SO-NUTS
JPI HDHL | prevention of sarcopenic obesity

Exercise program

Would you like to improve your **muscle strength** and **balance**, but not sure what kind of exercises are best to do?

On this page you will find some examples of exercises you can do at home. There are exercises at **3 different levels** increasing from light to heavy. Many exercises can be adjusted to be lighter or heavier by modifying the weights you use.

Start at **level 1** if:

You have never or not for a long time performed muscle strength or balance exercises

Start at **level 2** when:

- You have recently performed strength and/or balance exercises, or regularly participate in e.g. “Nederland in Beweging”.
- An ordinary squat or push-ups against the wall take no effort.
- Lifting objects of >5kg suits you well.

Start at **level 3** when:

- You do strength and balance exercises on a weekly basis.
- You completed most exercises of Level 2 without much effort and you are ready for additional challenges.

If an exercise is too heavy, you can always adjust it yourself by, for example, using lighter weights or no additional weights, or by swapping it with an exercise from an easier level.

How often should you do the exercises?

Try to perform the **strength exercises** 2 to 3 times per week. The easiest way is to perform 10 repetitions of each strength exercise and repeat the entire exercise regimen 2 to 3 times.

In addition, try to do the **balance exercises** twice a week. Try to hold each balance exercise for 10 to 15 seconds and repeat the exercise regime 2 to 3 times.

What you will need:

- (Yoga) mat
- Small (handheld) weights: 2-5 kg for the upper body exercises and 5-10 kg for the lower body exercises. If you don’t have weights, you can also use water bottles, food cans, laundry detergent package or other household items to substitute.
- Elastic exercise band to do the exercises with.

Please note!

These exercises are examples.

- If you cannot do certain exercises for medical or other personal reasons, skip the exercise or replace the exercise with another one that you do feel comfortable doing. When in doubt, always consult your doctor or physical therapist.

Do you have pain anywhere when performing an exercise?

- This is a signal from your body that this exercise may not be suitable for you. It is not wise to continue with this exercise in that case.

Do you have little experience with muscle strength exercises and/or are you just starting with strength training?

- Then it is advised to train under supervision of a physical or exercise therapist in the beginning.

Are some exercise(s) too heavy for you?

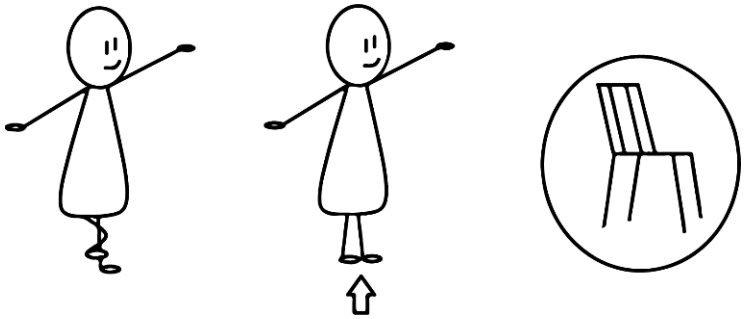
- You can always modify it yourself by doing it without additional weights, for example, or by swapping it with an exercise from an easier level.

Level 1

Balance

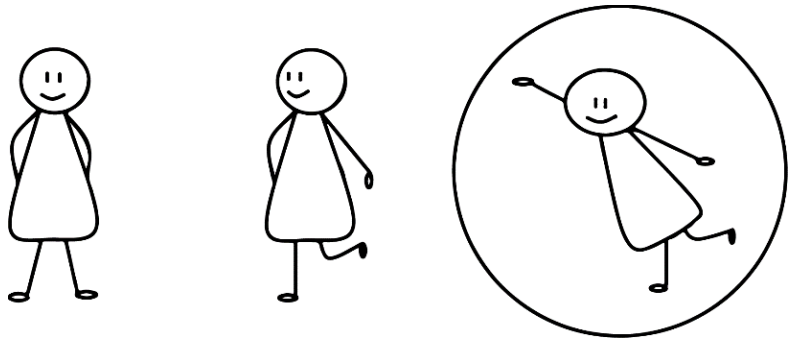
1. **Foot by foot**

- Put one foot in front of the other foot. The big toe of the back foot touches the heel of the front foot.
- Without having support, try to maintain balance. If keeping balance is too difficult, you can hold a chair lightly for support.



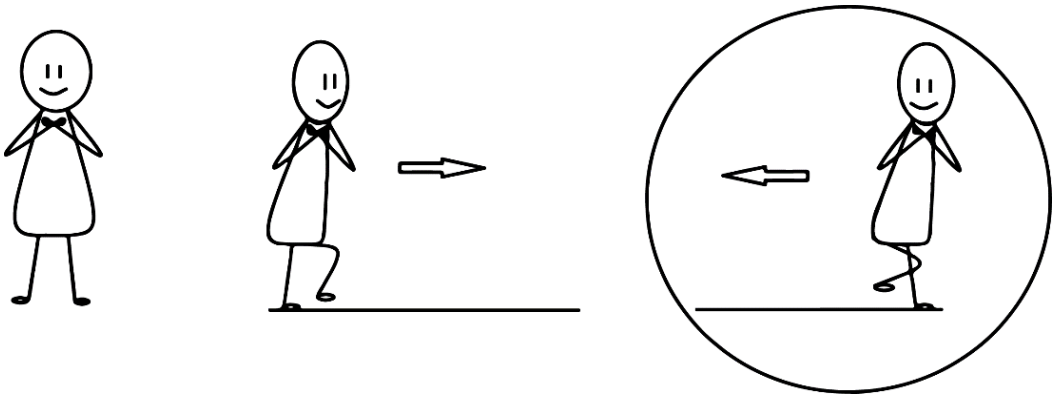
2. **Standing on 1 leg**

- Stand upright. Bring 1 foot off the ground toward the back.
- Does this go easy? Try the next step:
  Bend the upper body slightly forward. Extend your arms to the side, like an airplane, and keep your balance.



