

# ABC+ MOVEMENT PROGRAM FOR ACTIVE AGEING AND VITAL LIVING







#### ABC+ movement program for active ageing and vital living

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# What is Healthy Exercise ABC Plus Program?

Healthy Exercise ABC Plus is a movement program that promotes an active lifestyle and aims to improve physical and functional abilities in adults. It is an upgrade of the existing Healthy Exercise ABC program, which was the first systematic multi-month program for improving physical fitness for adults in Slovenia. The Healthy Exercise ABC Plus program includes exercises to increase strength (stability), balance, coordination, flexibility, and aerobic capacity. It adheres to recent global guidelines for planning healthy exercise.

# Content and Structure of the Healthy Exercise ABC Plus Program

Each exercise unit consists of a preparatory, main, and

**concluding part.** The prepratory part includes dynamic warm-up exercises, the main part contains strength and balance exercises in maximum of six difficulty levels, and the concluding part includes static stretching exercises. The program is planned for 12 weeks, with 2-3 exercise units per week. Each difficulty level of the exercise is expected to be performed in 4-6 exercise units.



The program consists of three exercise periods (EP), named **Exercise Periods A**, **B**, and **C**. Each exercise period is divided into the first two exercise units and the second two units. Thus, within **Exercise Period A**, the first part is called **A1** and the second part is called **A2**. Similarly, **Exercise Periods B** (**B1** and **B2**) and **Exercise periods C** (**C1** and **C2**) are represented. EP A includes content of the lowest volume and intensity of loads, which appropriately increase up to the conclusion of EP C.

In the introductory part of the program, exercises on a coordination ladder and dynamic exercises without equipment are presented. The main part includes pelvic floor muscle exercises, strengthening exercises for the whole body using various exercise equipment, and exercises for static and dynamic balance on hard, soft, and elevated surfaces. The concluding part involves static stretching exercises.





# Instructions for Performing Progressive Strength Exercises in the Healthy Exercise ABC Plus Program

**Perform 10-12 repetitions of the exercise**. You should feel the exercise as moderately strenuous. On the Borg scale, for example, moderate effort is rated at level 14. If you feel less effort (e.g., 10), choose a more difficult version of the exercise. If you feel more effort (e.g., 16), choose an easier version of the exercise.

RPE SCALE	Rate of Perceived Exertion
1	<b>VERY LIGHT ACTIVITY</b> Hardly any exertion, but more than sleeping, watching TV, etc.
2-3	<b>LIGHT ACTIVITY</b> Feels like you can maintain for hours, easy to breathe and carry on a conversation.
4-6	<b>MODERATE ACTIVITY</b> Breathing heavily but you can still hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.
7-8	<b>VIGOROUS ACTIVITY</b> Borderline uncomfortable, short of breath, can speak a sentence.
9	<b>VERY HARD ACTIVITY</b> Very difficult to maintain exercise intensity, can barely breathe, and can speak only a few words.
10	MAXIMAL EFFORT Feels almost impossible to keep going, completely out of breath, unable to talk, cannot maintain for more than a very short amount of time.



- Movement should be smooth, with each repetition of the exercise lasting approximately two seconds.
- Breathe evenly and do not hold your breath.
- Maintain an upright and tense torso and keep your head in line with your spine during exercises.
- For exercises performed standing, keep your knees slightly bent.
- Exercises performed with only one limb or to one side should be completed with all repetitions on one limb or side first, and then on the other limb or side.
- Certain exercises can also be performed in an isometric contraction mode (the exercise position is held for for at least 3 seconds). Particular care should be taken with exercisers with associated medical conditions, such as cardiovascular disease, as isometric contractions place a greater strain on the cardiovascular system than dynamic performance of the same exercise.

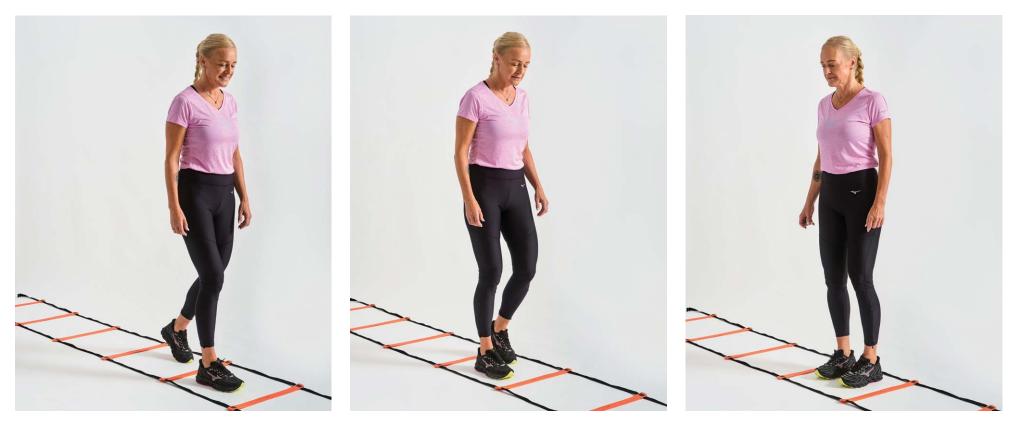


### **PREPARATORY PART - WARM-UP**

#### Aerobic and Coordination Tasks on the Ladder:

12 tasks, repeat 30 seconds each task.





1.

Walking forward, one foot in each square.

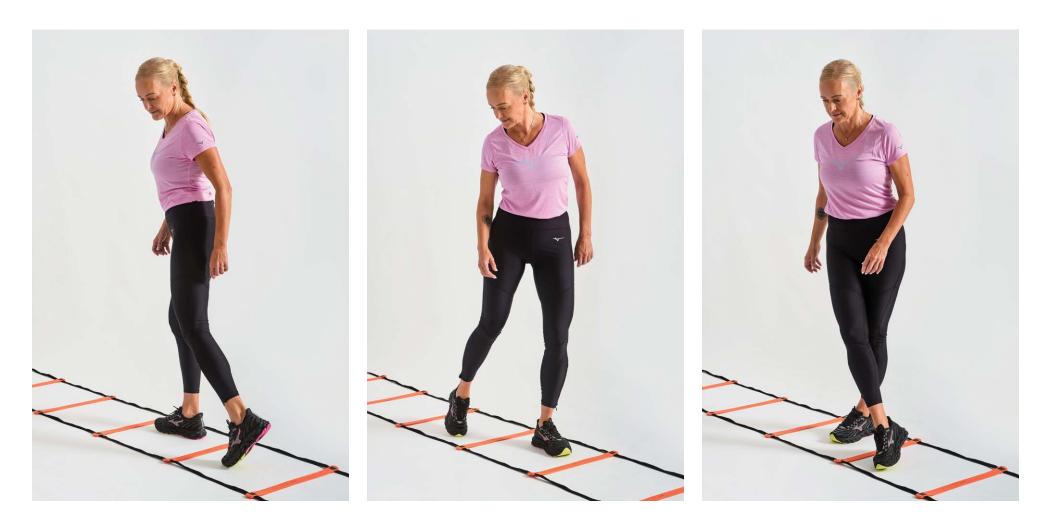
2.

