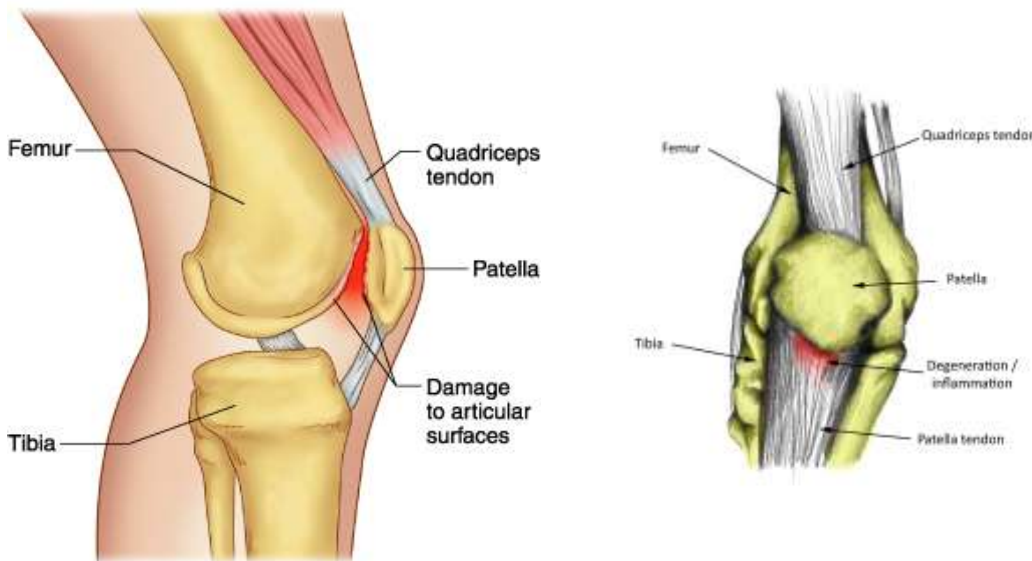
- Go down with one leg

- Make it slowly

Suggestions- Begin with problematic leg



Diagnosis: Chondromalacia patellae, Jumpers Knee



What is Chondromalacia patellae?

Chondromalacia patellae (also known as CMP) is smoothening of the articular cartilage of the patella. While it often affects young individuals engaged in active sports it also afflicts older adults who overload their knees, while in this case we face more degenerative changes and call the condition chondropathia

What is Jumpers knee?

Patellar tendinitis (patellar tendinopathy, also known as jumper's knee), is a relatively common cause of pain at the apex of patella in athletes. It is common with frequent jumping and studies have shown it may be associated with stiff ankle movement and ankle sprains.

EXERCISES FOR PREVENTION AND TREATMENT

Exercise 1

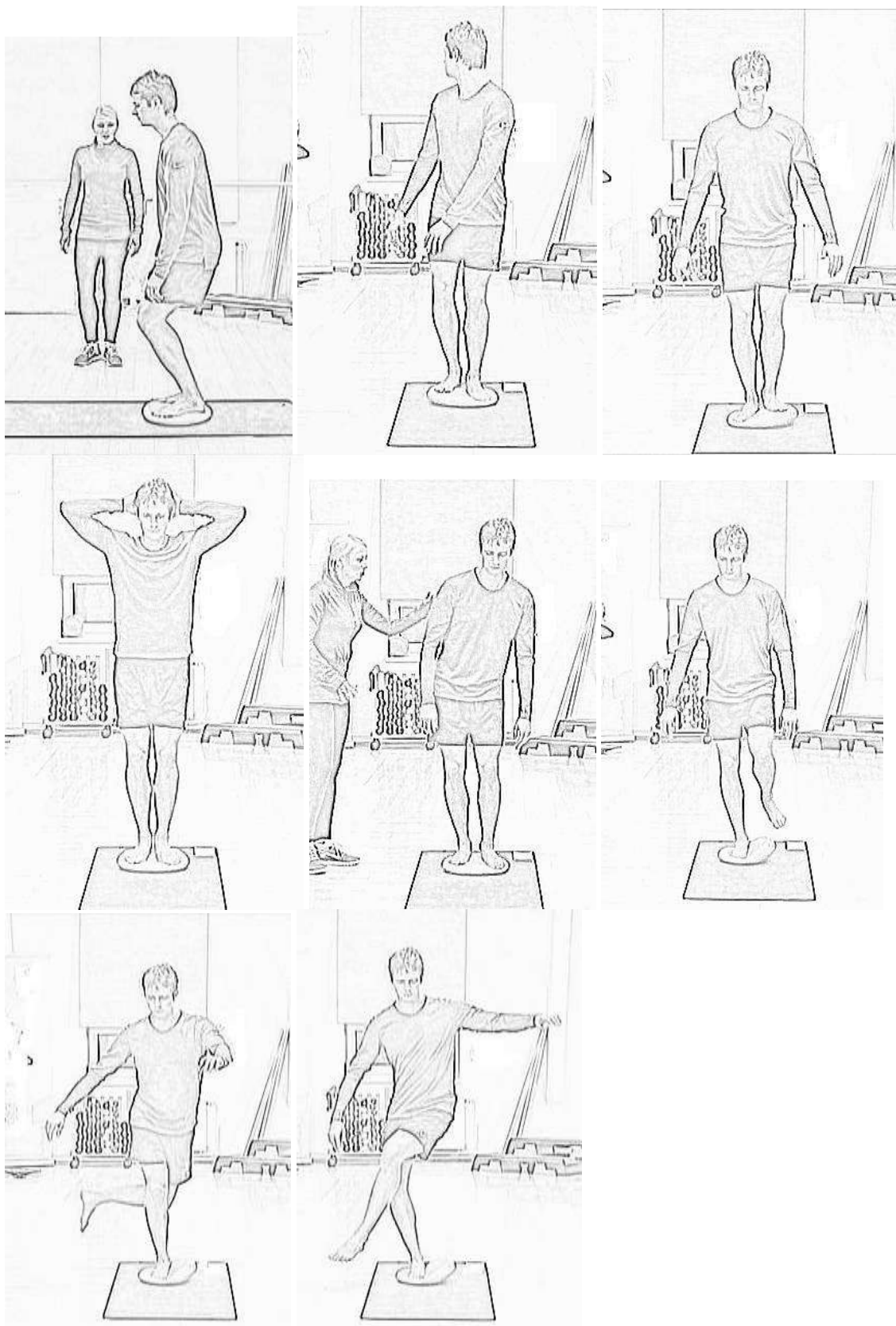
Goal Knee and ankle stabilization

Repetitions 3x 1 min each exercise

Important - Stay in half squat

- Look around (watch down, up, back, sides, close your eyes, etc.)
- Change your arms position (up, sides, etc.)

Suggestions- Try to do it with one leg as well



Exercise 2

Goal Thigh and gluteal muscles strengthening

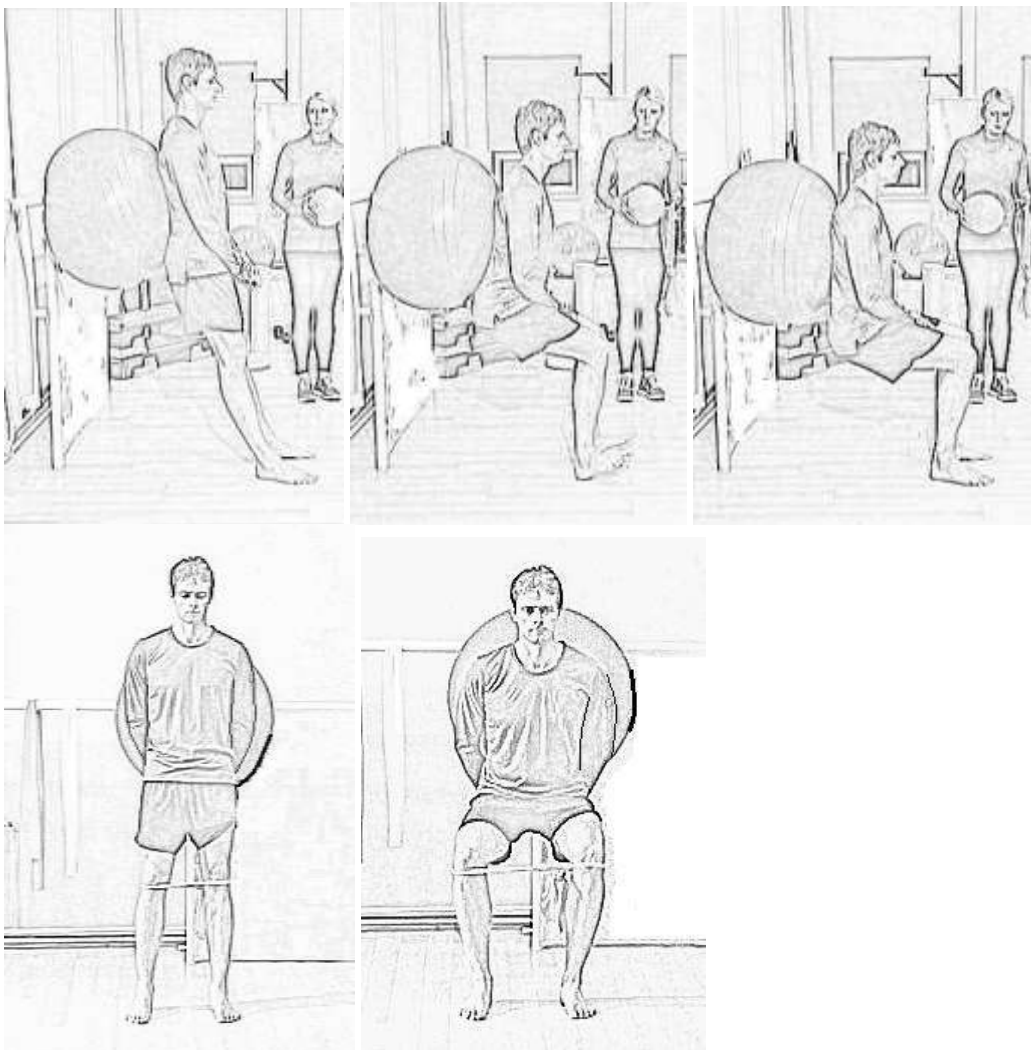
Repetitions 3-5x 5-10

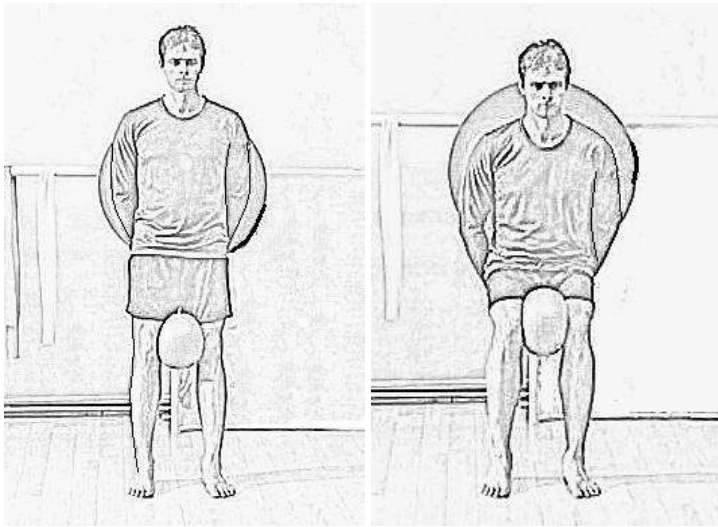
Important - Sit down to 90 degree

- Stay in seated position 1-5 sec.

- Raise your toes off the ground

Suggestions- To make exercise more difficult hold the ball between the knees or tie rubber band around the knees





Exercise 3

Goal Prevention and Treatment of Patellofemoral Pain Syndrome and Patellar Tendinitis