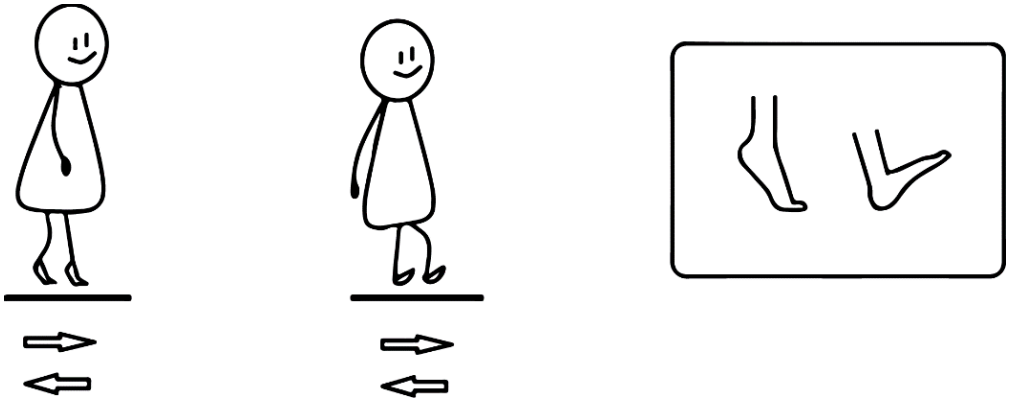
3. **Walking in a single line**

- Cross your arms in front of the chest.
- Line up your feet one at the time. Walk forward as slowly as possible, keeping your balance.
- Does this go easy? Try walking **backwards** in the same way.



4. **Toe-to-heel balance**

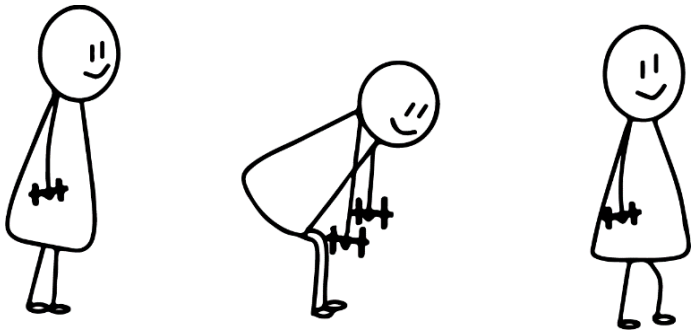
- Keep the arms along the body.
- Stand on your toes. Take a step forward while remaining on your toes and step back.
- Now stand on the heels. Take another step while staying on your heels and step back.



Strength exercises

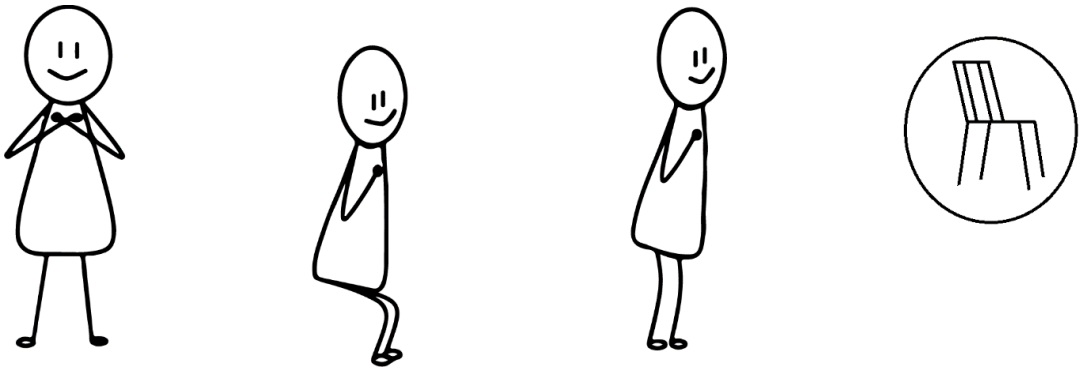
5. **Lifting from the ground**

- Grab the weights and hold them in your hand.
- Bring the hips back and keep a straight and slightly hollow back.
- Bend forward until the hands are halfway up the shins. Then rise up.



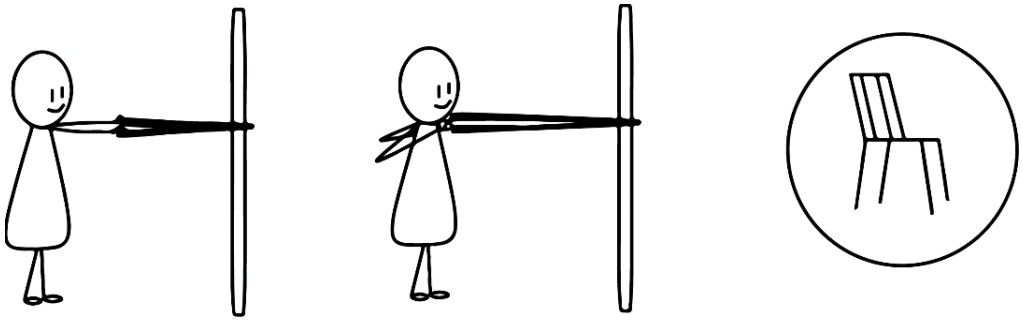
6. **Standing up from a chair**

- Stand up straight with hands crossed on your chest and feet shoulder-width apart.
- Bend through the legs until the hips and knees are the same height. Then stand up again. If necessary, you could use a chair to sit on when you find the exercise too difficult.



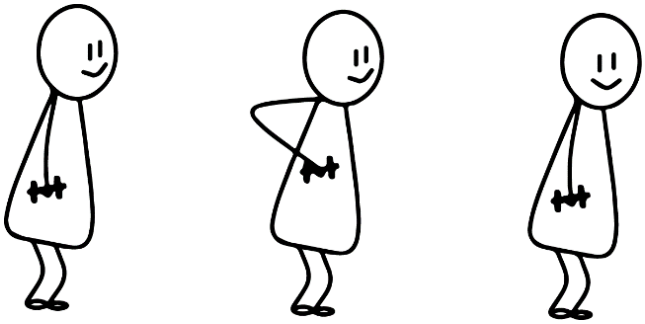
7. Rowing 1

- Tie the elastic band around a pole or doorknob.
- Sit on the edge of the chair or stand facing the elastic band.
- Start with arms extended in front of the face with the elastic band in both hands.
- Bring the elbows out and pull the elastic toward the face. Then straighten your arms again.