Walking forward, both feet in each square.

3.

Walking sideways, both feet in each square.





#### 4.

Walking backwards, both feet in each square.

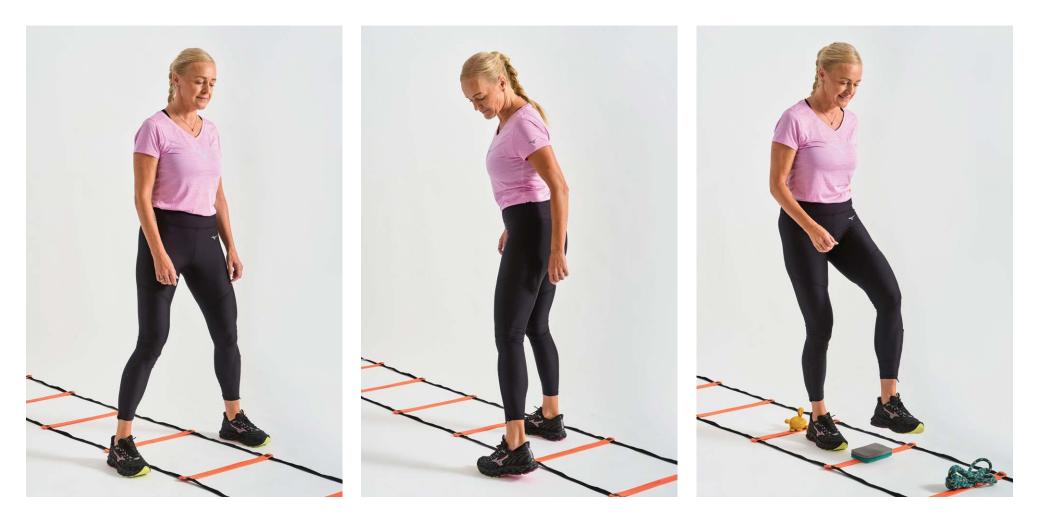
5.

Walking forward three squares, then one backwards.

**6**.

Walking sideways, one foot in each square (leg crossing).





7.

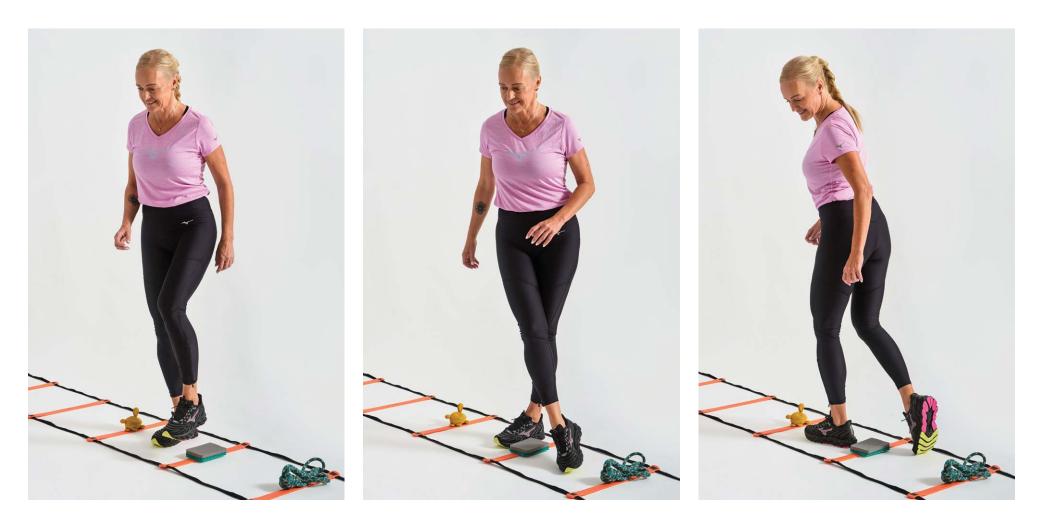
Walking forward, in the square and apart over the next.

8.

Walking backwards, in the square and Walking forward over the obstacles. apart over the next.

9.





#### 10.

Walking sideways over the obstacles, both feet in each square.

#### 11.

Walking sideways over the obstacles (leg crossing).

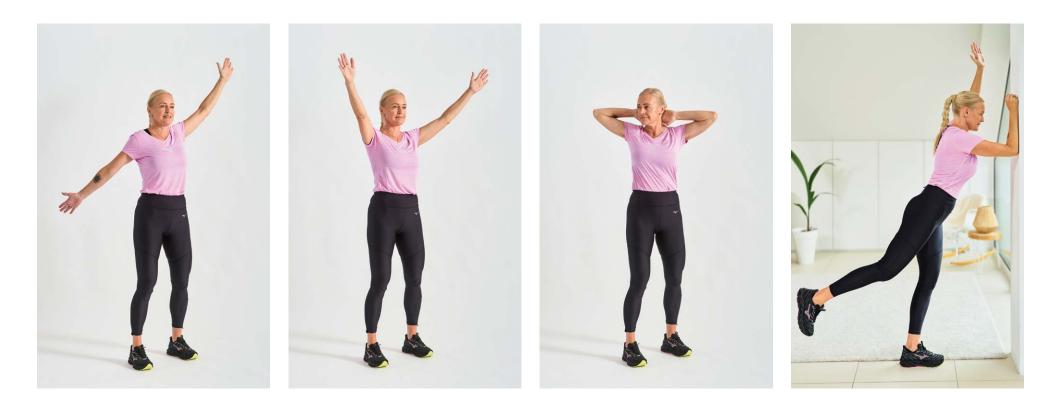
#### 12.

Walking backwards over the obstacles.

#### Free Gymnastic Warm-Up Exercises:

8 exercises, 10 repetitions each.





1.