Repetitions 3-5x 5-10

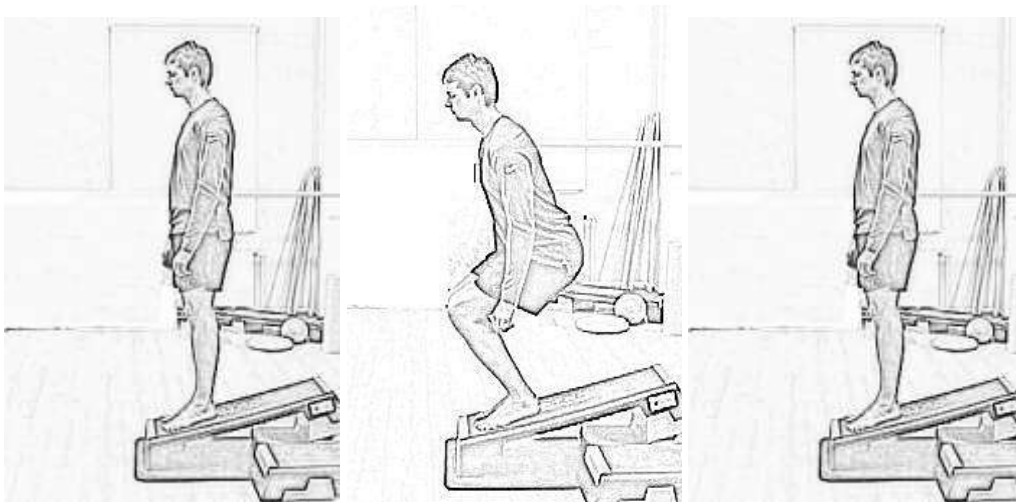
Important - Sit down to 90 degrees

- Make exercise slowly

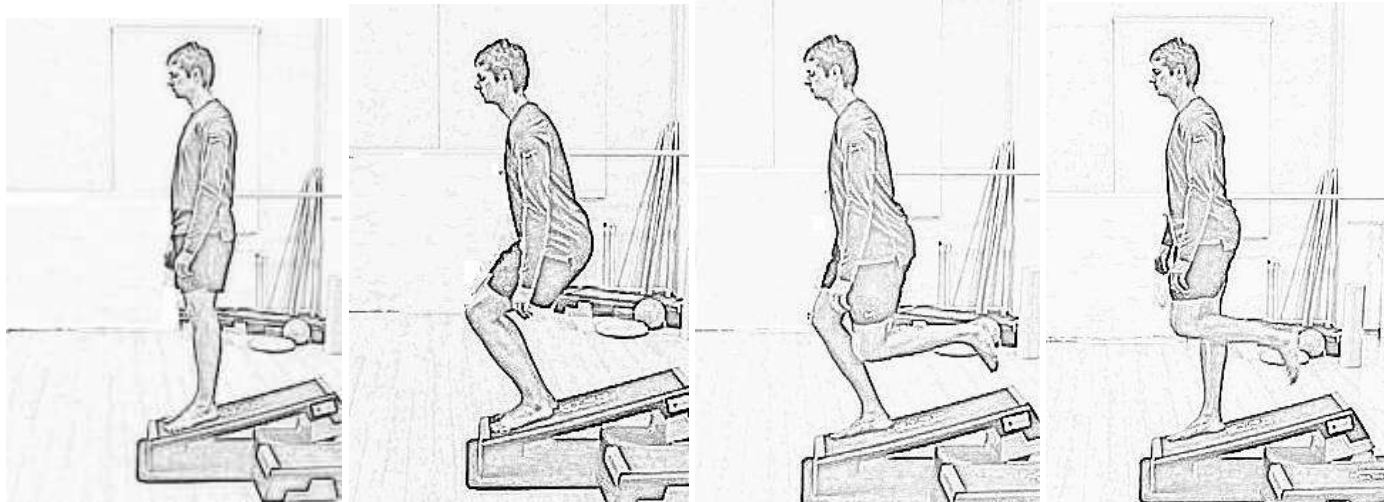
- Keep your body balanced

Suggestions- Do it also with one leg only

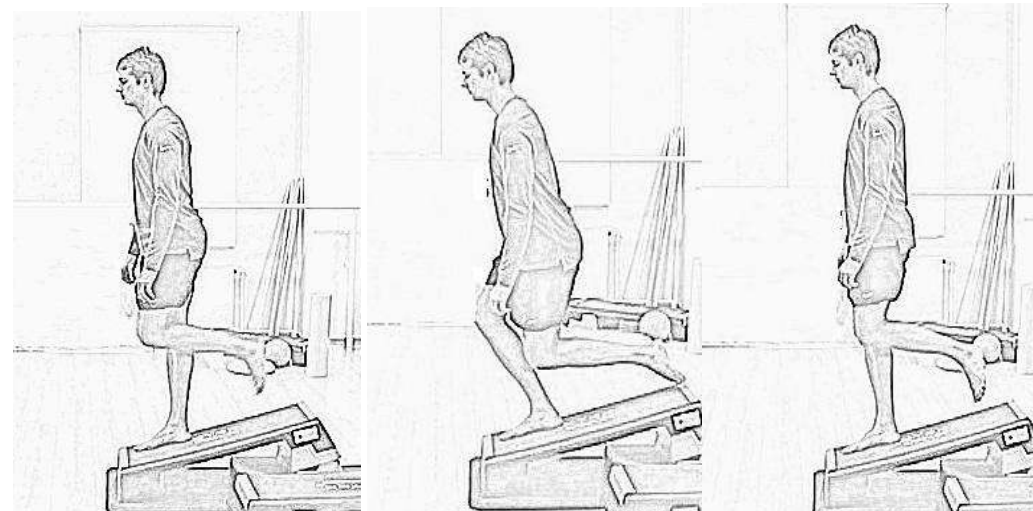
Version 1



Version 2



Version 3



Exercise 4

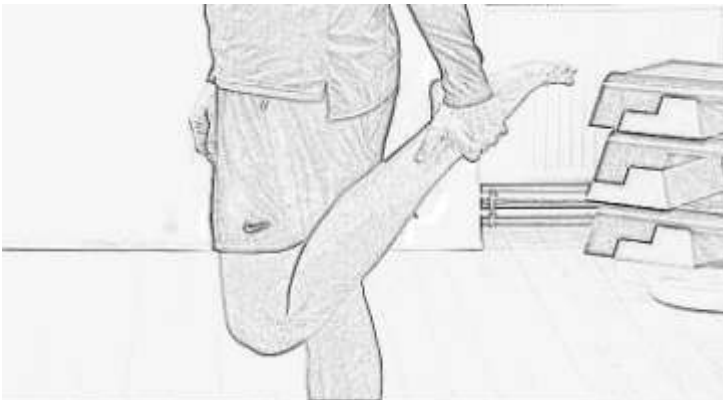
Goal Stretching of thigh muscles

Repetitions 3-5x 5-10

Important - Keep body straight, look forward

- Keep knees together
- Push hips forward
- Make exercise slowly
- Keep your body muscles tense
- Keep your body balanced

Suggestions- Begin with compliant leg



Diagnosis: Hamstring Muscle Syndrome



What is Hamstring Muscle Syndrome?

The hamstrings are the muscles running down the back of the thighs. They are responsible for bending the knee and extending the hip, and are used most when running, especially at speed. Tight hamstring muscle syndrome, also known as simply hamstring syndrome, is a postural abnormality seen with spondylolisthesis, which is the dislocation of a vertebra. It is also a complaint among some athletes who participate in sports that involve rapid acceleration and short, intense sprinting, such as hurdlers, skaters, and hockey, tennis and baseball players.

EXERCISES FOR TREATMENT AND PREVENTION

Exercise 1

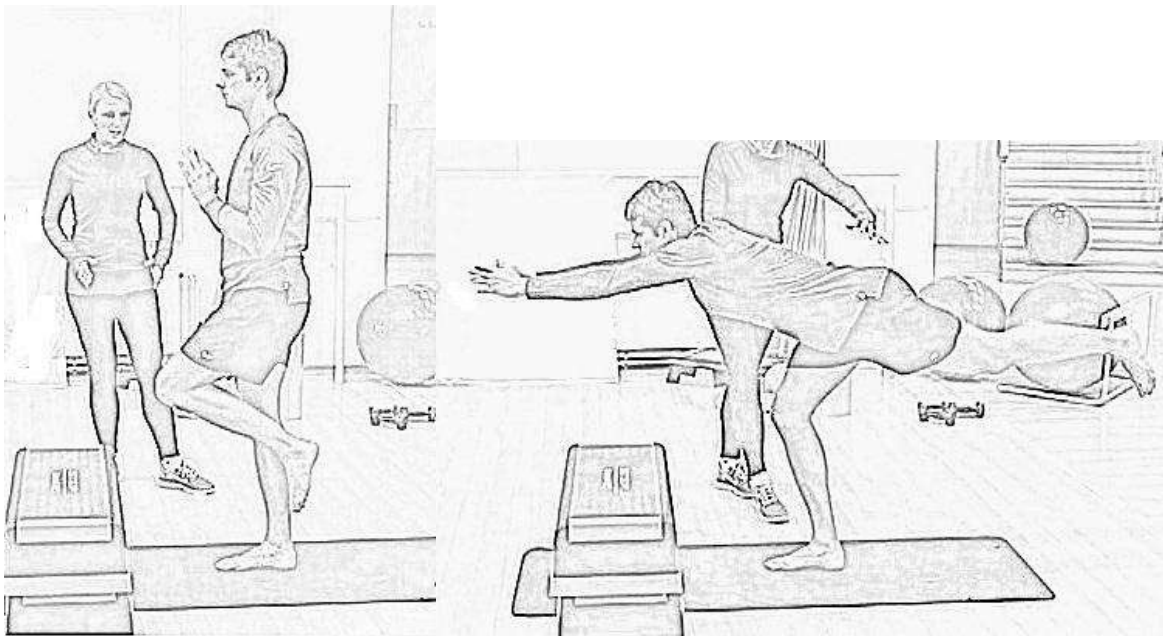
Goal Hamstring Muscles Injuries prevention and treatment

Repetitions 3-5x 5-10

Important - Keep body straight, look forward

- Avoid hips rotation
- Bend the weight bearing leg
- Make exercise slowly
- Keep your body balanced

Suggestions Do it for both legs



Exercise 2

Goal Hamstring muscles injuries prevention and treatment

Repetitions 3-5 x 5-10

Important - Keep body straight, look forward

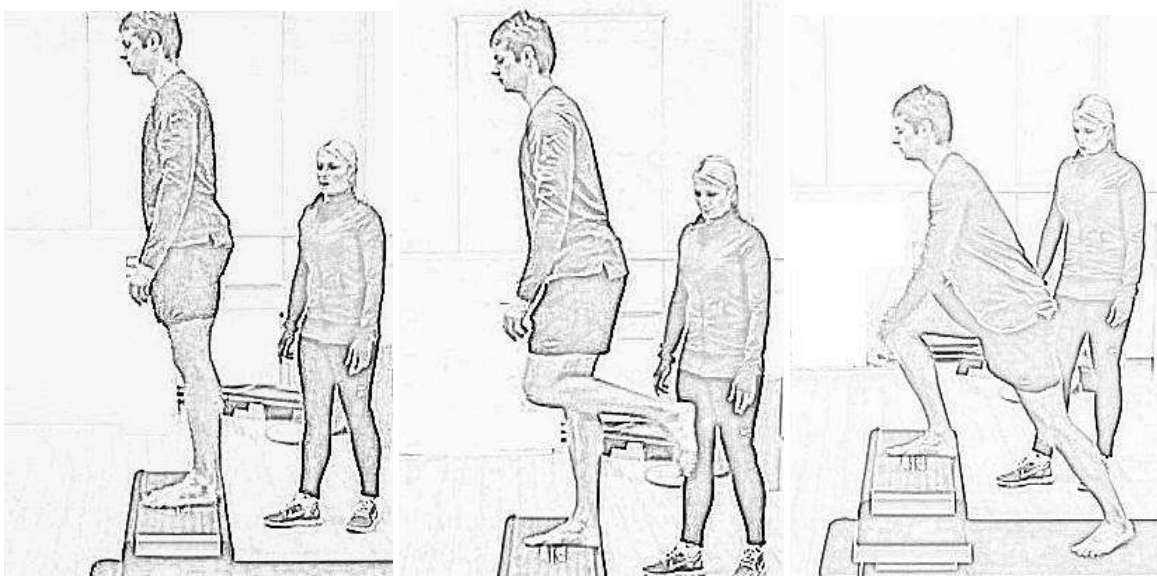
- Sag back and down as far as you can

- Make exercise slowly

- Keep your body balanced

- Avoid hips rotation

Suggestions: Do it for both legs

**Exercise 3**

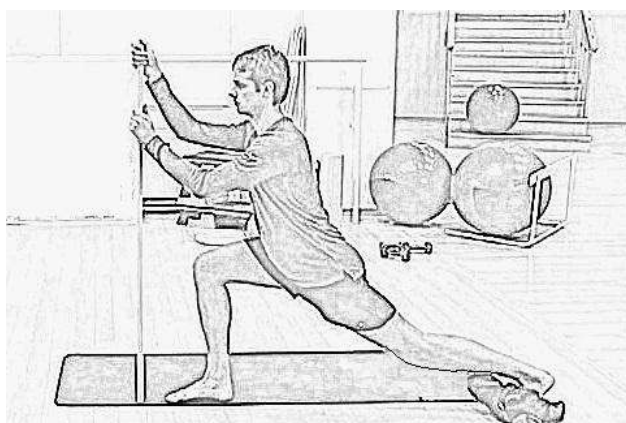
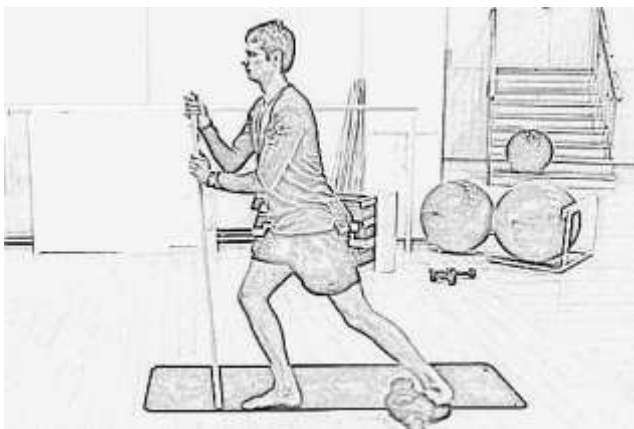
Goal Hamstring muscles injuries prevention and treatments

Repetitions 3-5 x 5-10

Important - Keep body straight, look forward

- Hold pole with two arms
- Stand on with compliant leg
- Slide backwards with healthy leg
- Make exercise slowly
- Keep your body balanced
- Avoid hips rotation

Suggestions Do it on slippery floor. To get better slip, you may use towel under your, foot