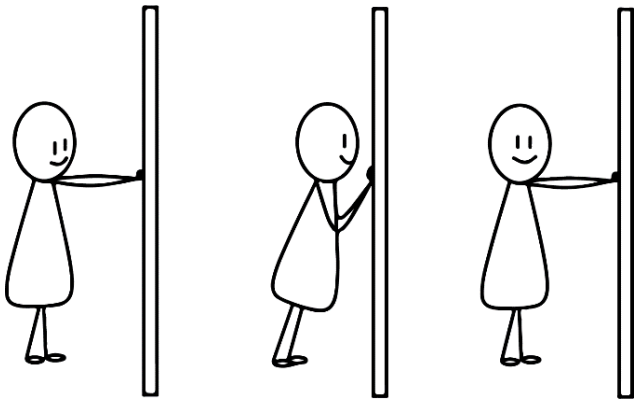
8. Rowing 2

- Place feet hip-width apart and bend knees slightly. Bend the upper body forward, keeping the back straight.
- Take a weight in the right hand.
- From the right arm, bring the elbow tip back and then slowly lower it again.
- Change arms after the set.



9. Push-ups

- Stand two steps away from the wall while facing the wall. Make sure the hands can touch the wall.
- Place the hands shoulder-width apart against the wall. Bend the arms until the chest just barely touches the wall, then extend the arms again.
  Tip: the exercise gets more difficult the steeper you stand.

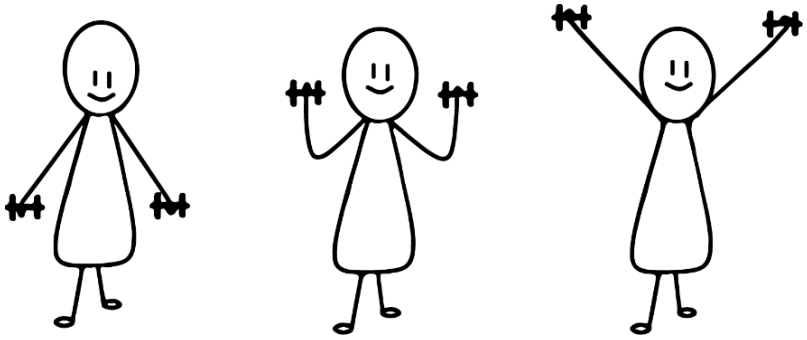


10. Step forward

- Put the hands on the hips and place the feet shoulder-width apart.
- Put the foot forward and bring the knee as low as possible. Make sure the knee does not go past the toes.
- Then step back to the starting position. Repeat with the other leg.

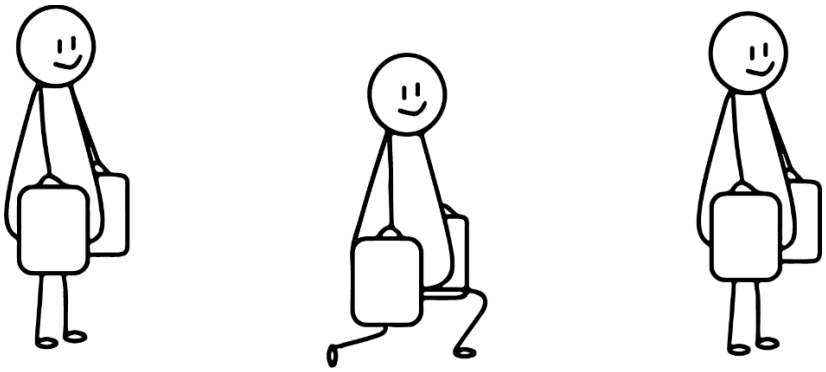
11. Shoulder push

- Grab the weights and hold them in your hand.
- Stand with one foot just in front of the other foot on the ground.
- Bring the weights in the hands to shoulder height and push out above the head.



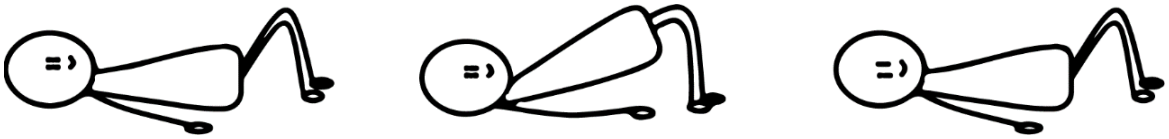
12. Grocery shopping

- Take two shopping bags (or weights) in your hands. You can make the bags heavier by putting some weights in the bags.
- Hold the shopping bags on both sides along the body. Put one foot in front of the other and sink slightly through the knees.
- Step back to the starting position and do the same with the other leg in front.
- Step back and put the bags back on the ground.



13. Bridge

- Lie on your back with knees bent.
- Push the lower back slightly into the mat and hold (brace the abdominal muscles).
- Push the hips up. Hold this for about 3 seconds.
- Lower the hips again and repeat.

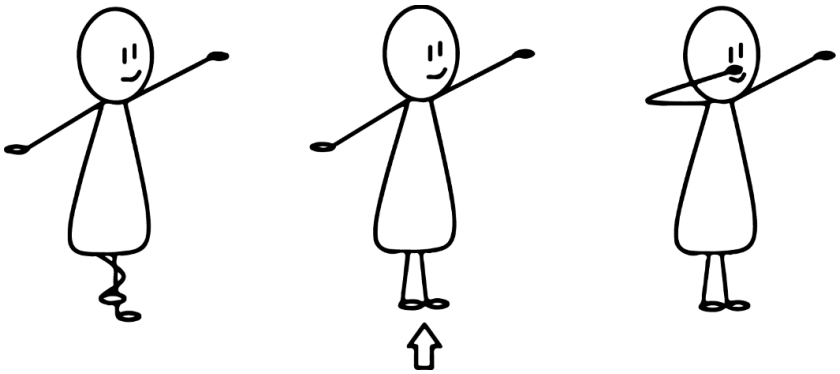


Level 2

Balance

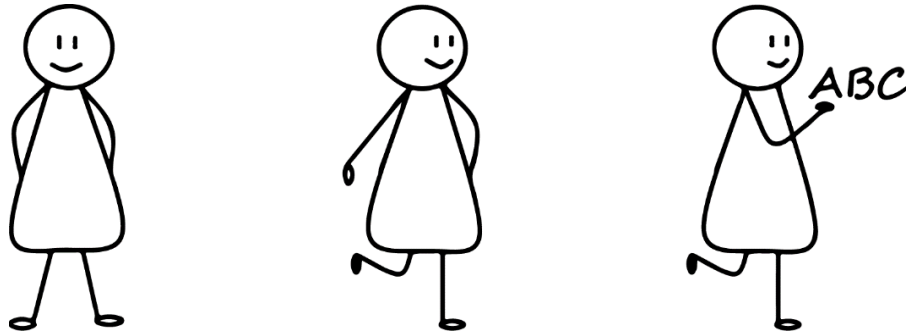
14. Foot by foot

- Put one foot in front of the other foot. The big toe touches the heel of the other foot.
- Perform an **additional task** while standing in this way, for example, alternately touching your nose with the tips of your index finger or writing the alphabet in the air. Try to maintain balance in this way.