Swings with arms diagonally back.

Circular arm movements backwards.

2.

3.

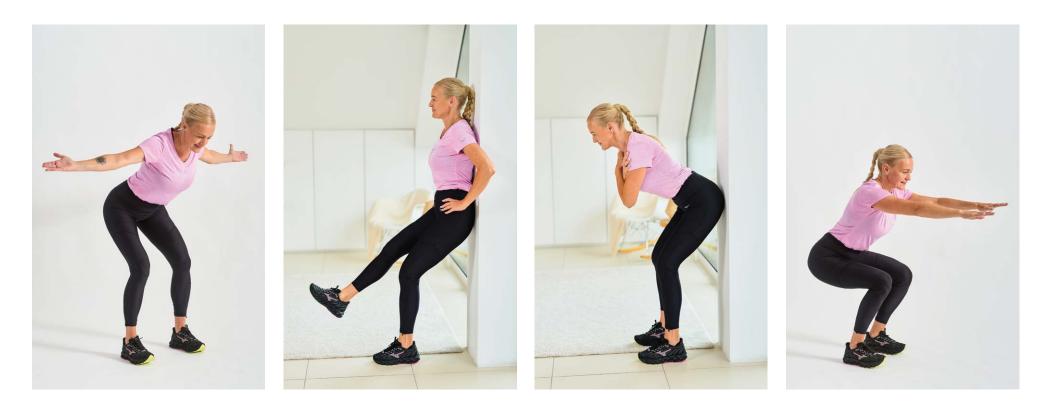
Torso twists with hands on the back of the neck.

#### 4.

Lifts of opposite limbs while supported with the forearm against the wall.

#### **PREPARATORY PART - WARM-UP** / Free Gymnastic Warm-Up Exercises





#### 5.

Turning thumbs backwards in a half-squat with a forward bend.

#### 6.

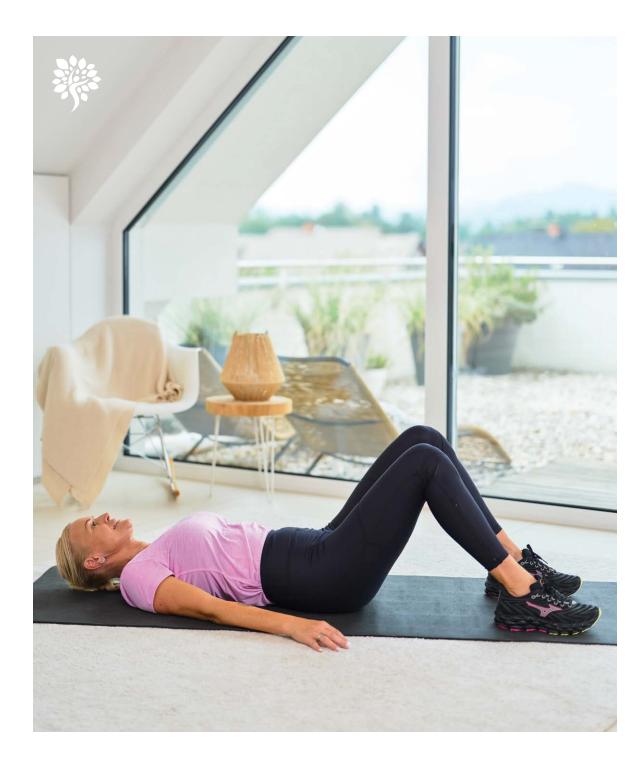
Leg raises while supported with the back against the wall.

#### 7.

Trunk raises while supported with the coccyx against the wall.

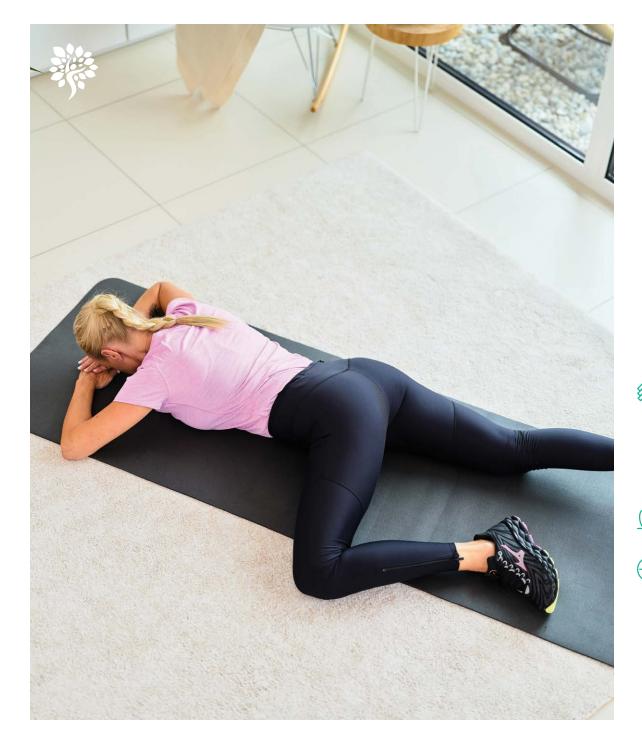
#### 8.

Squats.



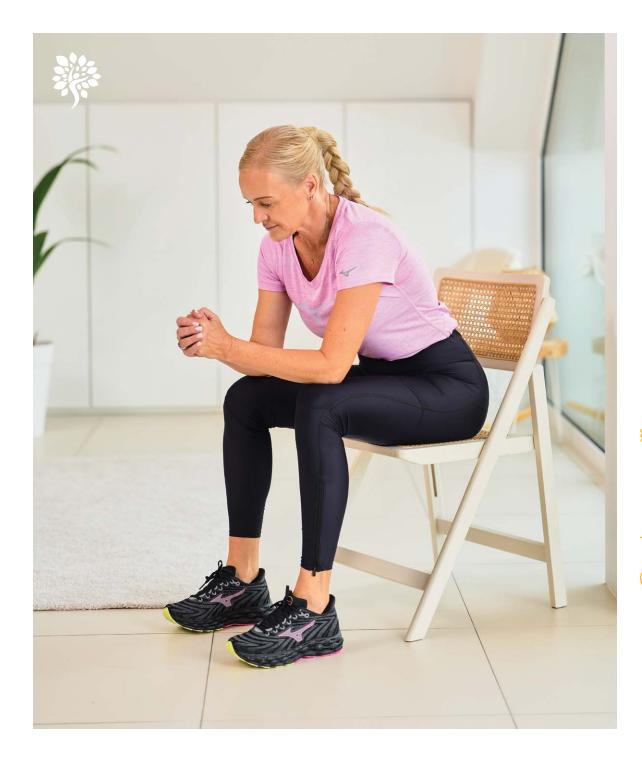
PELVIC FLOOR MUSCLE CONTRACTIONS WHILE LYING ON YOUR BACK

- Lie on your back on a mat, legs bent, arms alongside your body.
- Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