Exercise 4

Goal Prevention and treatment for hamstring muscles injuries

Repetitions 3-5 x 5-10

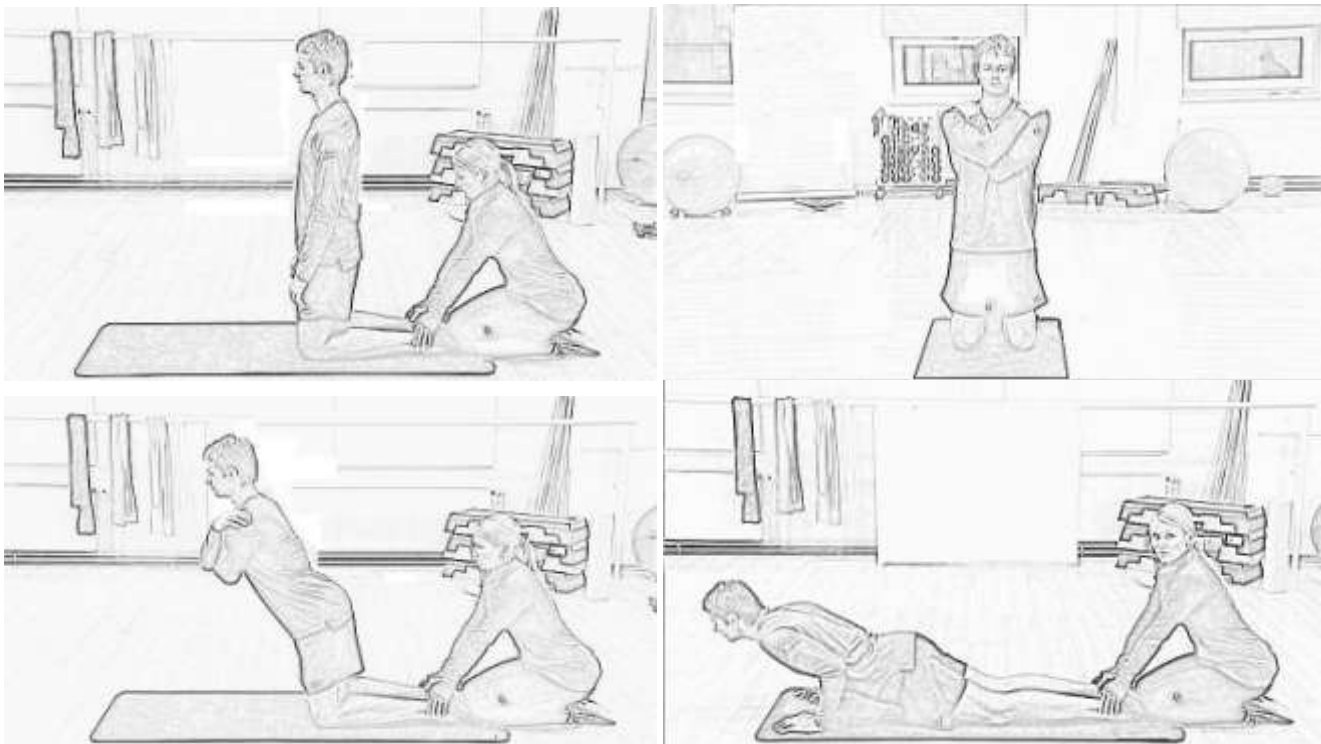
Important - Keep body straight, look forward

- Hold arms on your chest

- Make exercise slowly

- Keep your body muscles tens

Suggestions- Do not speed with your arms



Exercise 5

Goal Stretching of hamstring and thigh muscles

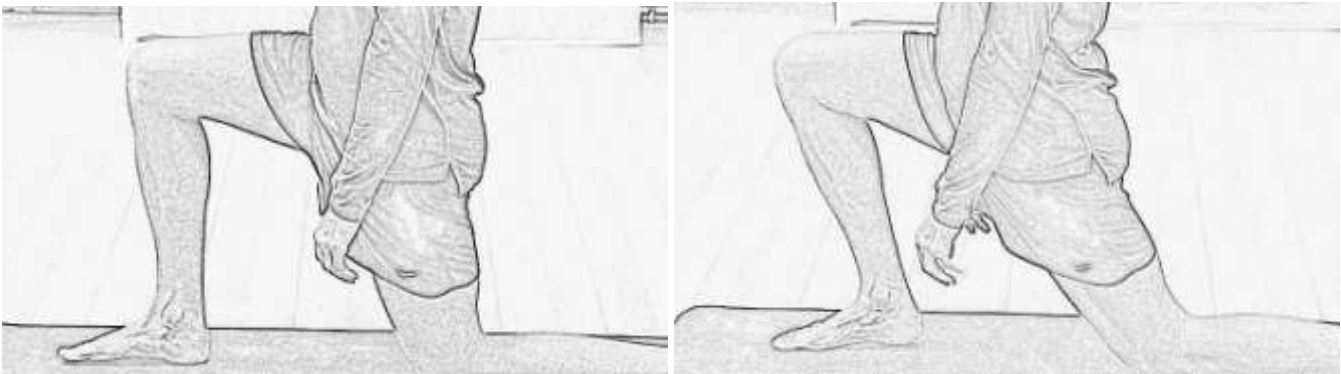
Repetitions 3x 20 sec. for both legs

Important - Keep body straight, look forward

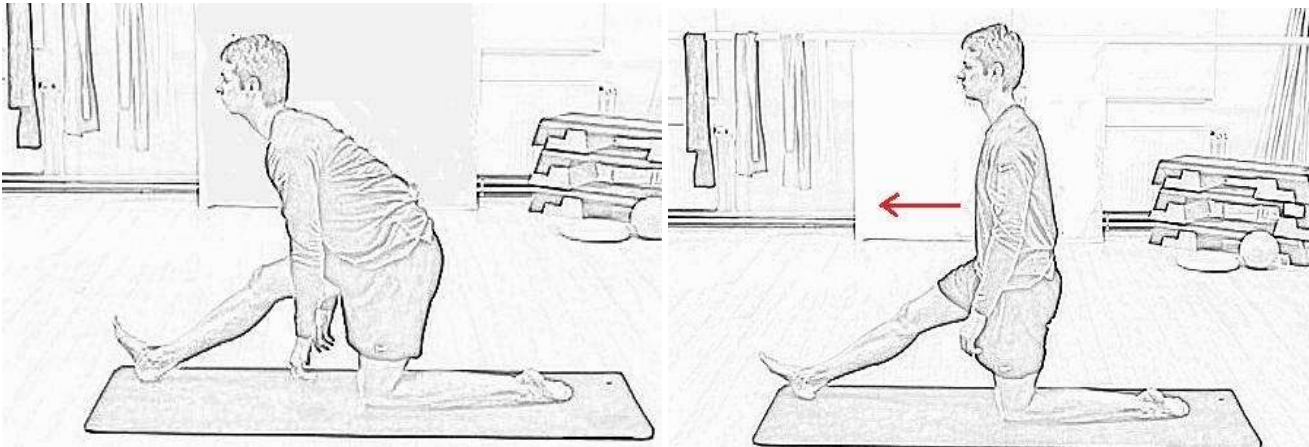
 - Keep your body balanced

Suggestions

Version 1



Version 2



Version 3



Exercise 6

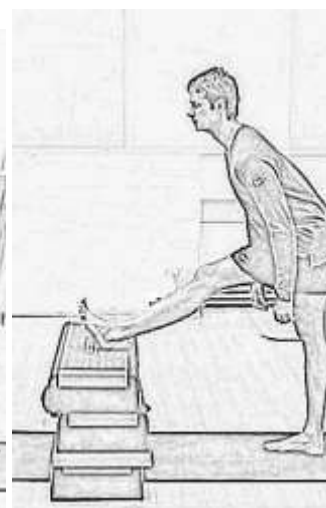
Goal Stretching of hamstring muscles

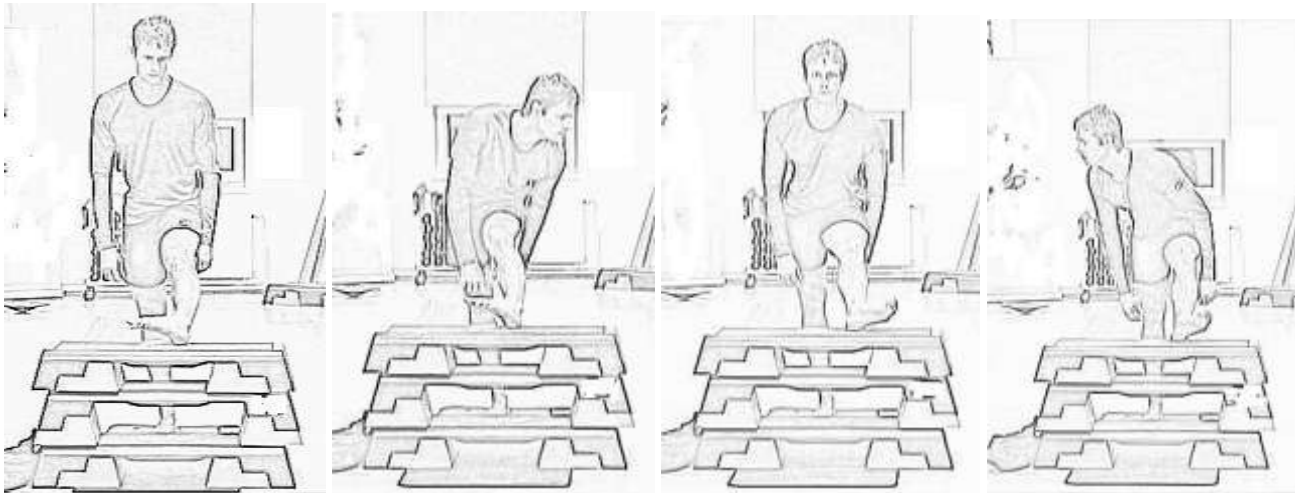
Repetitions 3 x 20 sec. for both legs

Important - Keep body straight, look forward

 - Keep your body balanced

Suggestions- During the stretching change your body positions



**Exercise 7**

Goal Strengthening of gluteal and hamstring muscles

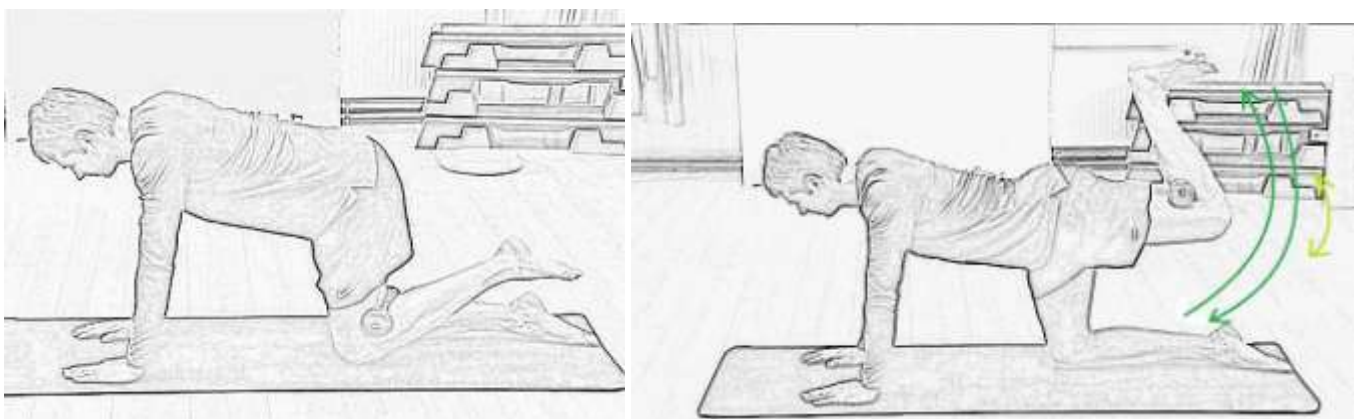
Repetitions 3 x 10

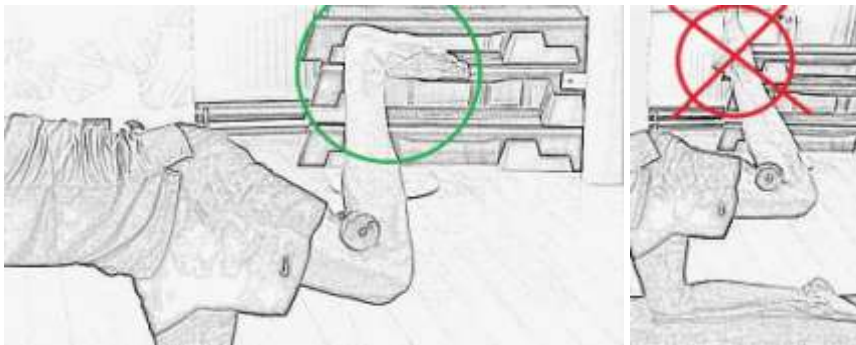
Important - Keep your body straight

- Keep your body muscles tens

- Keep your body balanced

Suggestions- Try to hold your foot in upright position (5-10 sec.), make also short and fast movements in top position