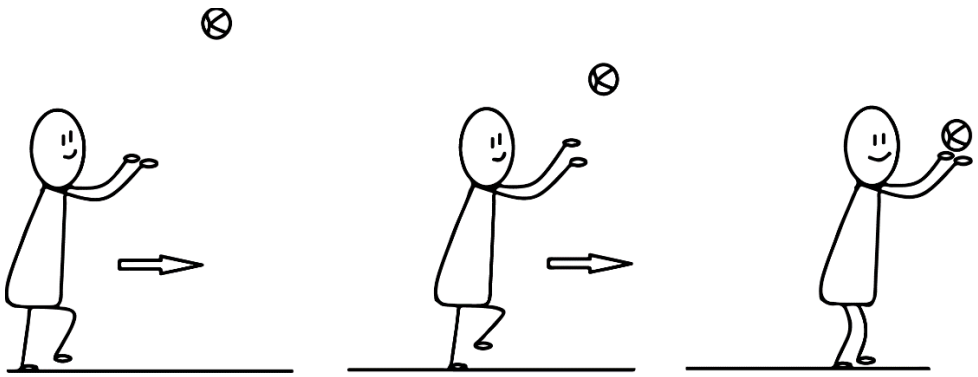
15. Standing on one leg

- Stand up straight. Bring 1 foot off the ground to the back.
- Perform an **additional task** while standing on 1 leg by, for example, alternately touching your nose with the tips of your index finger or writing the alphabet in the air.



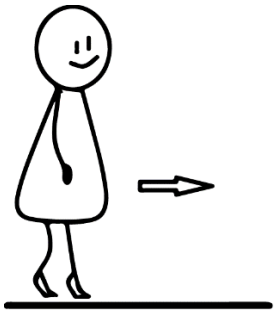
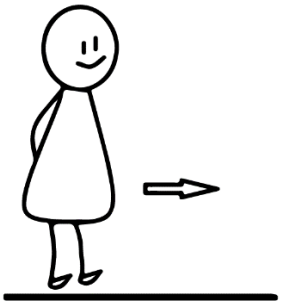
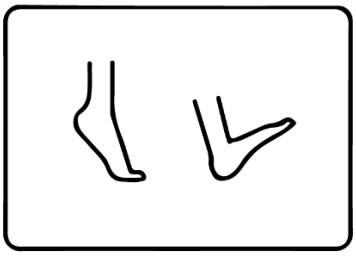
16. Walking on 1 line

- Line up your feet one at a time. While doing this, walk forward while performing an **additional task**, such as counting backward from 100 in steps of 7 or throwing and catching a ball.
- Take no support and maintain balance.



17. Toe - heel balance

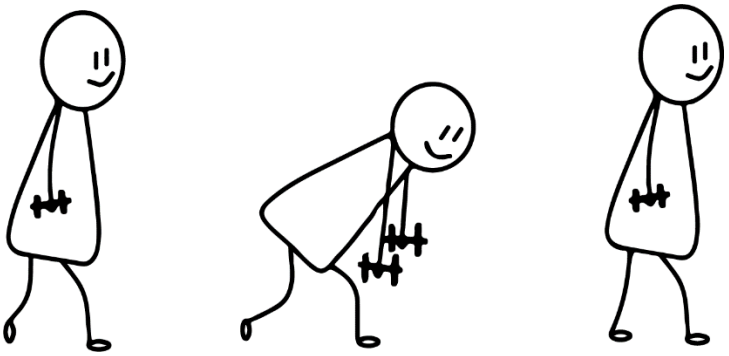
- Stand on your toes. Try walking forward a few steps while maintaining balance.
- Stand on the heels. Try to walk a few steps forward while maintaining balance.

Strength

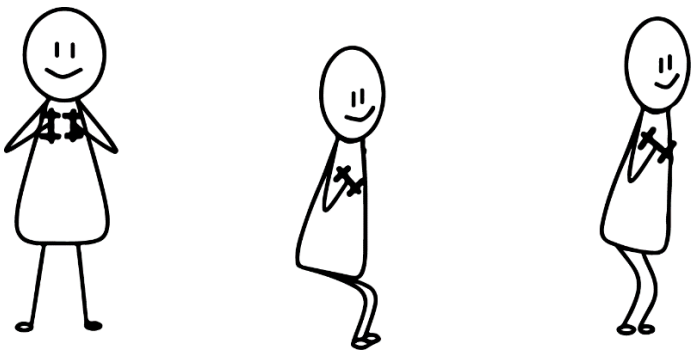
18. Lifting from the ground

- Take the medium-heavy weights and hold them in your hand.
- Put one foot slightly forward and step on the toe of the back foot.
- Bring the hips back and keep a straight, slightly hollow back.
- Bend forward until the hands are halfway up the shins. Then come up.



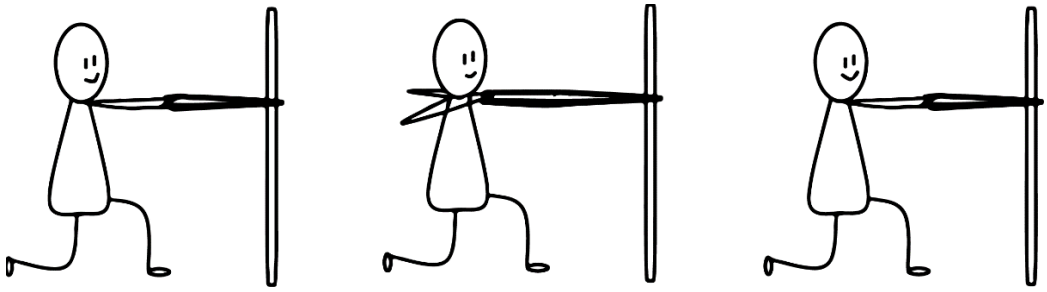
19. Getting up from a chair

- Stand up straight with hands crossed on chest and feet shoulder-width apart. If necessary, hold a weight in both hands.
- Bend through the legs until the hips and knees are the same height. Come up slightly and bend the legs again. Then stand up again.