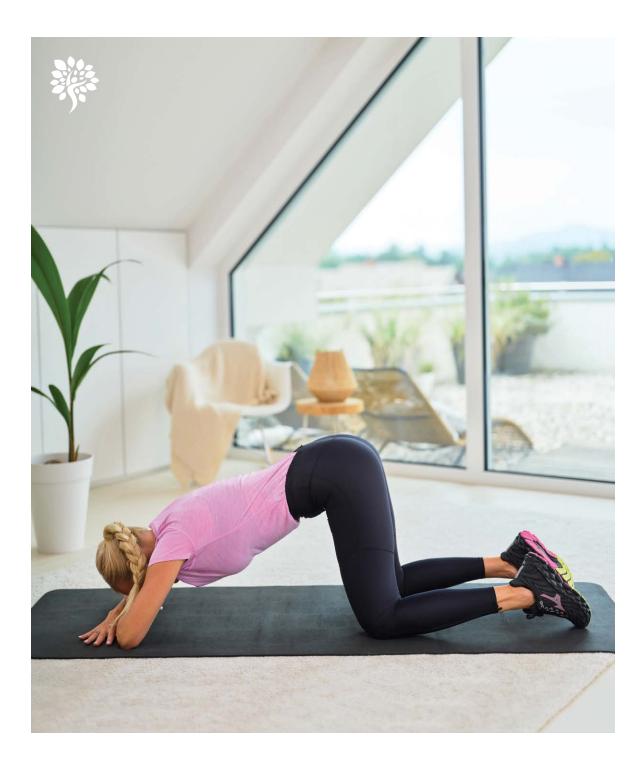
PELVIC FLOOR MUSCLES CONTRACTIONS WHILE LYING ON YOUR STOMACH

- Lie on your stomach, one leg is bent to the side, with your forehead resting on your hands.
- $\underline{\&}$  Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



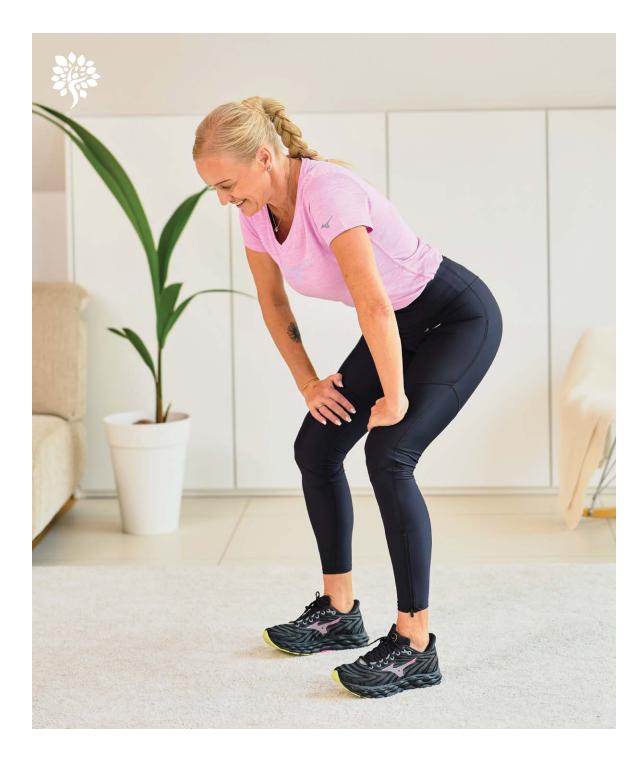
PELVIC FLOOR MUSCLES CONTRACTIONS WHILE SEATED ON A CHAIR

- Sit on a chair bent forward, resting your elbows on your thighs.
- $\underline{\mathscr{C}}$  Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



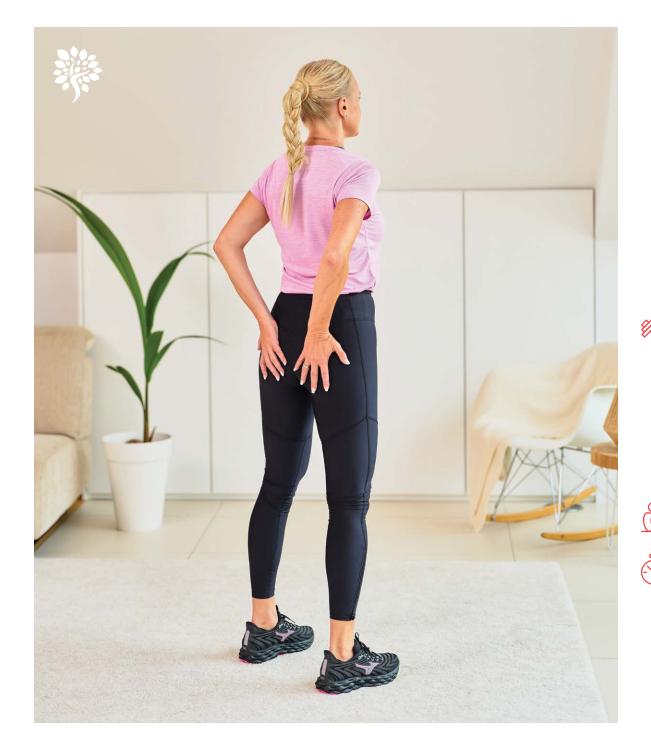
# PELVIC FLOOR MUSCLES CONTRACTIONS WHILE KNEELING

- Kneel on a mat and lean on your forearms, with your forehead resting on your arms.
- $\underline{\&}$  Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