Exercise 8

Goal Strengthening and stabilizing gluteal, hamstring and back muscles

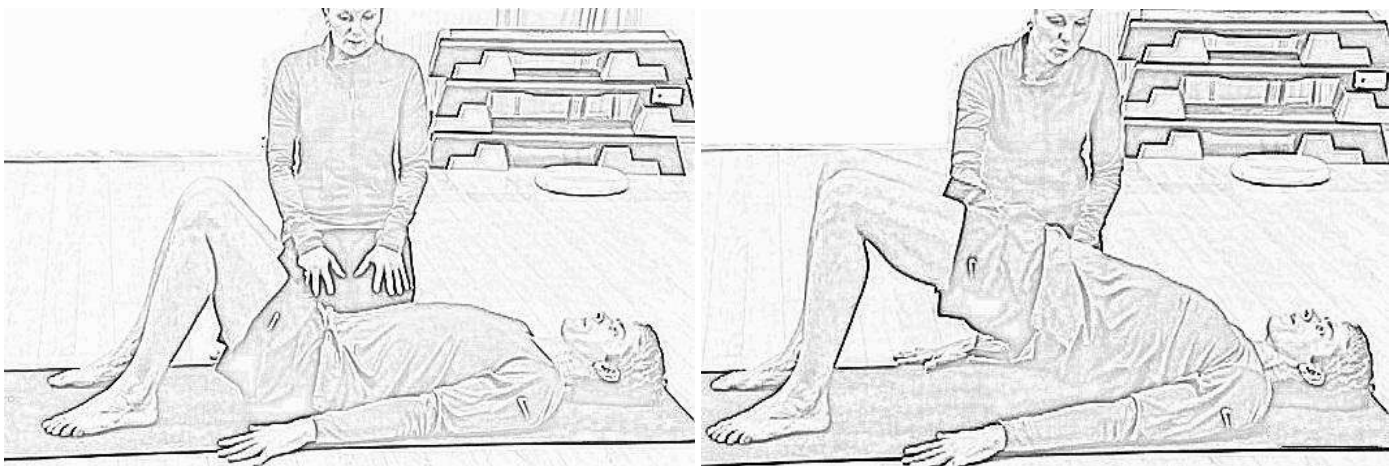
Repetitions 3x 10

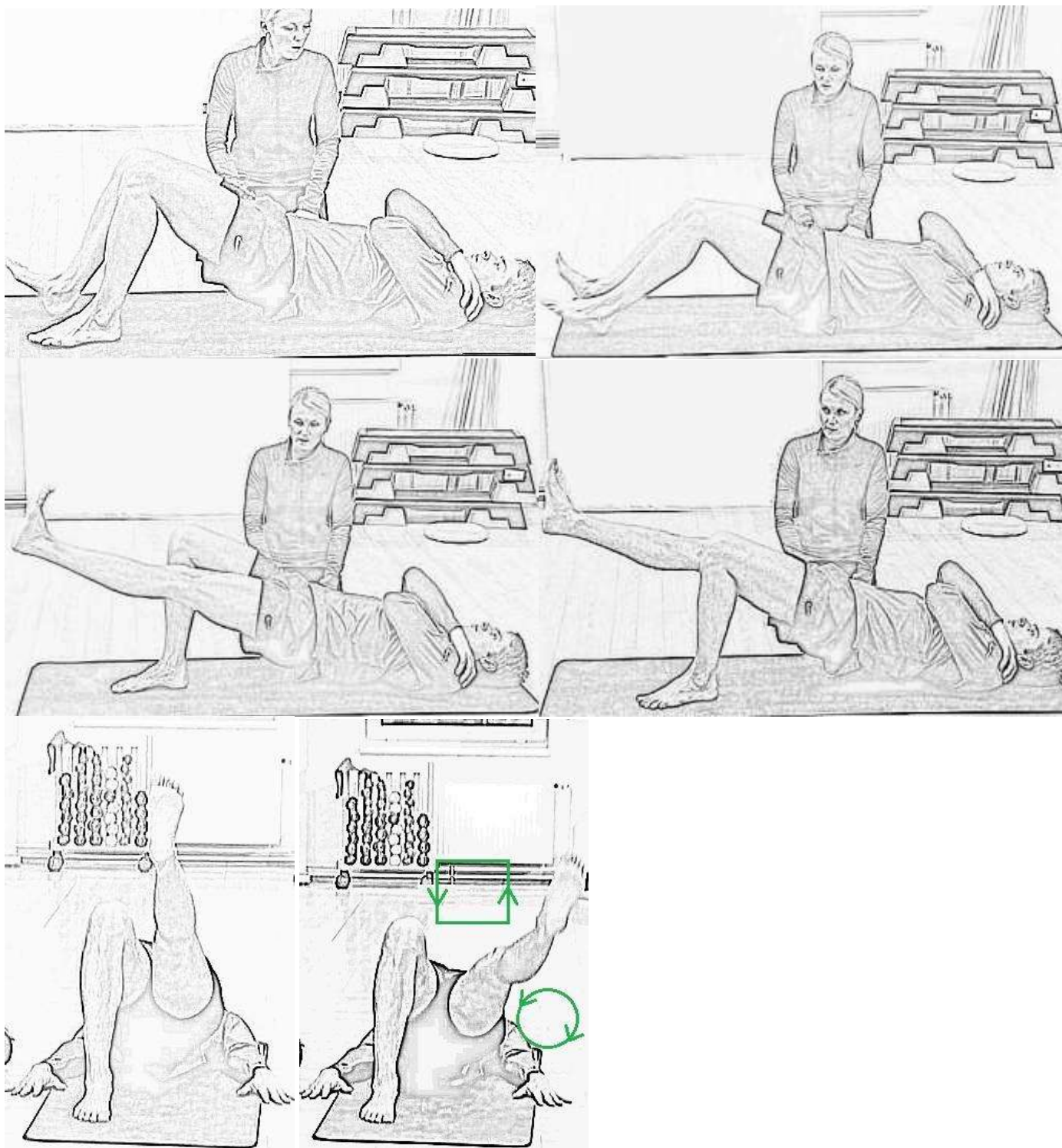
Important - Activate your pelvic muscles

- Take your back off the ground with „rolling“ movement
- Keep static tension in upper position 1-5 sec.

Suggestions- It is more difficult if you cross your arms on your chest

- Modify your movements (stay up on leg, move back and forward etc)





Exercise 9

Goal Strengthening and stabilizing of gluteal, hamstring and back muscles

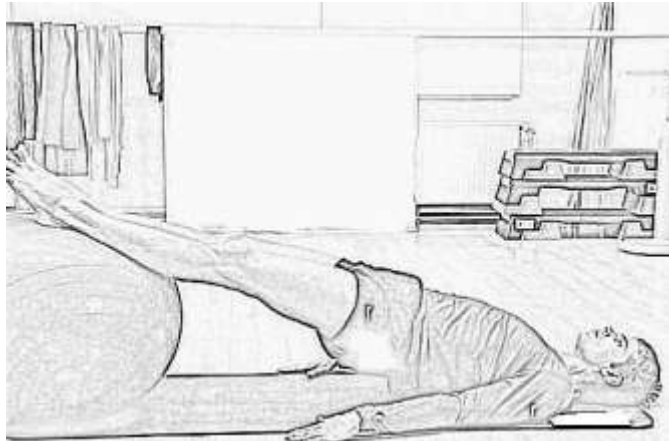
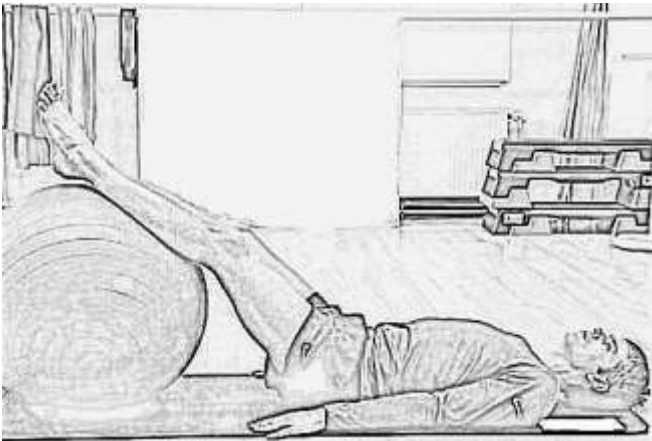
Repetitions 3x 10

Important - Hold your body stable and your back straight

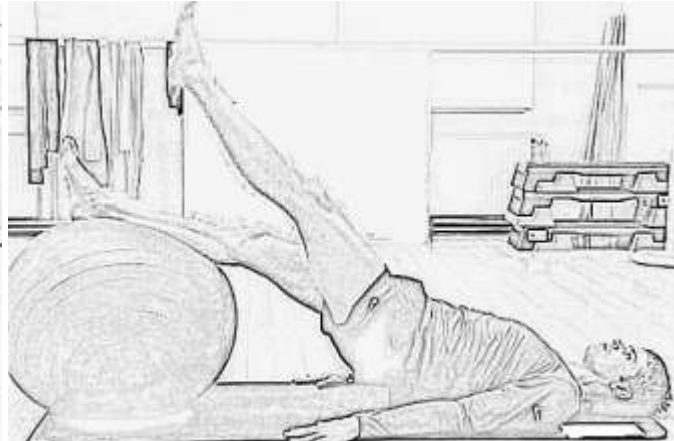
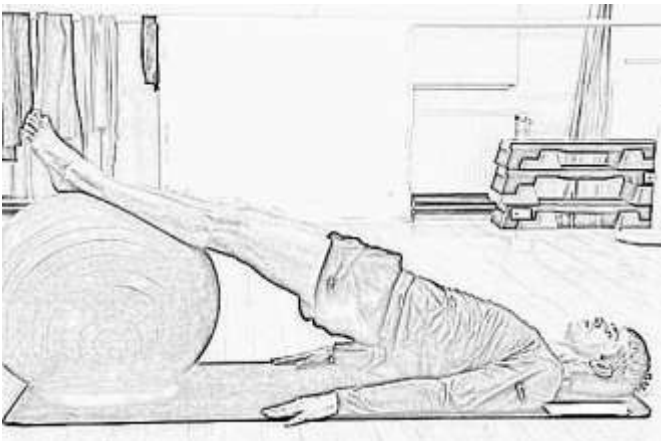
- Activate your pelvic muscles
- In resting keep 90 degree angle between thigh and shin
- Keep static tension in upper position 1-5 sec.

Suggestions- Variate your movements (amplitude, direction etc)

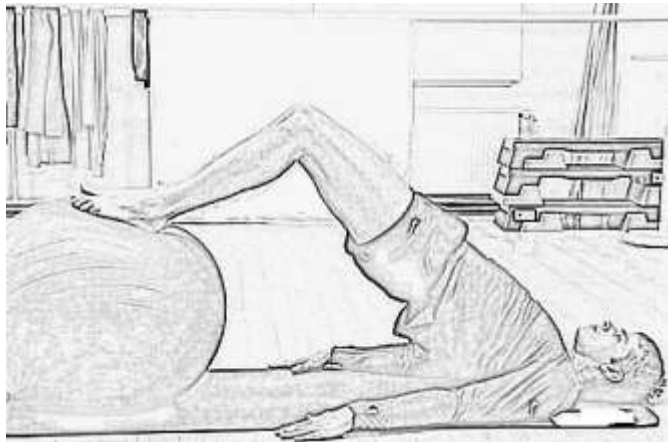
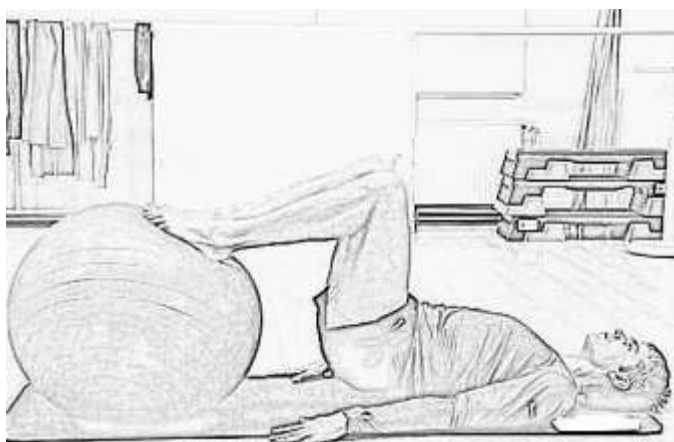
Version 1



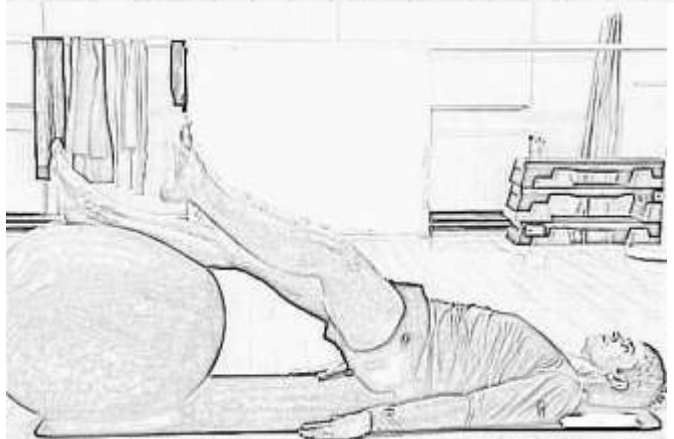
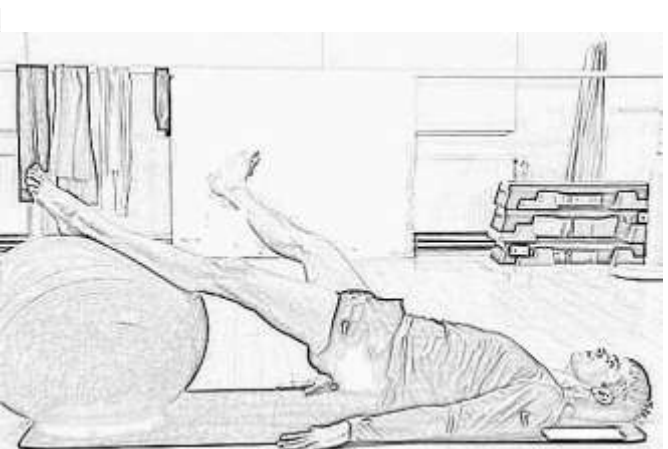
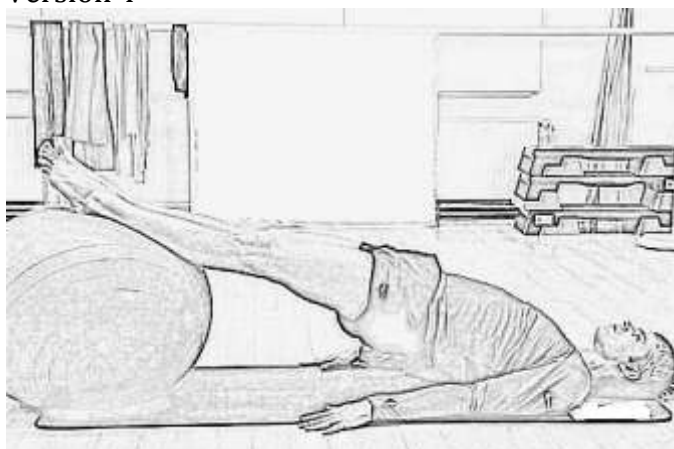
Version 2



Version 3



Version 4



Diagnosis: Strained Lower Back Injury



What is Strained Lower Back Injury?

Muscle strains and lumbar sprains are the most common causes of low back pain. A low back muscle strain occurs when the muscle fibers are abnormally stretched or torn. A lumbar sprain occurs when the ligaments, the tough bands of tissue that hold bones together, are torn from their attachments.