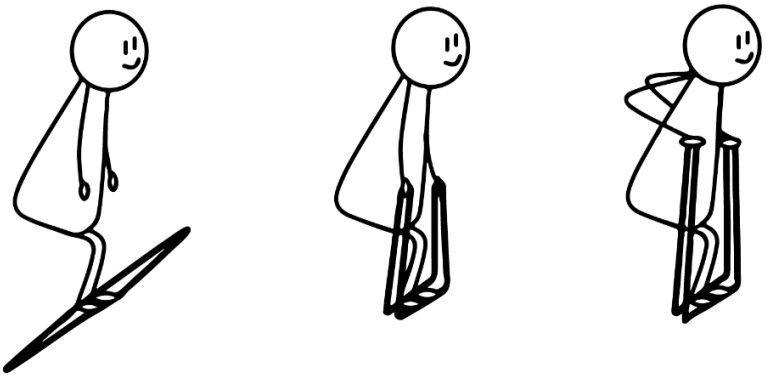
20. Rowing 1

- Tie the rubber band around a pole or doorknob.
- Get down on one knee and face the elastic band.
- Start with arms stretched out in front of the face with the elastic band in both hands.
- Bring the elbows out and pull the elastic toward the face. Then straighten your arms again.
- Would you like to make this exercise heavier? Then hold the elastic closer to the pole or tie the elastic double around the pole.



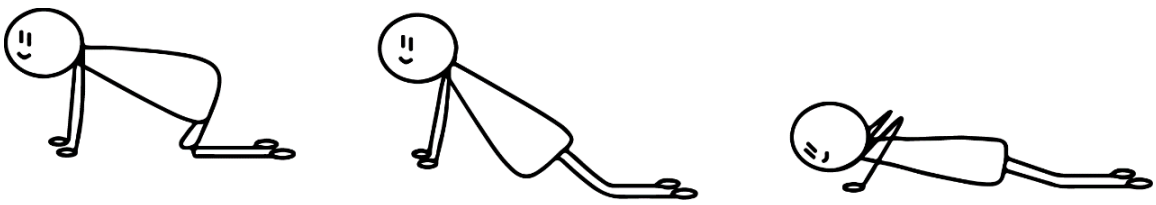
21. Rowing 2

- Stand with both feet on the middle of the elastic band. Place the feet hip-width apart and bend the knees slightly. While doing so, keep the back straight.
- Take one end of the elastic band in each hand.
- Bring both elbow tips back simultaneously and then slowly lower back down.



22. Push-ups

- Place the hands shoulder-width apart on the floor.
- Put the knees on the ground and make sure the body is stretched from knee to shoulder.
- Bend the arms until the chest almost touches the ground, then extend. Tighten the abdominal muscles by slightly contracting the navel.

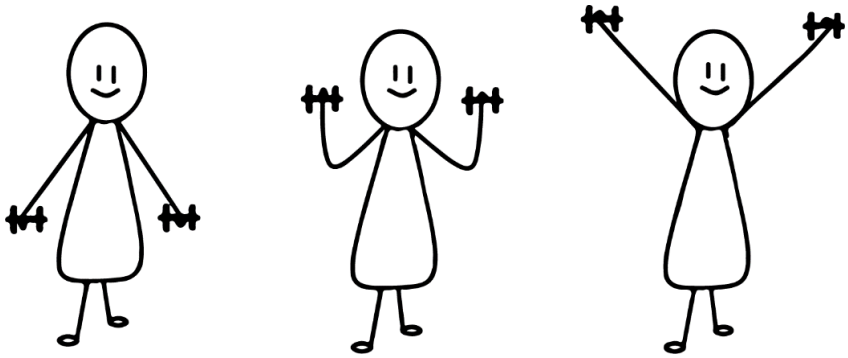


23. Stepping forward

- Grab a medium heavy weight in each hand.
- Let the arms hang along the body and place the feet shoulder-width apart.
- Put one foot forward and bring the knee as low as possible. Make sure the knee does not go past the toes.
- Step back to the starting position and repeat with the other leg.

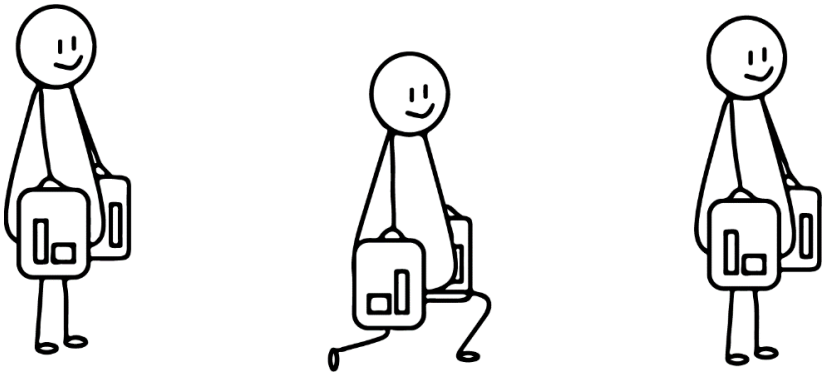
24. Shoulder push

- Grab the weights and hold them in your hand.
- Stand with one foot just in front of the other foot on the ground.
- Bring the weights in the hands to shoulder height and push out above the head.



25. Grocery shopping

- Take the heavy shopping bags in the hands. Put some extra items in the bag to make the bags heavier.
- Hold the shopping bags on both sides along the body. Put one foot in front of the other foot and lower slightly through the knees.
- Step back to the starting position and repeat with the other leg.

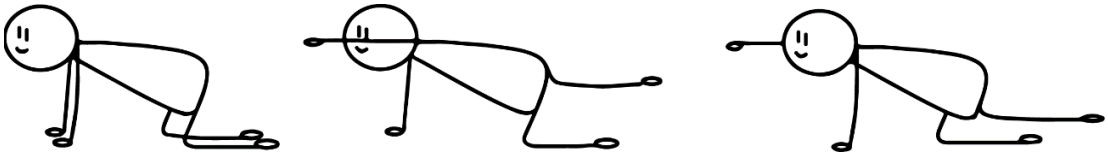


26. Bridge

- Lie on back with the knees bent.
- Push the lower back into the mat to brace the abs and hold.
- Push the hips up.
- Then extend 1 leg forward. Hold this for about 3 seconds. While doing this, try to keep the hips straight.
- Put the foot back on the ground.
- Lower the hips again and repeat with the other leg.