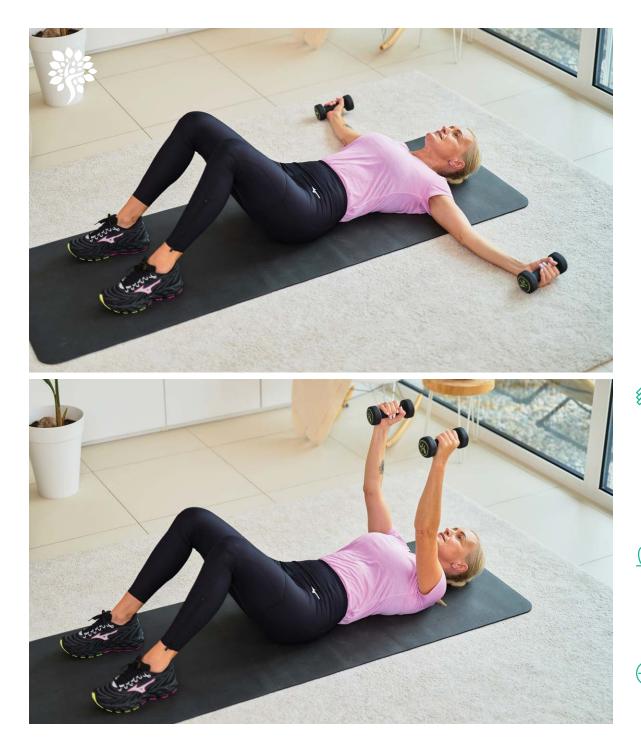
PELVIC FLOOR MUSCLES CONTRACTIONS WHILE BENDING OVER

- Stand astride slightly bent forward, and your legs slightly bent. Rest your hands on your knees with your palms facing inwards.
- Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



# PELVIC FLOOR MUSCLES CONTRACTIONS WHILE STANDING

- Stand with your knees slightly bent. With your hands on your buttocks, make sure you don't squeeze your gluteal muscles during the exercise.
- Contract the pelvic floor muscles.
- Hold the contracted muscles for 6-8 seconds, then do 3 strong squeezes. Repeat five times (there is a 5-second break between repetitions).



LIFTING **DUMBBELLS** 

- Lie on your back on a mat with your knees bent. Hold the dumbbells in your hands with your arms extended.
- R Raise and lower the dumbbells, stopping the motion before your arms touch the ground.
- Do 10-12 repetitions. Repeat three times.



**A2** 

# **PUSHING A RESISTANCE BAND FORWARD WHILE SEATED**

 $(\overline{\mathbf{v}})$ 

Sit on a chair, holding a taut resistance band in your hands.

(K) Push the resistance band forward.

> Do 10-12 repetitions. Repeat three times.



**B1** 

WALL **PUSH-UPS** 



Kean against a wall with your hands shoulder-width apart.



Perform push-ups.

 $(\overline{\cdot})$ Do 10-12 repetitions. Repeat three times.



# PUSH-UPS ON YOUR KNEES

Kneel on a mat with your arms extended. The angle at the hip and knee should be greater than 90°.

Perform push-ups.

Do 10-12 repetitions. Repeat three times.



**C1** 

# BENCH **PUSH-UPS**



炎 Place your hands on a bench, shoulder-width apart.

ß Perform push-ups.

(~) Do 10-12 repetitions. Repeat three times.



LIFTING INTO A PLANK POSITION





- Forearm plank position on a mat with your toes on the ground.
- Alternate lifting into a plank position on extended arms, first with your right arm and then with your left.
- Do 10-12 repetitions. Repeat three times.



SEATED TORSO LIFTS WITH A STICK

- Sit bending forward on a chair, holding a stick behind you, touching your head, your back between the shoulder blades, and your sacrum.
- Raise your torso to an upright position.
- Do 10-12 repetitions. Repeat three times.



**A 2** 

# SEATED TORSO LIFTS WITH A RESISTANCE BAND

- Sit bending forward on a chair, cross your arms holding a resistance band.
- Lift your torso to an upright position.
  - Do 10-12 repetitions. Repeat three times.



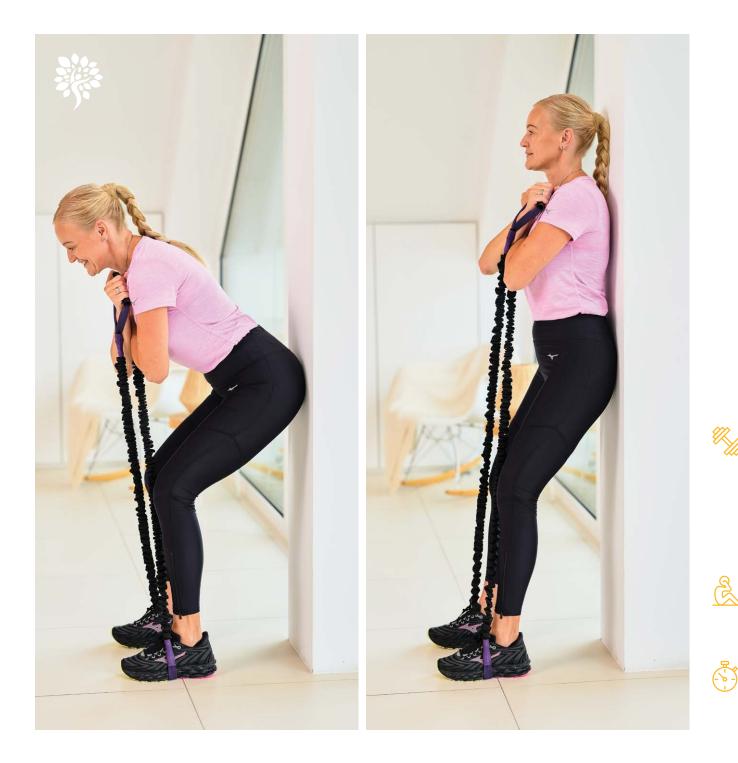
**B1** 

# SEATED TORSO LIFTS WITH A HEAVIER RESISTANCE BAND

Sit bending forward on a chair, cross your arms holding a heavier resistance band.

Lift your torso to an upright position.

Do 10-12 repetitions. Repeat three times.



**B**2

TORSO LIFTS WITH A RESISTANCE BAND WHILE LEANING ON A WALL

Lean against a wall with your sacrum, your knees slightly bent, holding a resistance band in crossed arms.

Lift your torso to an upright position.

Do 10-12 repetitions. Repeat three times.



**C**1

OPPOSITE LIMB LIFTS AGAINST A WALL WITH A RESISTANCE BAND

🖏 L

Lean against a wall with your forearms, with a resistance band looped around them.

Simultaneously lift opposite limbs.