Differentiating a strain from a sprain can be difficult, as both injuries will show similar symptoms. Many doctors refer to both injuries as a category called "musculoligamentous injuries" of the lumbar spine. In general, it doesn't matter what you call the problem because the treatment and prognosis for both back strains and sprains is the same.

EXERCISES FOR PREVENTION AND TREATMENT

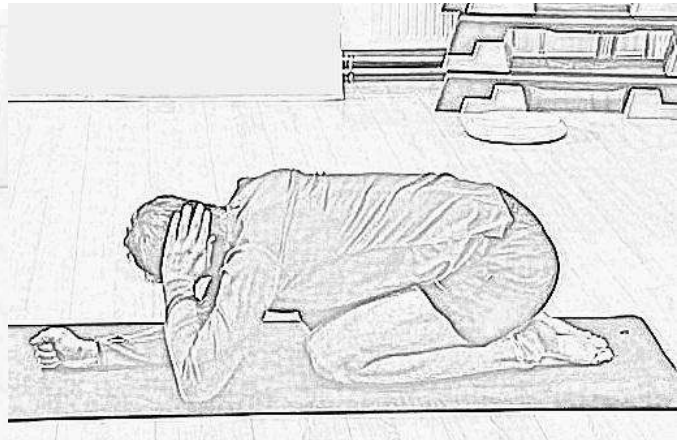
Exercise 1

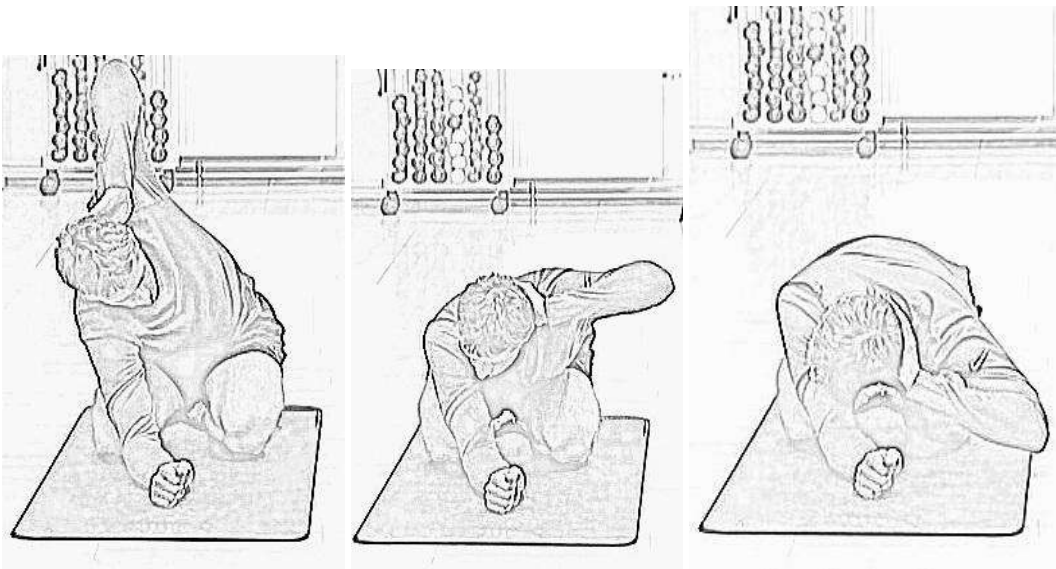
Goal Back and chest mobilisation

Repetitions 3x 10-20 rep

Important - Keep your back straight
 - Avoid hip rotations

Suggestions





Exercise 2

Goal Back and chest mobilisation

Repetitions

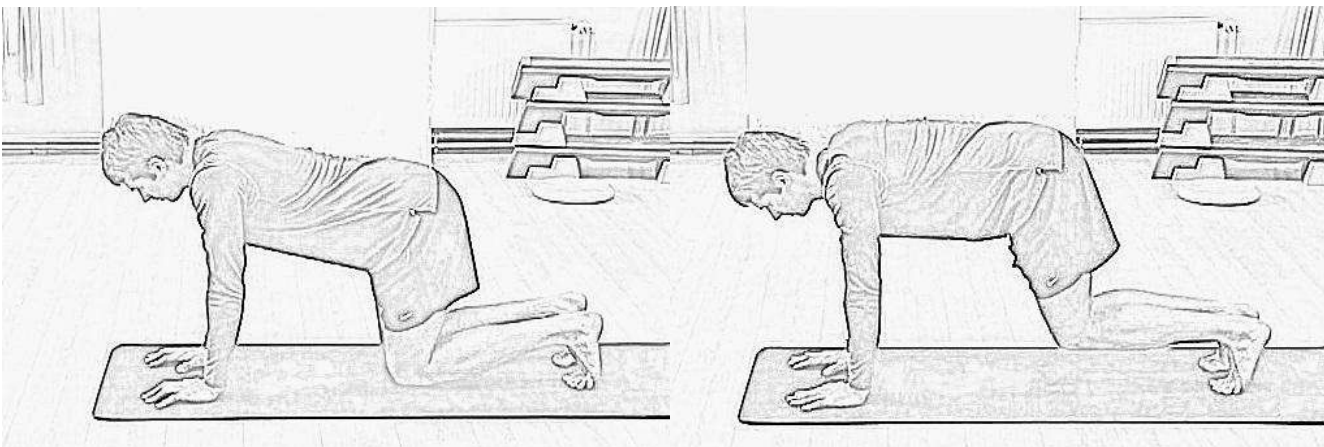
Important - Keep your back straight

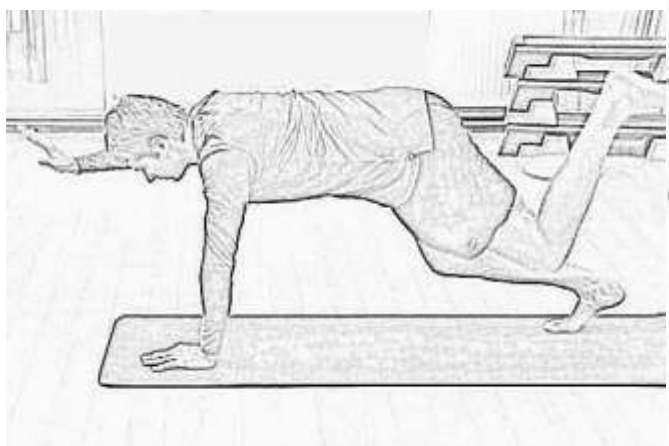
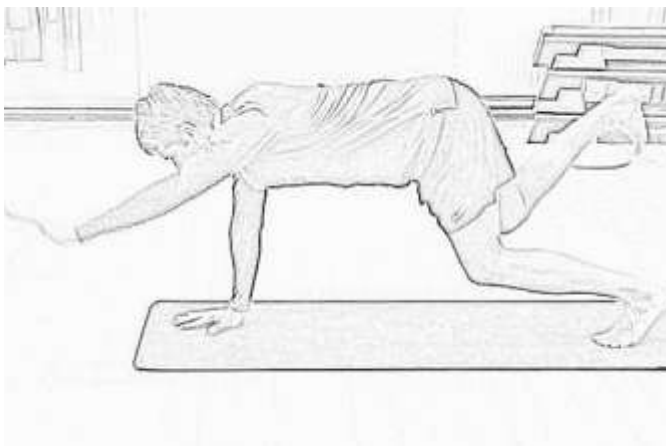
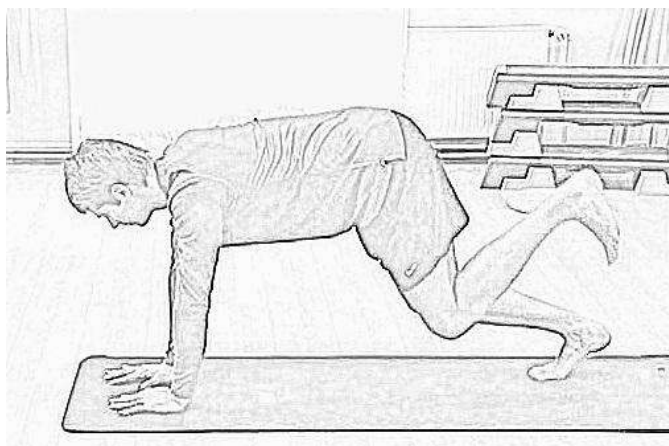
- Keep your body balanced

- Vary positions (two legs-one arm, two arms-one leg, one leg-one arm etc)

- Keep static tension in upper position as well

Suggestions- The exercise is more demanding if you use balance board under your foot or arm