27. Superman

- Get on the mat on your hands and knees.
- Take turns stretching out 1 arm and 1 leg crosswise. Start with the left arm and right leg. Be sure to keep the lower back and hips straight. Return to the starting position.
- Then extend the right arm and left leg. Again, make sure the lower back and hips stay straight. Return to the starting position again.
- Repeat 10 times.

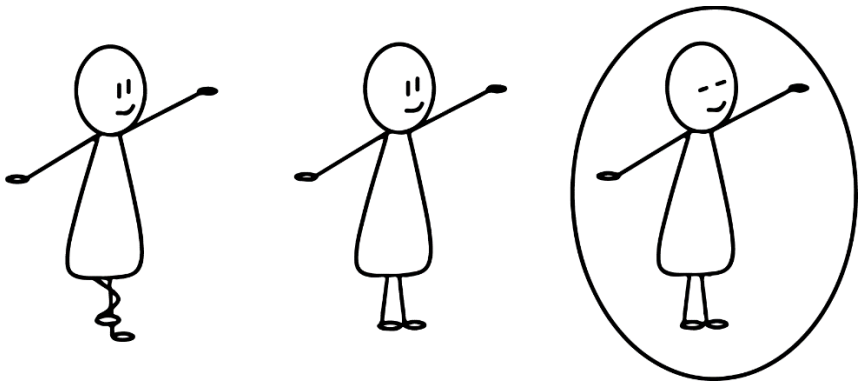


Level 3

Balance

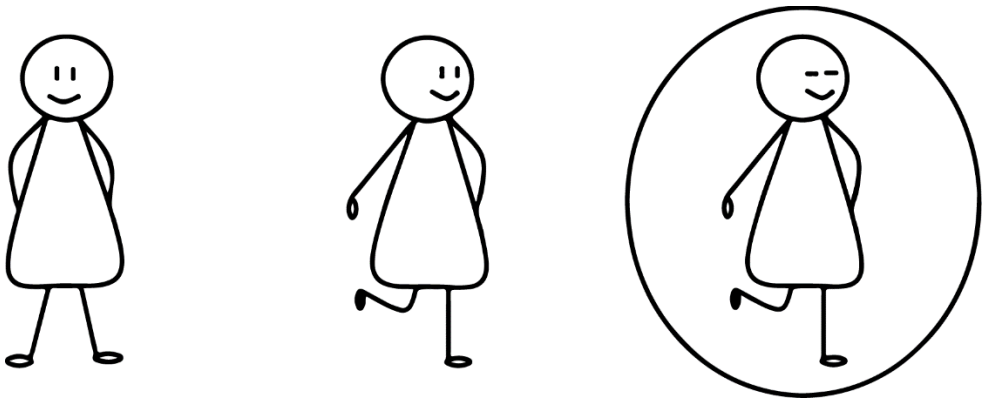
28. Foot by foot

- Put one foot in front of the other foot. The big toe touches the heel of the other foot.
- Make it extra difficult **by closing your eyes** while standing in this position. Try to maintain balance as best you can.



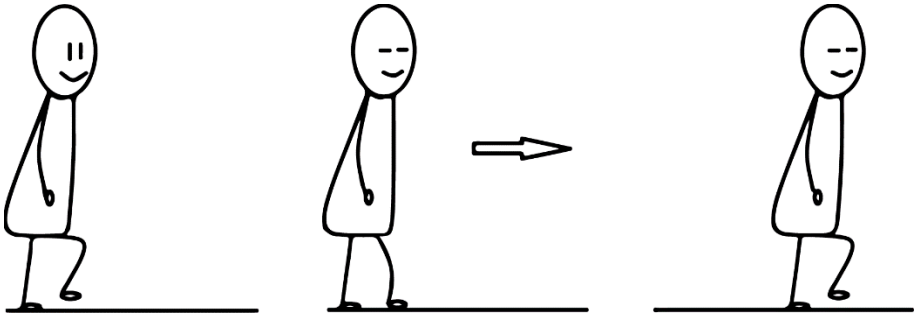
29. Standing on 1 leg

- Stand upright. Bring 1 foot off the ground towards the back.
- Make it extra difficult by closing your eyes while standing in this position. Try to maintain balance as best you can.



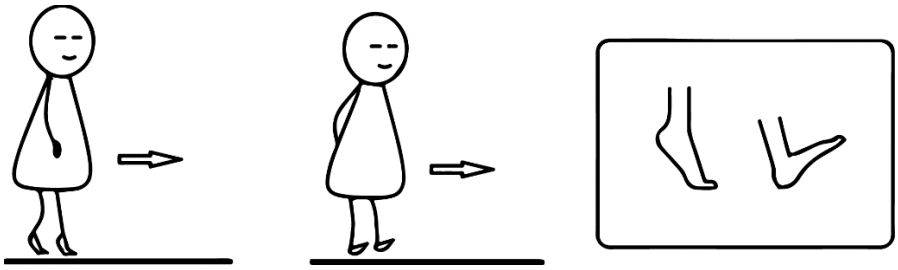
30. Walking on 1 line

- Line up the feet one at a time. While doing this, walk forward **while keeping your eyes closed.**
- Take no support and keep arms along the body and maintain balance.



31. Toe-to-heel balance

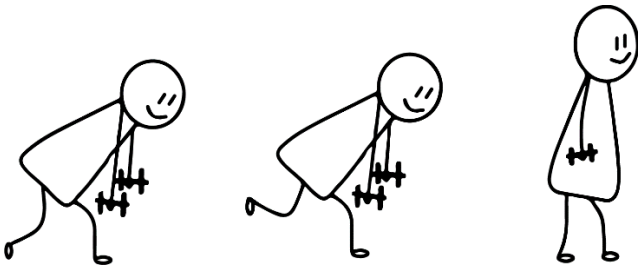
- Stand on the toes. Try walking forward a few steps **<u>while keeping your eyes closed</u>**. Try to maintain balance.
- Stand on the heels. Try walking forward a few steps **<u>while keeping eyes closed</u>**. Try to maintain balance.