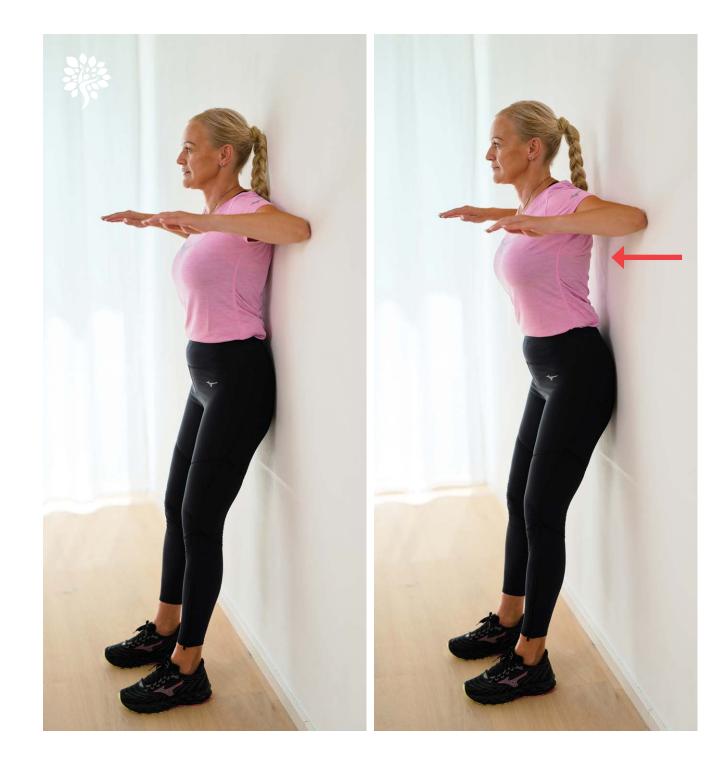
Do 10-12 repetitions. Repeat three times with each pair of limbs.



**C 2** 

# OPPOSITE LIMB LIFTS AGAINST A WALL WITH A HEAVIER RESISTANCE BAND

- Lean against a wall with your forearms, with a heavier resistance band looped around them.
- Simultaneously lift opposite limbs.
- Do 10-12 repetitions. Repeat three times with each pair of limbs.



**A**1

# ELBOW PUSH-OFFS FROM A WALL

- Stand with slightly bent knees against a wall. Your head, shoulder blades, elbows, and sacrum are touching the wall.
- Rush off the wall with your elbows, allowing your head and torso to move away from the wall.
- Do 10-12 repetitions. Repeat three times.



**A2** 

# **SEATED RESISTANCE BAND** ROWS



Seated rows with a taut resistance band.

Rull the band backward. Begin the movement by retracting your shoulder blades, then bend your arms.

Do 10-12 repetitions. Repeat three times.



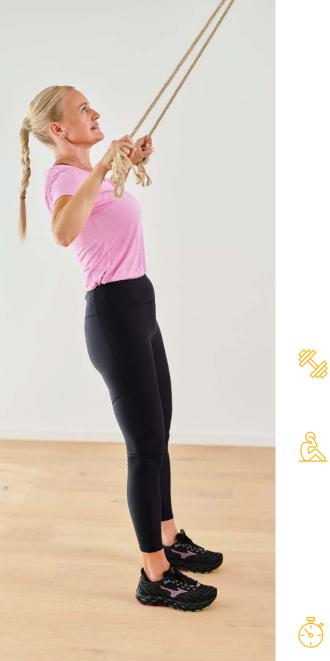
#### **B1**

# STANDING RESISTANCE BAND PULLS

- Stand with your legs apart and your knees slightly bent, holding a taut resistance band in front of you.
- Pull the band backward. Begin the movement by retracting your shoulder blades, then bend your arms.

Do 10-12 repetitions.
 Repeat three times.





### **ROPE PULLS**

- Holding a taut rope in front of you, lean back slightly.
  - Pull up to a more upright position. Begin the movement by retracting your shoulder blades, then bend your arms.

Do 10-12 repetitions. Repeat three times.



**C**1

# BENT-OVER ROWING WITH THE DUMBBELLS

- - In a bent-over half-squat position, hold the dumbbells.
  - Lift the dumbbells. Begin the movement by retracting your shoulder blades, then bend your arms.
  - Do 10-12 repetitions. Repeat three times.



**C**2

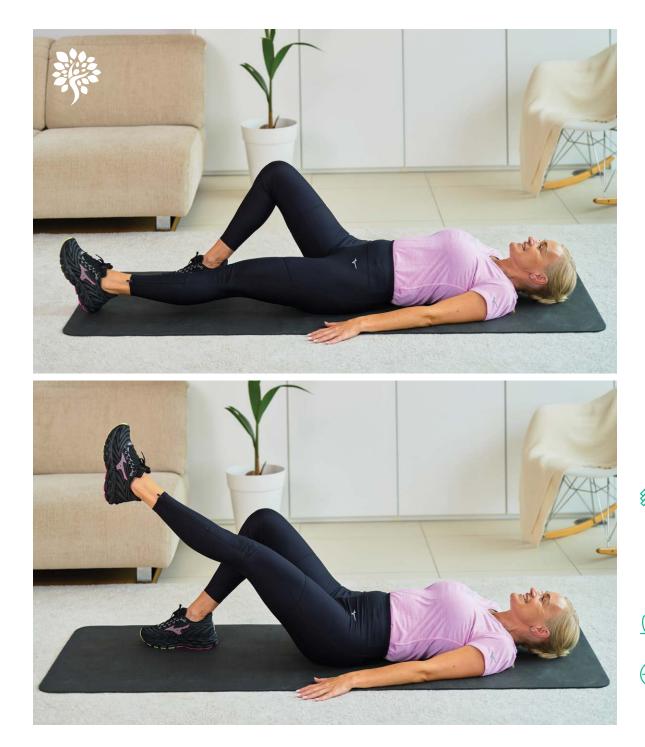
**SINGLE-ARM DUMBBELL ROW IN A BENT-OVER LUNGE POSITION** 



K In a bent-over lunge position, hold a dumbbell.

R Lift the dumbbell. Begin the movement by retracting your shoulder blade, then bend your arm.