Exercise 3

Goal Back and chest mobilisation

Repetitions 3x 10-20 rep

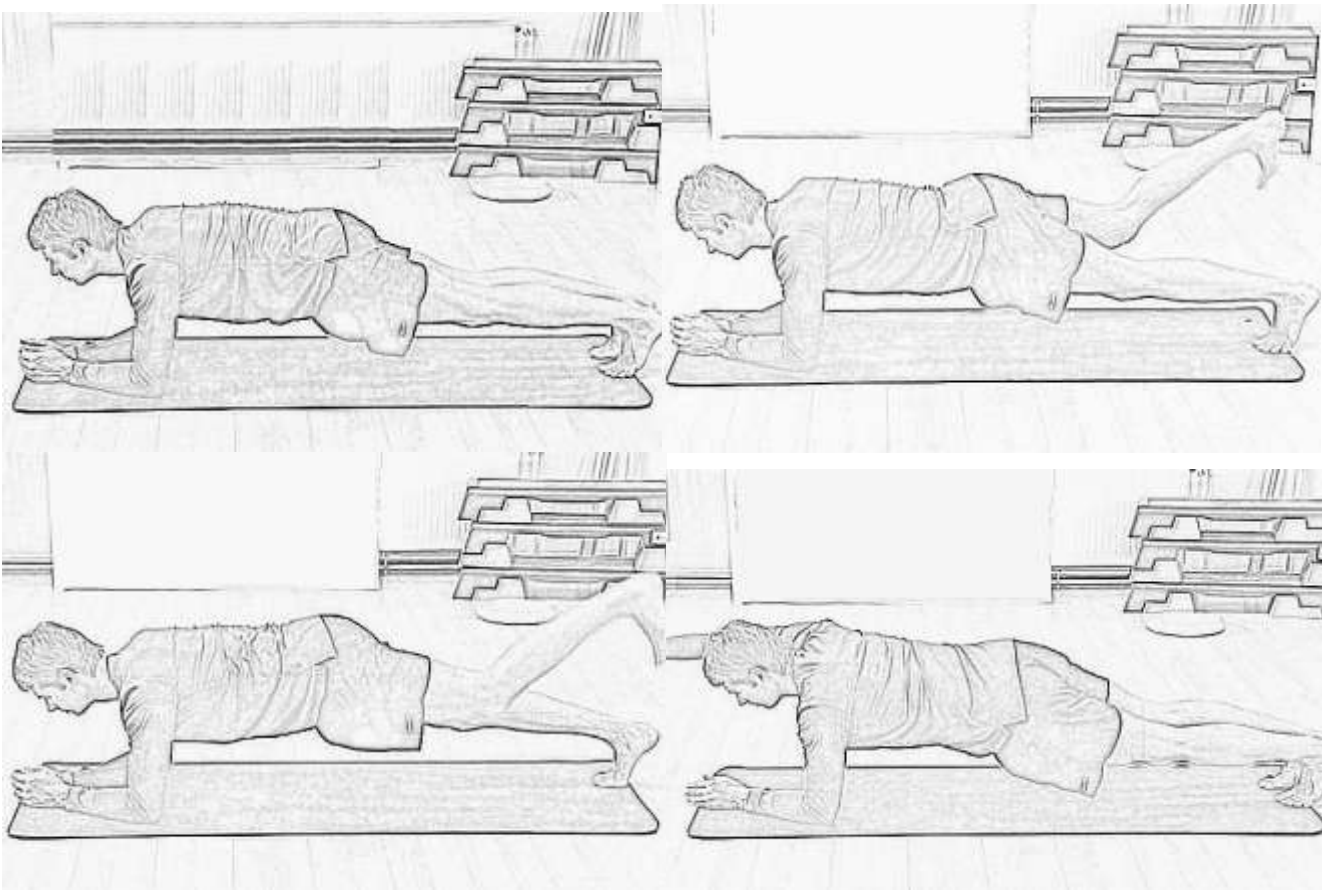
Important - Keep your back straight

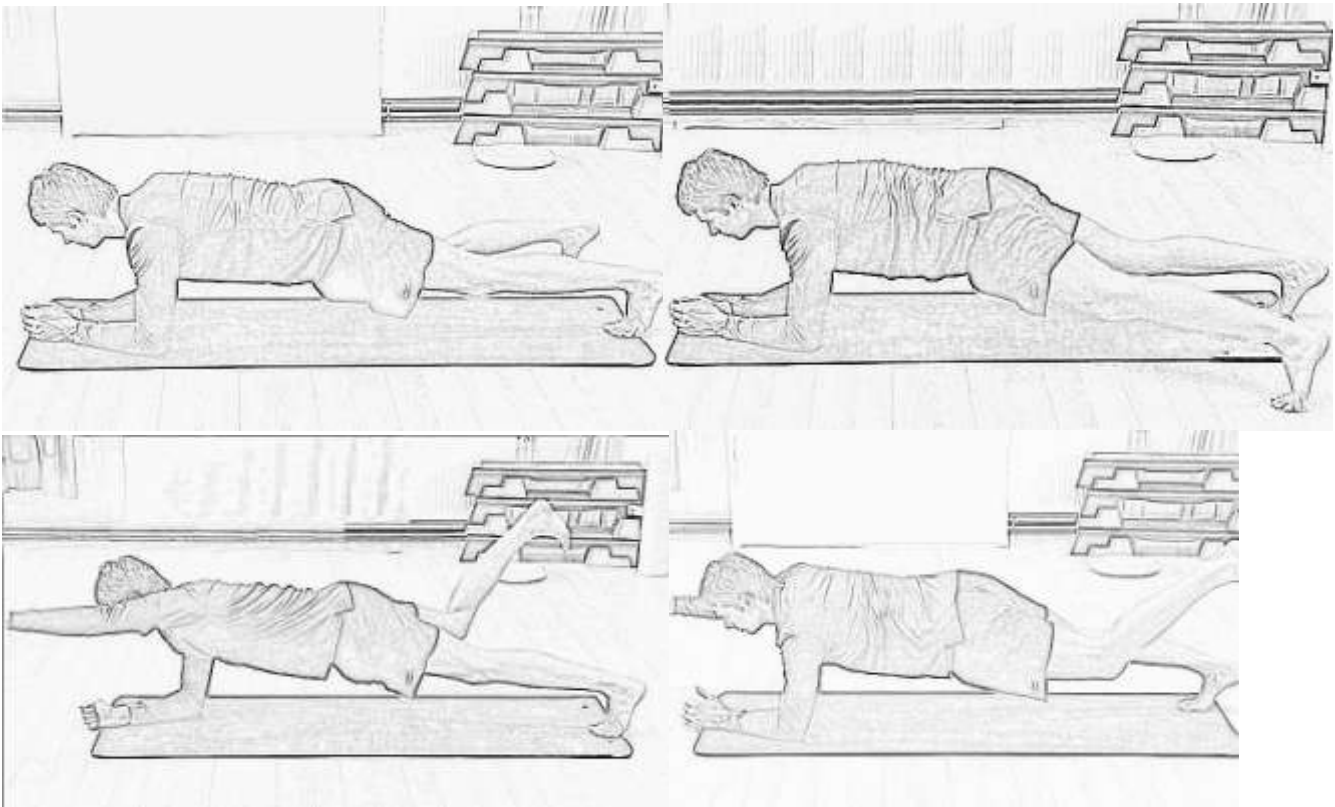
- Keep your body balanced

- Variate positions

- Keep static tension in upper position (1-5 sec) as well

Suggestions





Exercise 4

Goal Back and chest mobilisation

Repetitions 3x 1 min

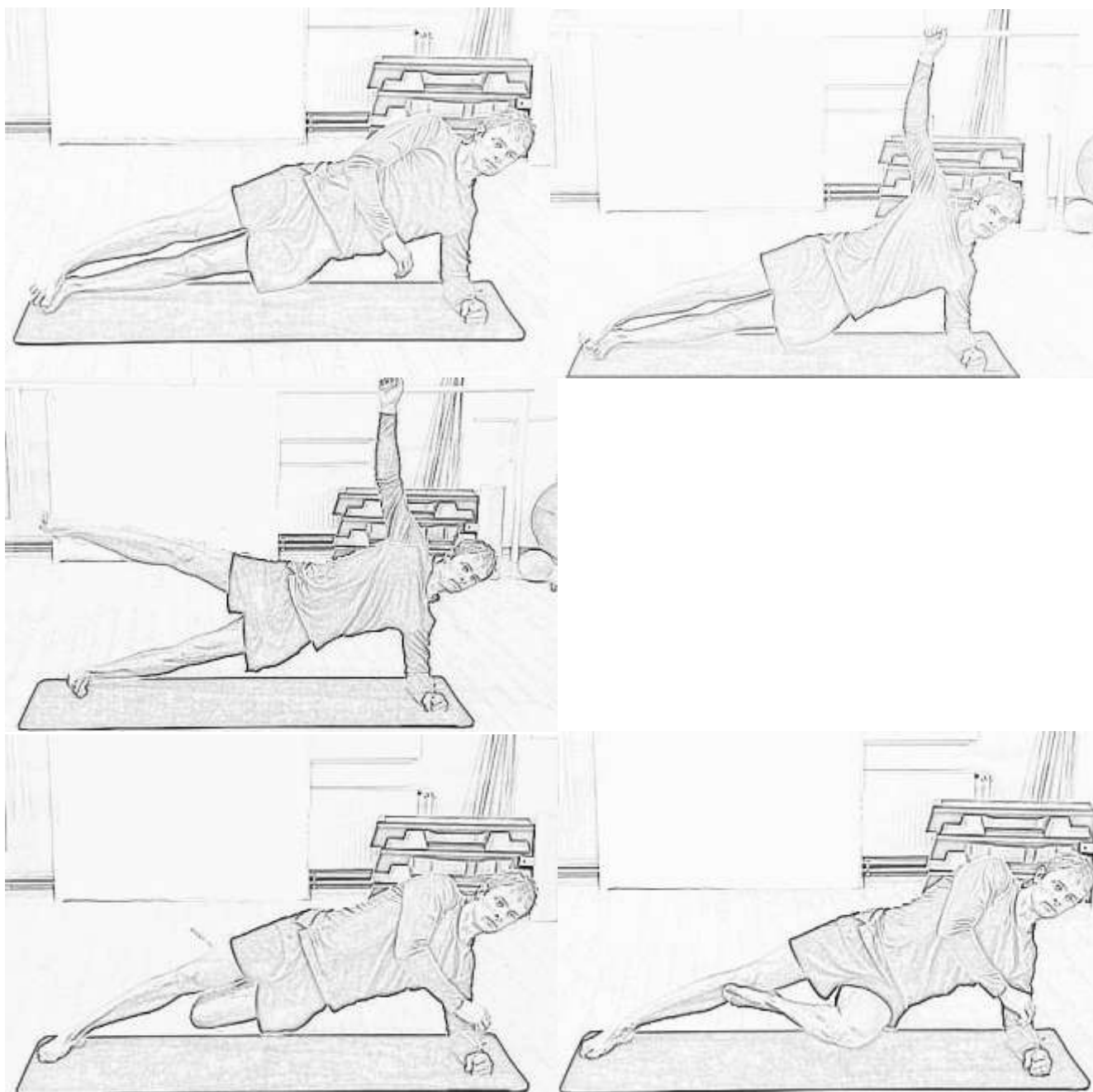
Important - Keep your back straight

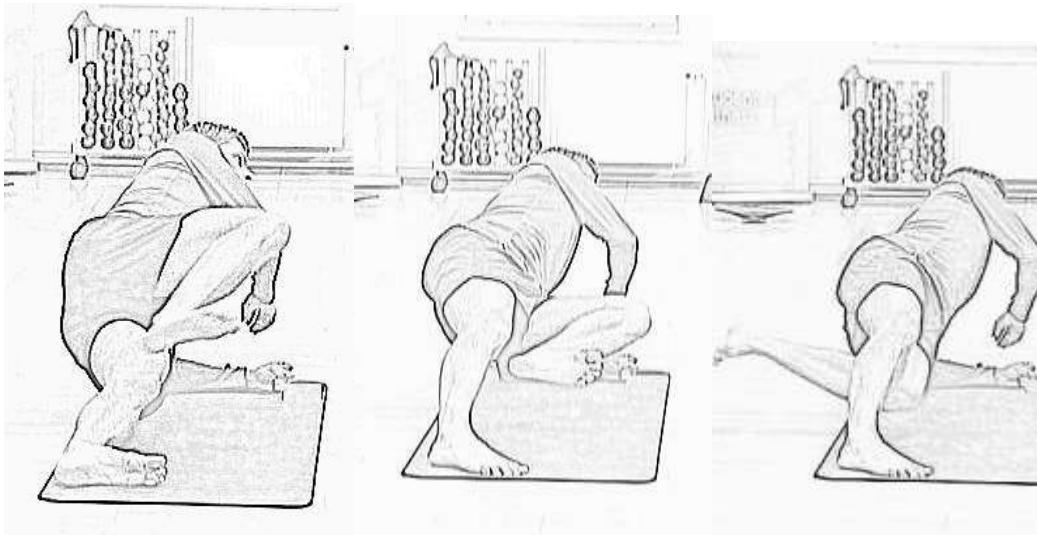
- Stay balanced

- Vary positions

- Keep static tension in upper position (1-5 sec) as well

Suggestions- Align your body straight according to the edge of the mat





Exercise 5

Goal Back and chest mobilisation

Repetitions 3x 1 min

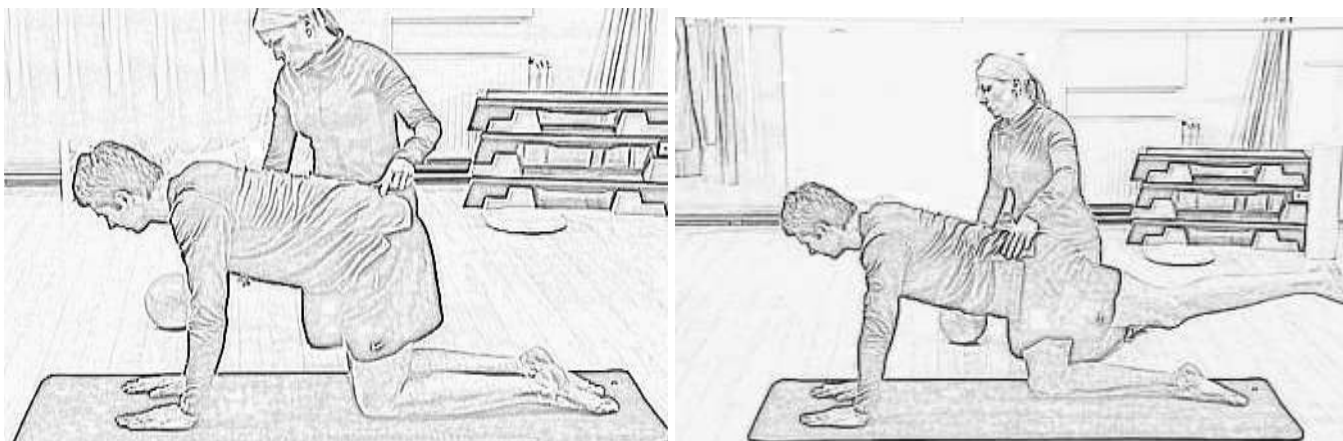
Important - Keep your back straight

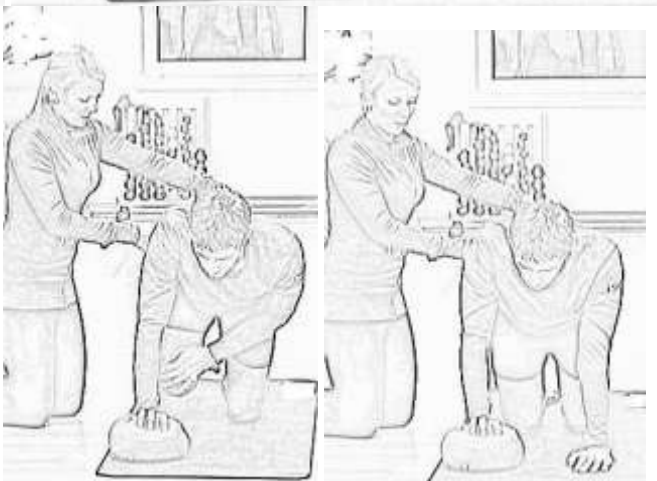
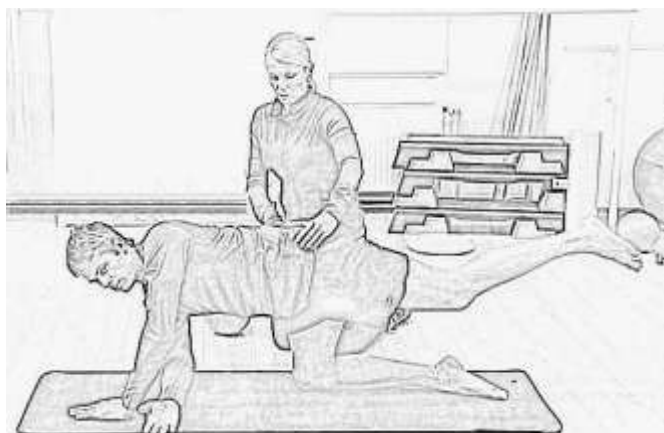
- Keep your body balanced