Strength

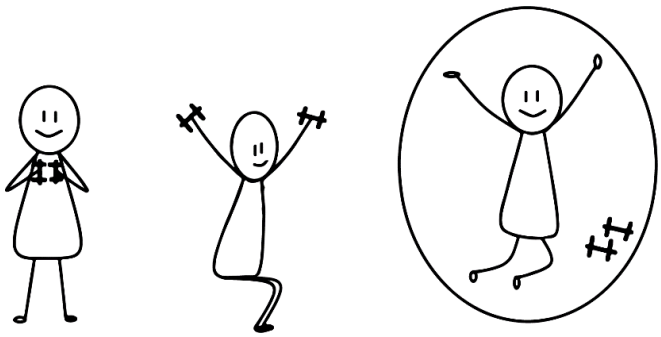
32. Lifting from the ground

- Grab the weights and hold them in your hand.
- Put one foot slightly forwards and stand on the toe of the back foot.
- Bend forward with the weights along the shins so that the back leg comes off the ground. While doing this, try to maintain balance and a straight back and pelvis. Then come up.



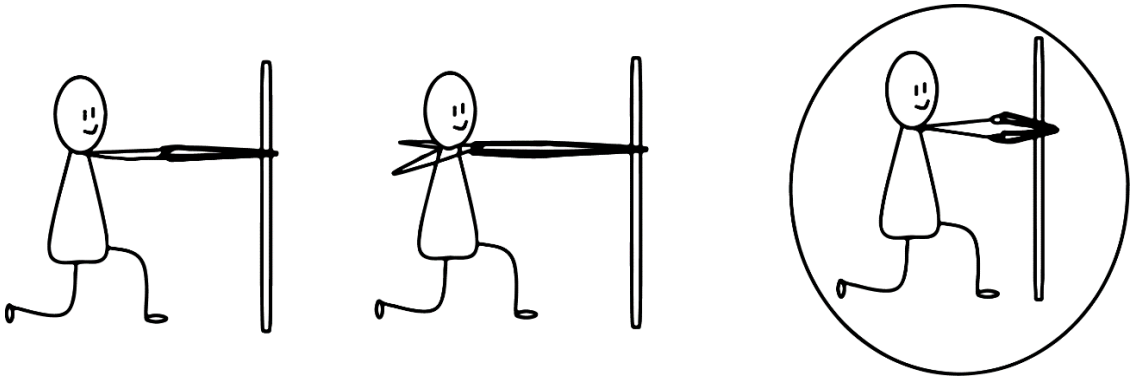
33. Getting up from a chair

- Stand upright with a medium heavy weight in hands at chest height and feet shoulder-width apart.
- Bend through the legs until the hips and knees are the same height.
- While bending down, simultaneously push the weight overhead.
- Come back up and lower the weight back to chest height.
- **<u>Exercise too easy?</u>** Then while coming up, make a small jump so that both feet are off the ground. Land on both feet, making sure the knees bend slightly as you land. (Do this without extra weight in the hands).



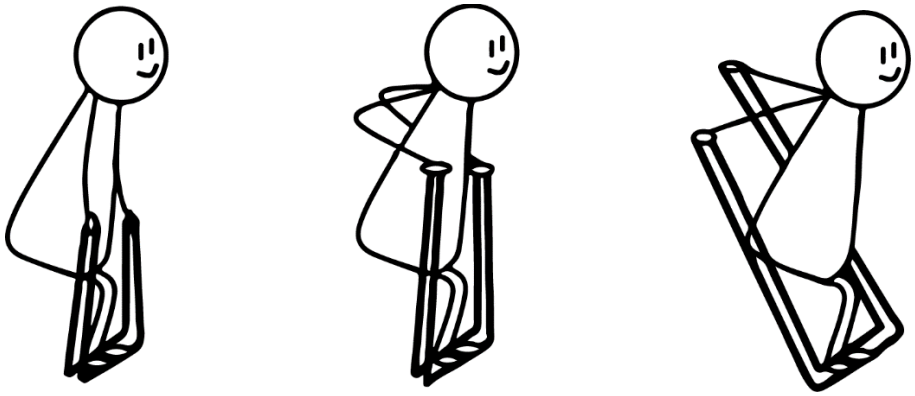
34. Rowing 1

- Tie the elastic band around a pole or doorknob.
- Stand facing the elastic band.
- Step forward with 1 leg out and sink through both knees (lunge). The back knee does not touch the ground.
- Start with arms extended in front of the face with the elastic band in both hands.
- Bring the elbows out and pull the elastic to the face while standing in a lunge position. Then extend the arms again and repeat this movement.
- **Would you like to make the exercise heavier?** Hold the elastic closer to the pole or tie the elastic twice around the pole.



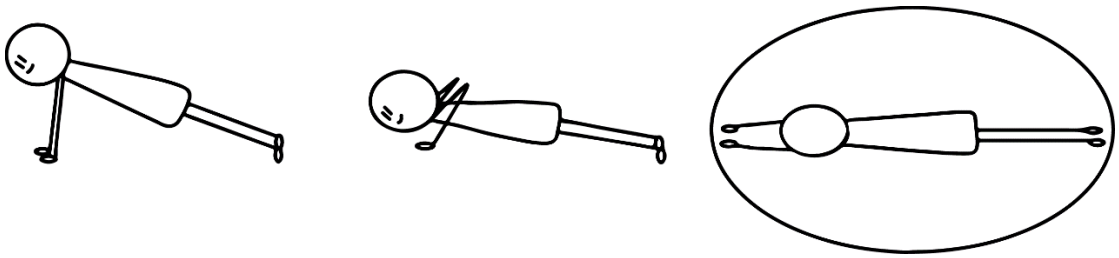
35. Rowing 2

- Stand with both feet on the center of the elastic band. Place the feet hip-width apart and bend the knees slightly. While doing so, keep the back straight.
- Take one end of the elastic band in each hand.
- Bring both elbow tips back at the same time and then slowly lower them again.
- After this, move the arms wide back and then slowly lower them again. This is 1 set.
- Repeat these 2 movements.



36. Push-ups

- Place the hands shoulder-width apart on the floor.
- Put the toes on the ground and make sure the body is stretched from knee to shoulder.
- Bend the arms and make sure body drops as 1 straight line toward the ground.
- Just before the chest touches the ground, push yourself back up to the starting position. Tighten the abdominal muscles by slightly contracting the navel and tightening the glutes.
- **<u>Full push-up too difficult?</u>** Try this intermediate variation:
  Lower yourself to the ground as slowly and in a controlled manner as possible. Stretch your arms out in front of you for a moment and then push yourself back up to the starting position.