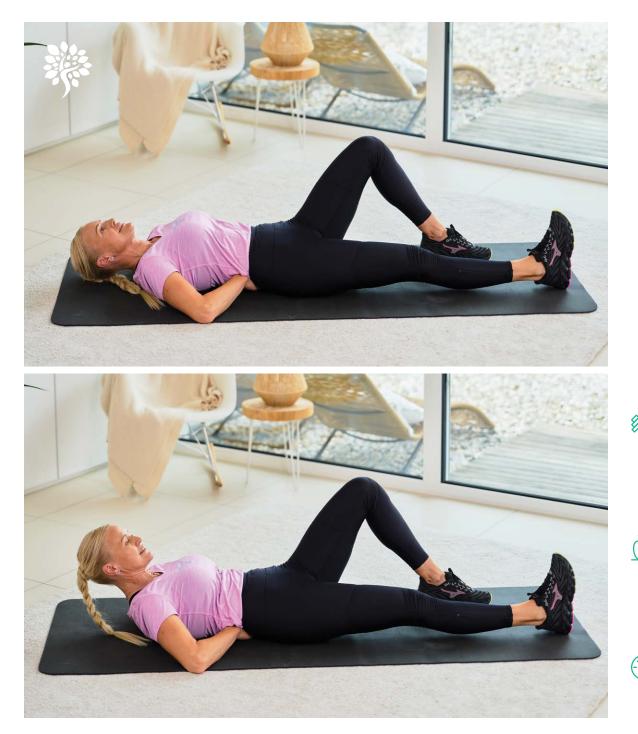
 $(\overline{\mathbf{b}})$ Do 10-12 repetitions. Repeat three times with each arm.



# **LEG RAISES WHILE** LYING ON YOUR BACK

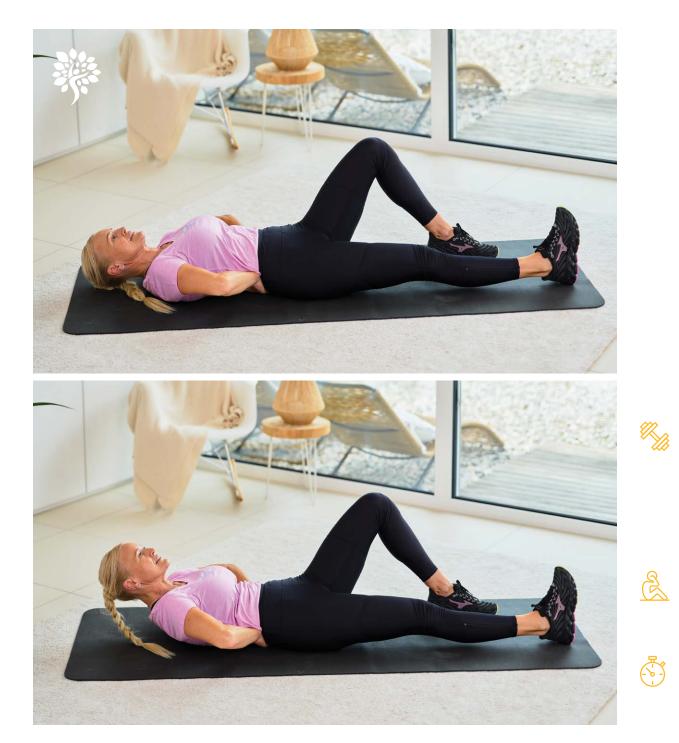
- Lie on your back on a mat with one leg bent, and your arms by your sides.
- ß Lift the extended leg.
- Do 10-12 repetitions.

Repeat three times with each leg.



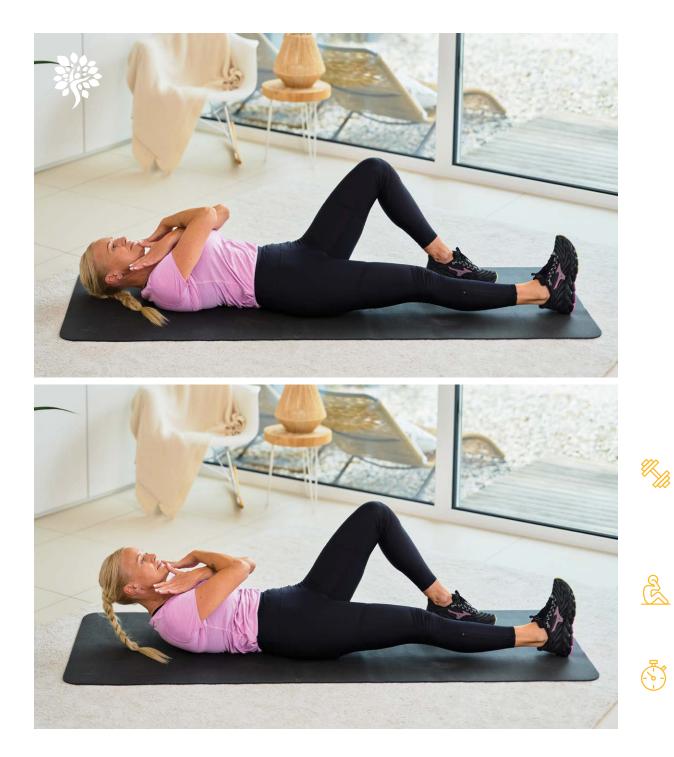
## CRUNCHES

- Lie on your back on a mat with one leg bent, and your palms under the lumbar region of your trunk.
- Raise the upper part of your trunk and head, supporting yourself with your elbows on the floor.
- Do 10-12 repetitions. Repeat three times.



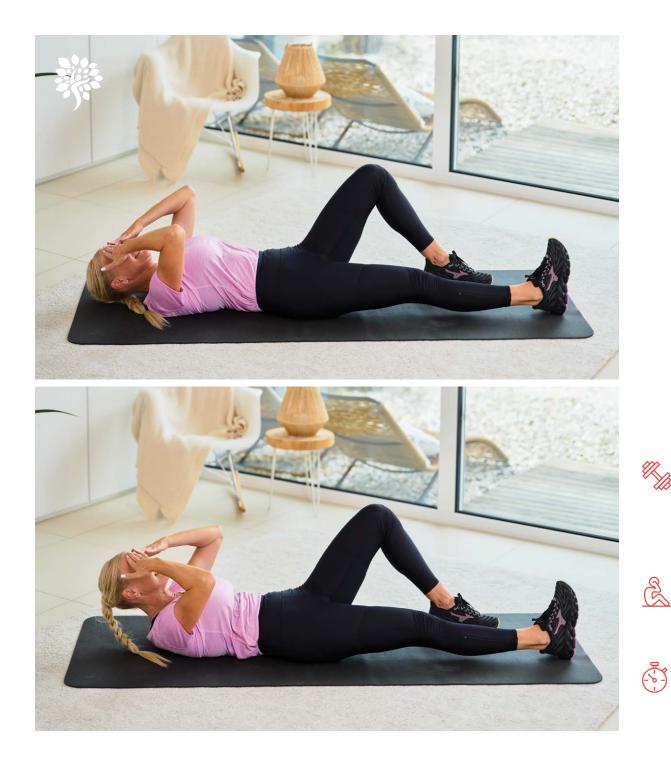
## CRUNCHES WITH LIFTED ELBOWS

- Lie on your back on a mat with one leg bent, your palms under the lumbar region of your trunk, and your elbows lifted.
- Raise the upper part of your trunk and head.
- Do 10-12 repetitions. Repeat three times.