- Vary positions

- Keep static tension in elevated position (1-5 sec) as well

Suggestions





Exercise 6

Goal Strengthening of pelvic and back muscles

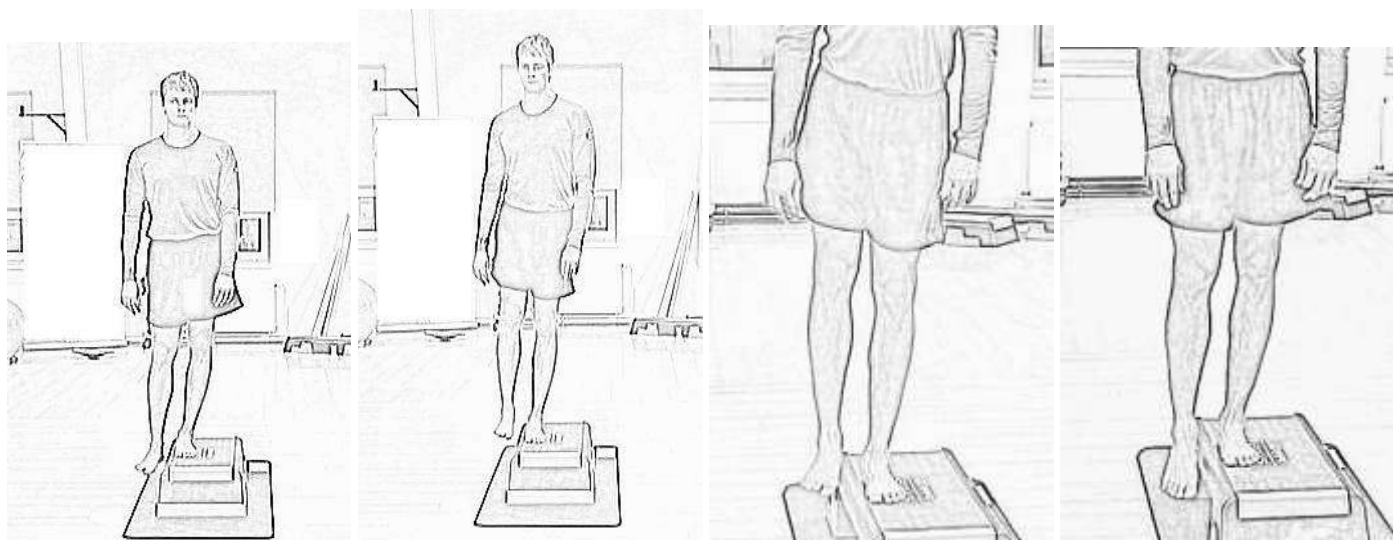
Repetitions 3x 20 rep

Important - Keep your back straight, look forward

- Make vertical movements only

- Do not rotate your hips

Suggestions



Exercise 7

Goal Strengthening of stomach muscles

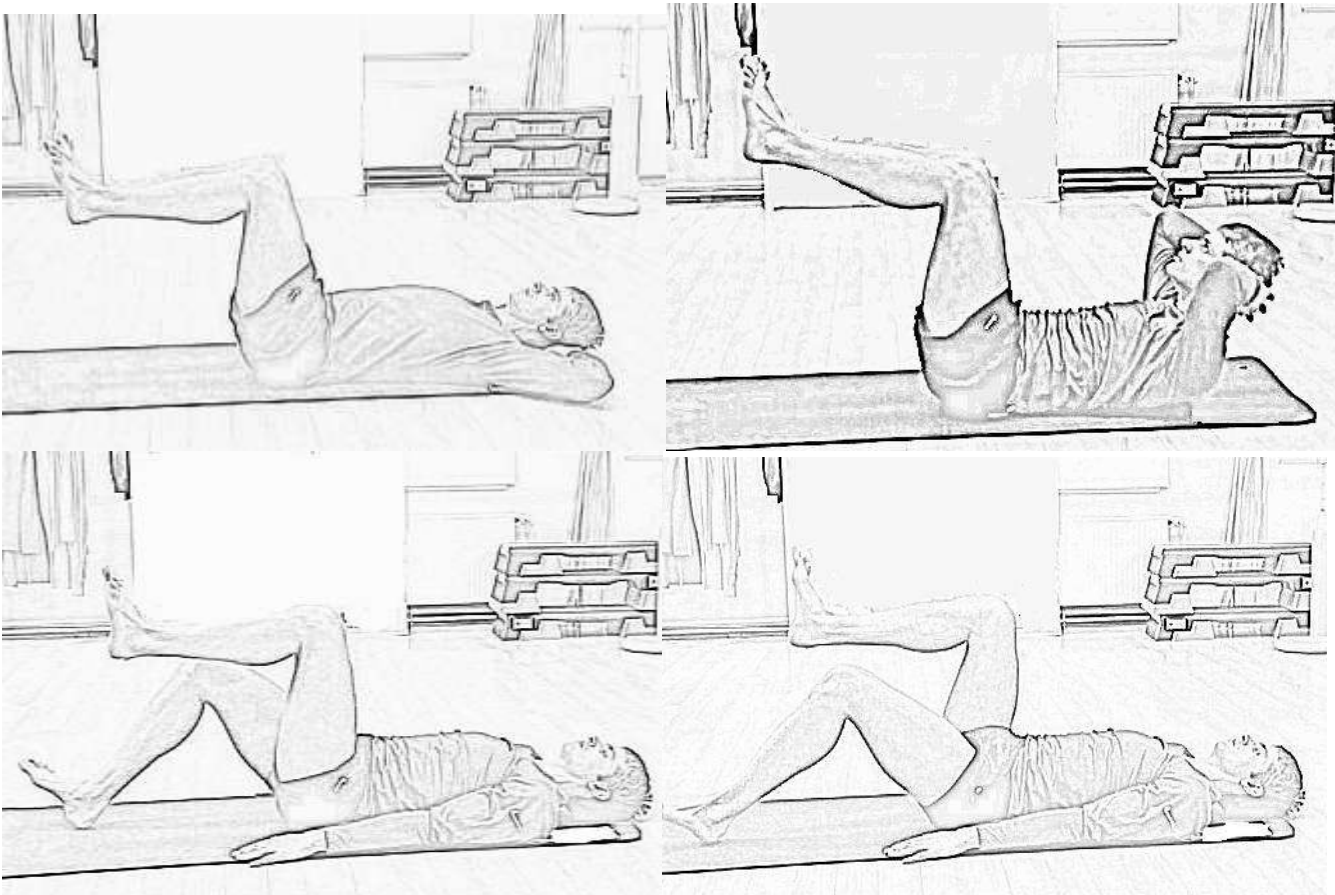
Repetitions 3x 10-20

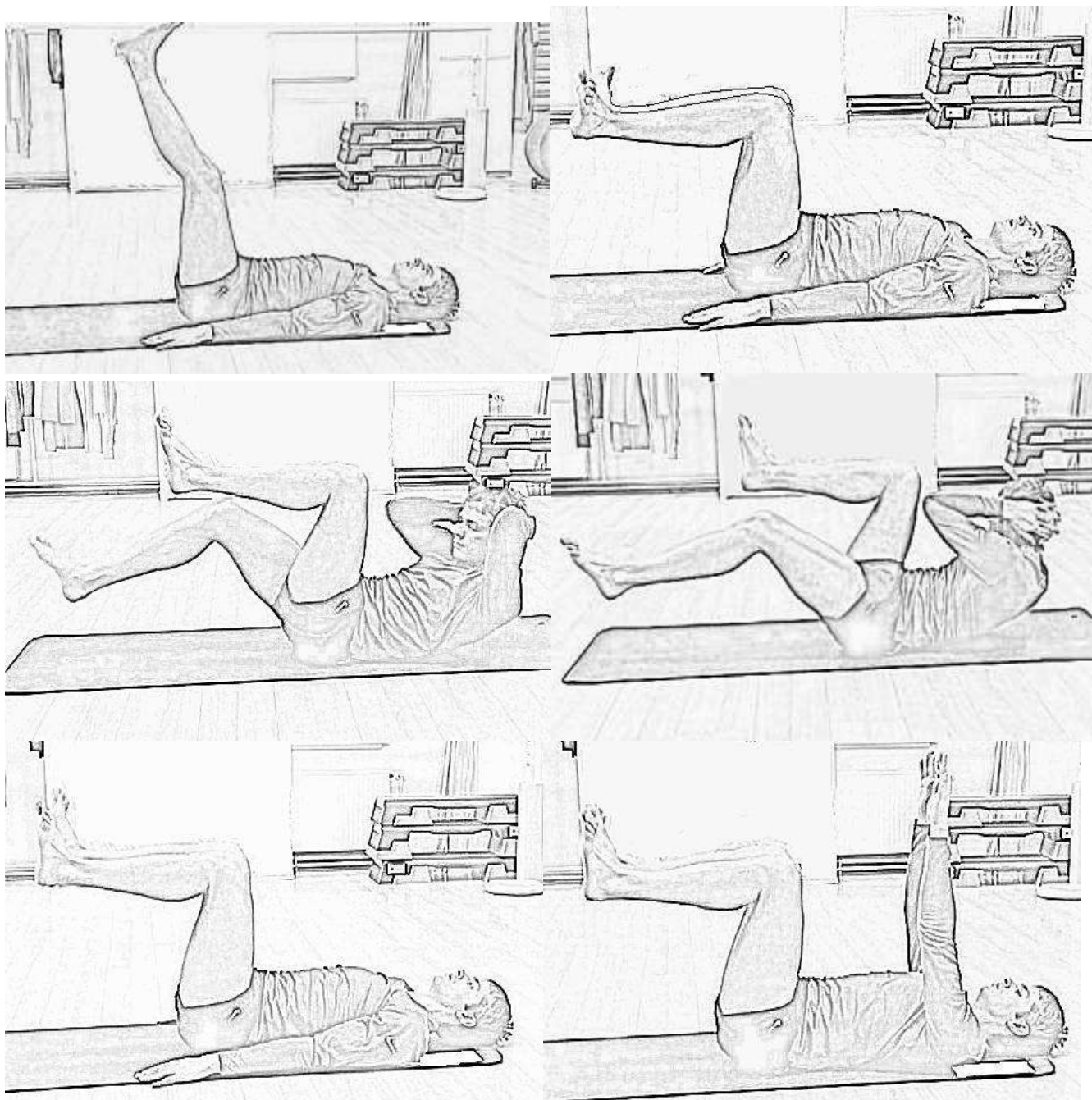
Important - Neutralize your lower back muscles

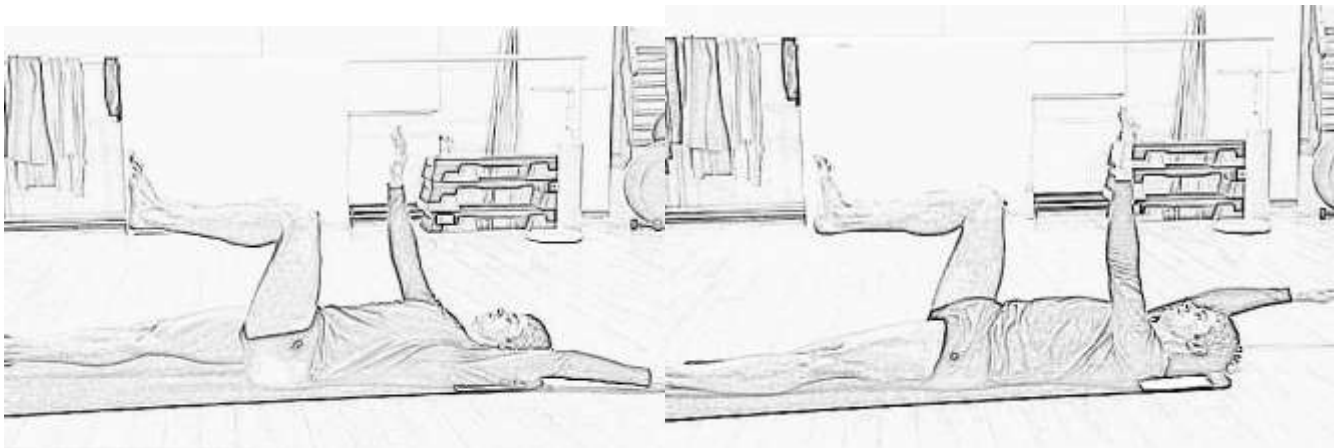
- Look up

- Do not work with your neck muscles

Suggestions modify movements







Exercise 8

Goal Strengthening of stomach muscles

Repetitions 3x 10-20

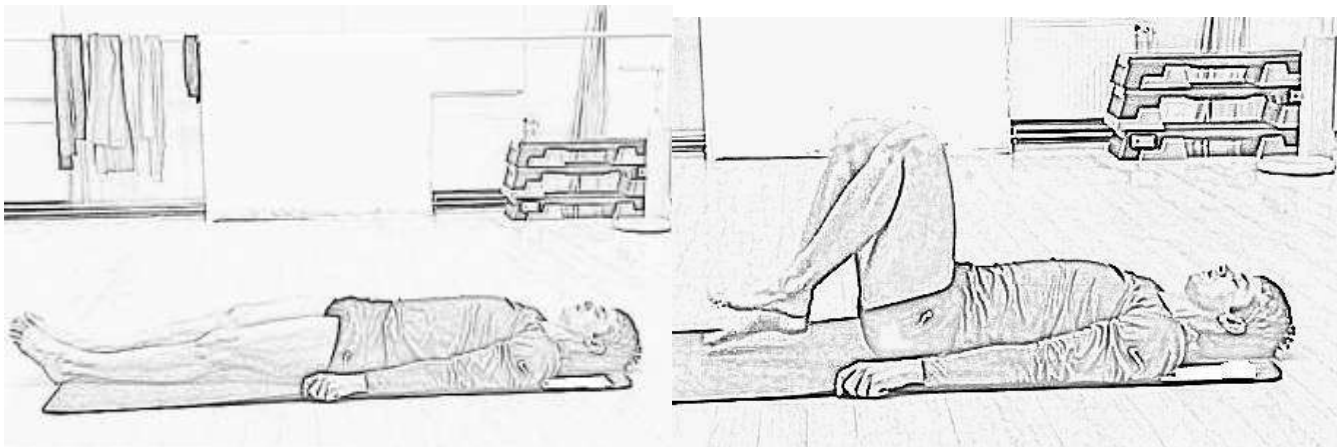
Important - Keep your lower back in neutral position