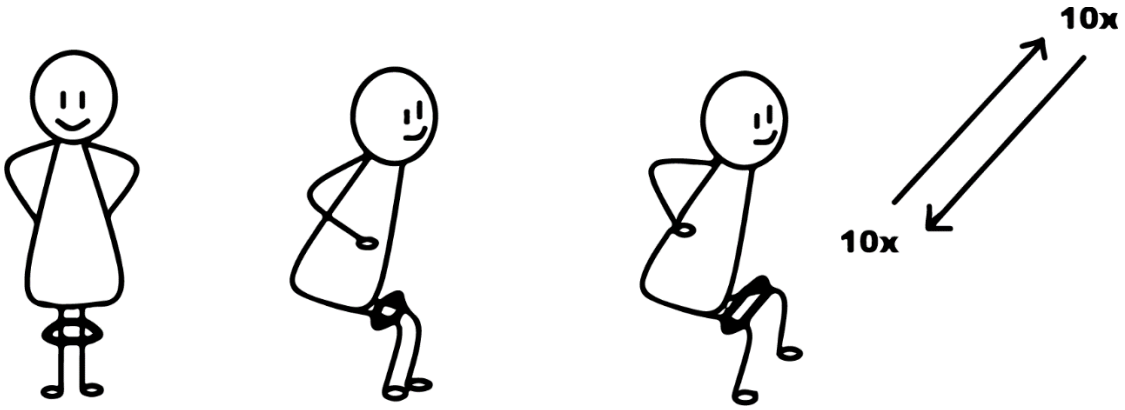


37. Stepping forward

- Grab a weight in each hand.
- Let the arms hang down and place the feet shoulder-width apart.
- Put one foot forwards and bring the knee as low as you can. Make sure the front knee does not go past the toes. While stepping forward, push the arm of the leg that stepped backwards above the head.
- Then step back to the starting position and repeat with the other leg and arm.

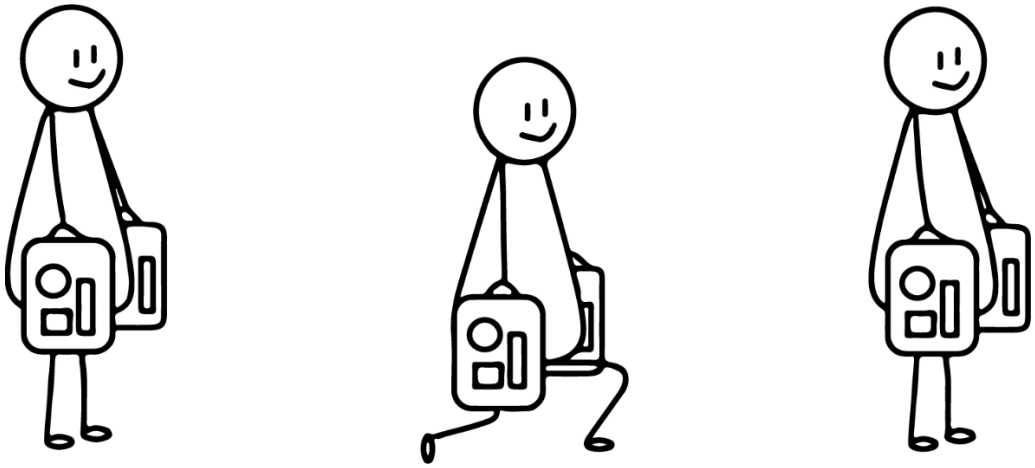
38. Crab walk

- Tie the elastic into a small loop and put it around the thighs just above the knee.
- Sink through the legs so the knees and hips are about level. Keep the back straight.
- In this position, take 10 steps to the side. Try to stay low.
- Then take 10 steps the other way.



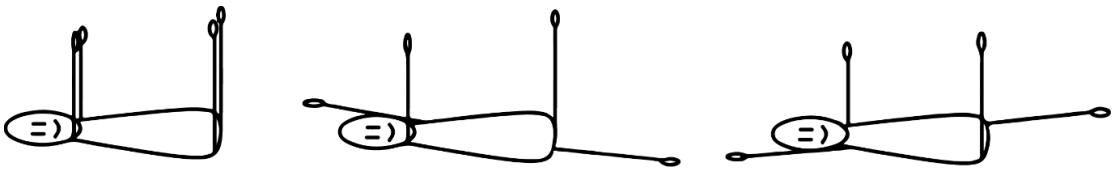
39. Grocery shopping

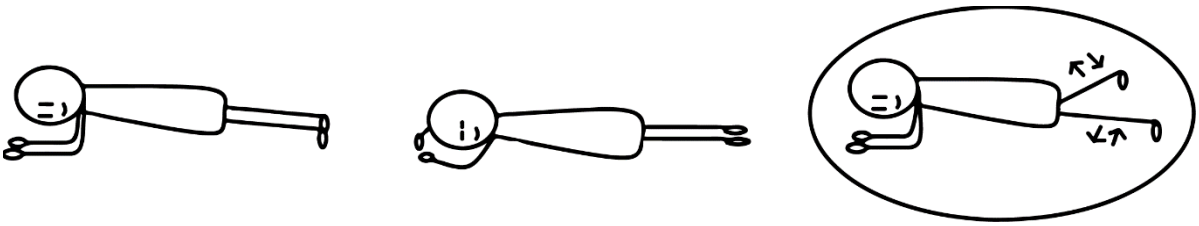
- Take the heavy shopping bags in your hands. Make the bags heavier by putting some extra heavy items in the bag.
- Hold the shopping bags on both sides along the body. Put one foot in front of the other foot and lower slightly through the knees.
- Step back to the starting position and repeat with the other leg.



40. The beetle

- Lie on your back on the mat.
- Extend both arms and legs in the air.
- Then take turns lowering 1 arm and 1 leg crosswise to the ground. Start with the left arm and right leg. Make sure the lower back keeps having contact with the mat. If it does not, try to stop slightly higher above the ground. Return to the starting position.
- Repeat with the right arm and left leg as well. Again, be careful not to hollow the lower back. Return to the starting position.



41. Plank

- Come into prone position with support on the forearms and toes. Make sure the shoulders are stacked above the elbows.
- Make sure the rest of the body is in 1 straight line. It helps to pull the navel in slightly and tighten the glutes.
- Hold this position as long as possible without losing proper posture (do not sag in the hips/lower back or just push the buttocks up).
- Slowly sink back onto the mat and take a rest.
- **<u>Exercise too easy?</u>** Then try stepping out the feet alternately to the side while in plank pose.