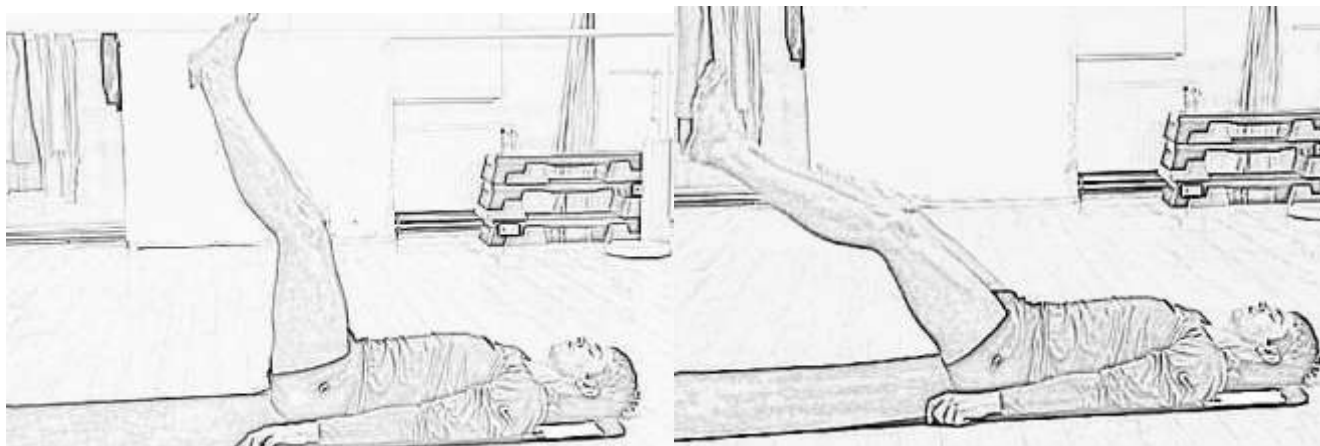
 - Hold your head on the ground

 - Do not work with your neck muscles

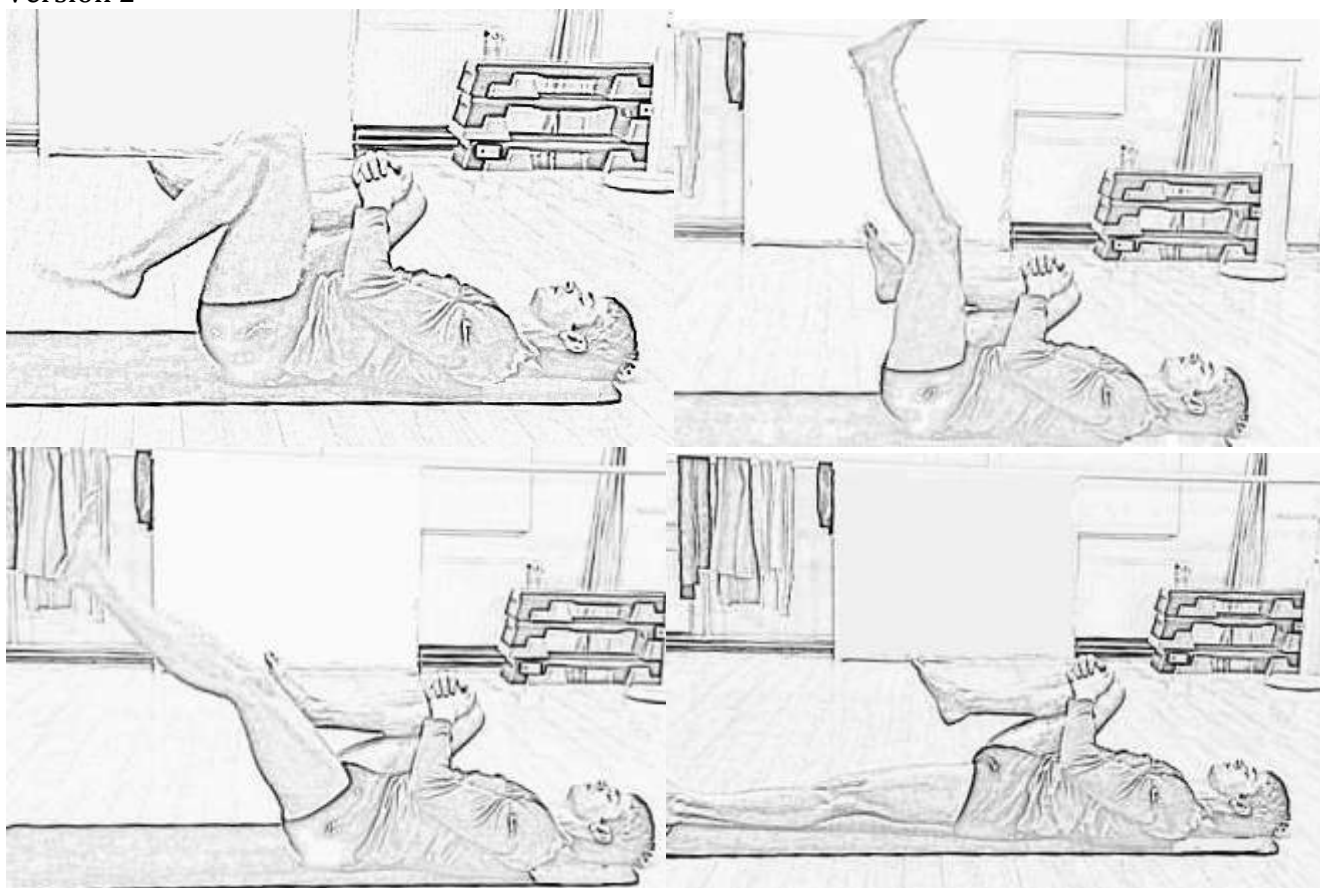
Suggestions

Version 1





Version 2



Exercise 8

Goal Strengthening of body stabilization muscles

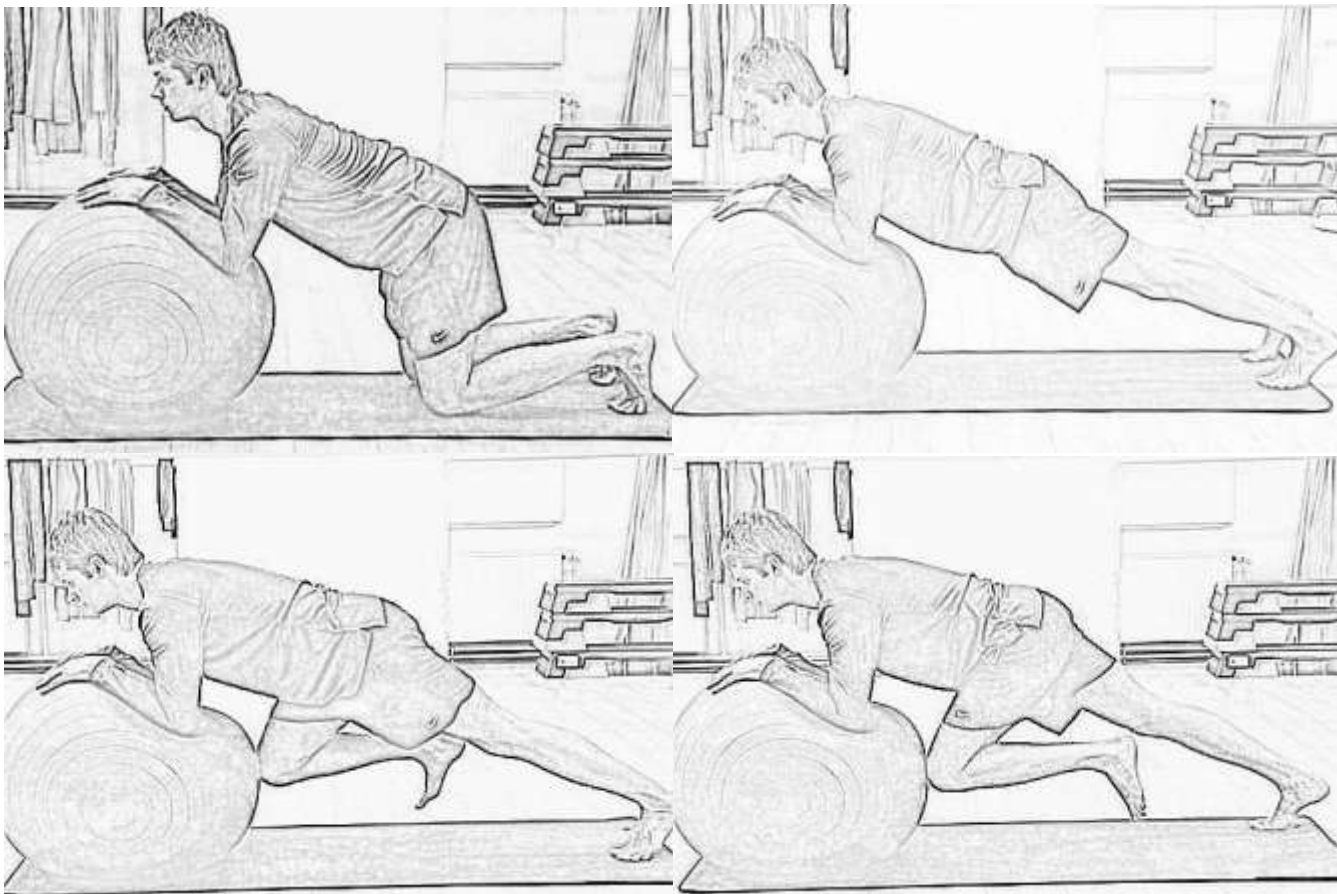
Repetitions 3x 10-20

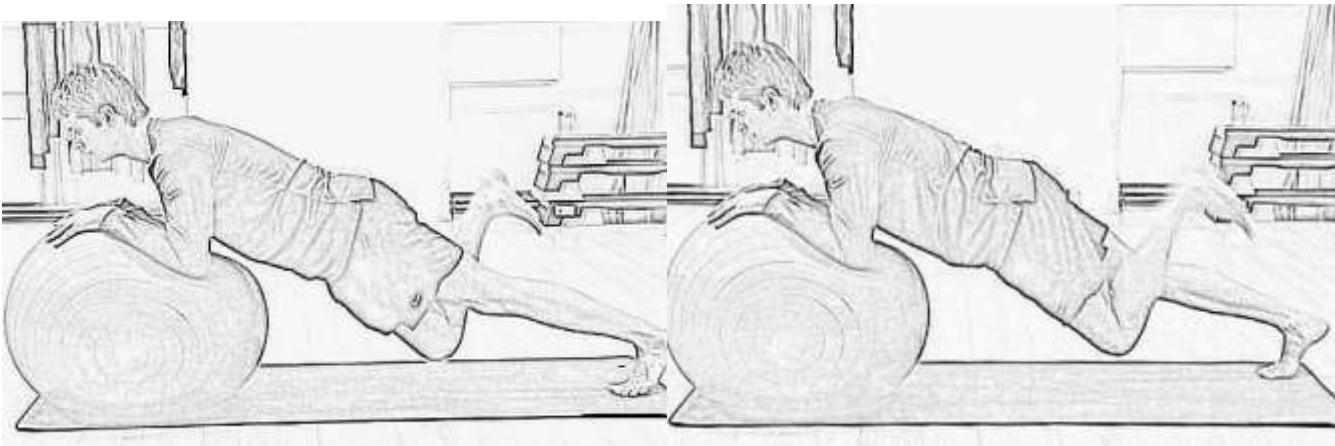
Important - Keep your body straight and balanced

- Avoid hip rotation

- Modify your movements

Suggestions





Exercise 9

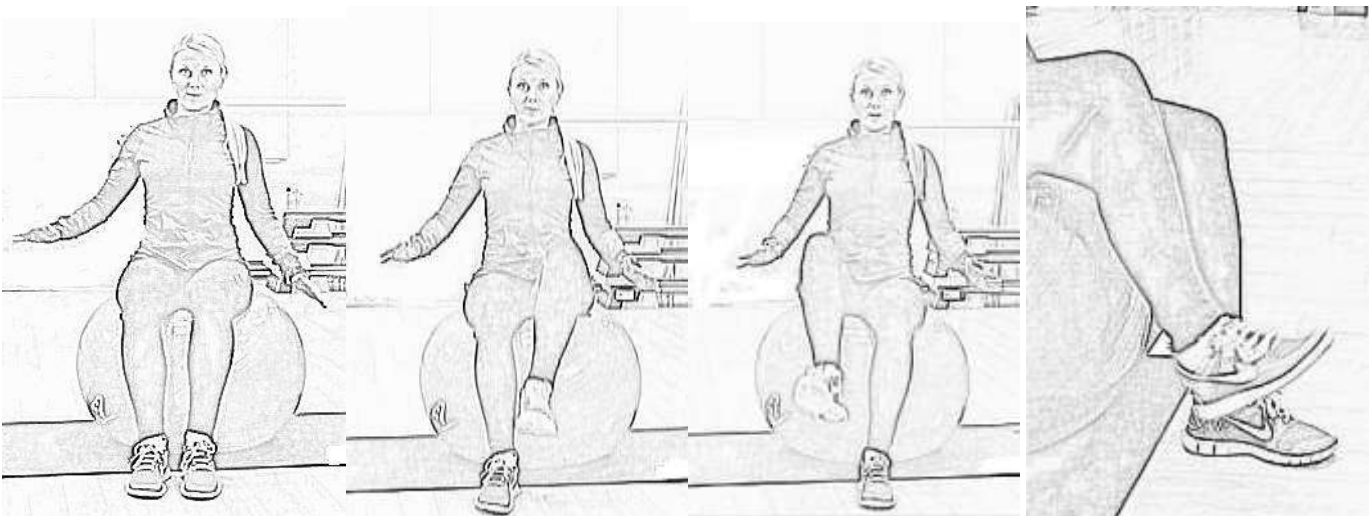
Goal Strengthening of body and pelvic muscles

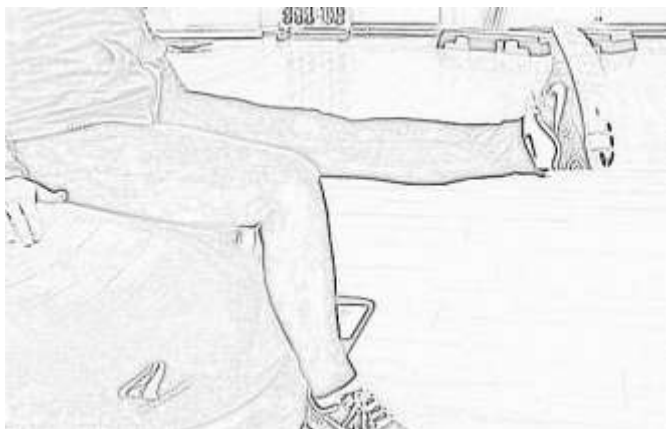
Repetitions 3x 10-20 rep

Important - Keep your body balanced

- Keep your body straight and look forward

Suggestions Modify movements





Exercise 10

Goal Stretching of lower back, chest and gluteal muscles

Repetitions 3 x 20 sec.

Important - Hold your body relaxed

Suggestions