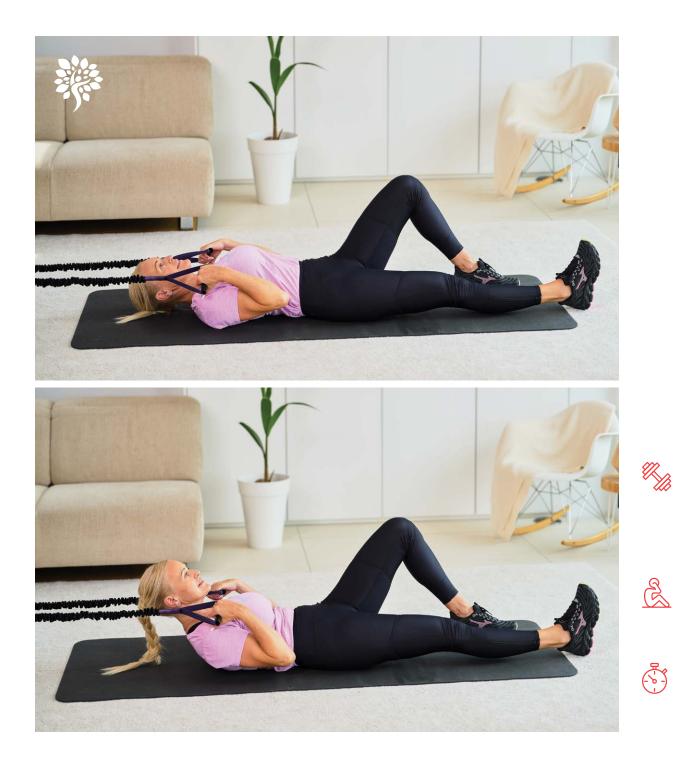
# CRUNCHES WITH YOUR HANDS ON YOUR CHIN

- Lie on your back on a mat with one leg bent. Cross your arms with your hands on your chin.
- Raise the upper part of your torso and head.
- Do 10-12 repetitions. Repeat three times.



# CRUNCHES WITH YOUR HANDS ON YOUR FOREHEAD

- Lie on your back on a mat with one leg bent. Cross your arms with your hands on your forehead.
  - Raise the upper part of your torso and head.
  - Do 10-12 repetitions. Repeat three times.



CRUNCHES WITH AN ELASTIC BAND

- Lie on your back on a mat with one leg bent, holding a resistance band in your hands.
  - Raise the upper part of your torso and head.
- Do 10-12 repetitions. Repeat three times.



**A**1

# **SQUATS** WITH SUPPORT

- - Hold onto support (rope or bar) at shoulder height.
  - $\bigcirc$  Perform squats to a 90° angle at your knees, keeping your heels on the ground.
  - $(\overline{\mathbf{b}})$ Do 10-12 repetitions. Repeat three times.



**A2** 

WALL SQUATS WITH A BALL BEHIND YOUR BACK

 Stand with your legs apart, facing away from a wall, with a large ball supporting your lower back against the wall. Hands are on your hips.

- Perform squats to a 90° angle at the knees.
- Do 10-12 repetitions. Repeat three times.



**B1** 

**KNEE ROCKS IN A SQUAT** POSITION

Stand in front of a chair with your arms crossed over your chest.

R Squat down and rock up and down on your knees.

Do 10-12 repetitions. Repeat three times.



SQUATS WITH A RESISTANCE BAND

- Stand with your feet shoulder-width apart on a resistance band. Hold the ends of the band in your hands, which are positioned against your upper arms.
- Perform squats to a 90° degree angle at the knees.
  - Do 10-12 repetitions. Repeat three times.



**C1** 

ROCKING IN A LUNGE POSITION WITH ONE LEG IN FRONT

- Stand in front of a chair with one leg in front and your knees bent, and your arms crossed over your chest.
- Squat down and rock up and down on your knees.
  - Do 10-12 repetitions. Repeat three times with each leg in front.



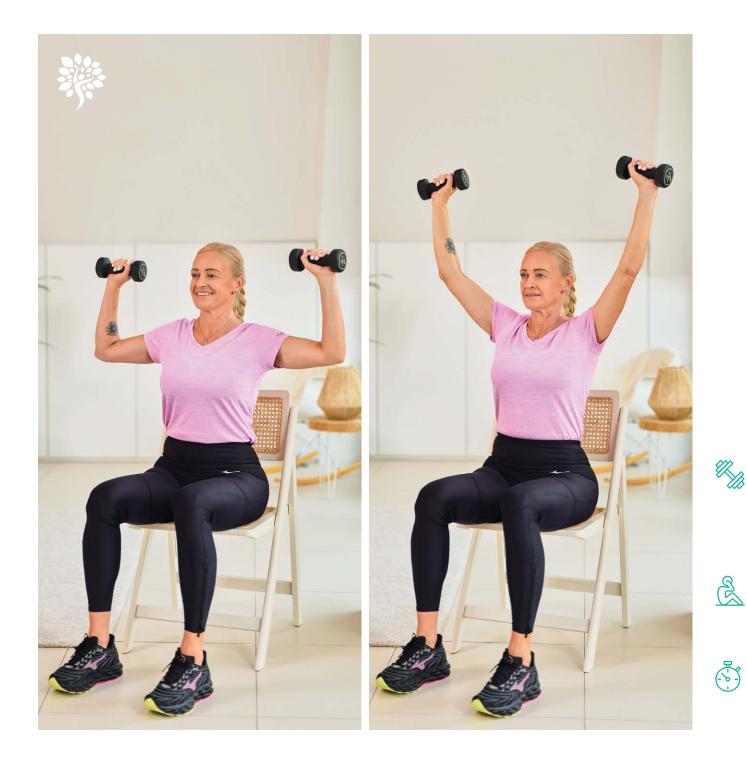
SINGLE LEG SQUATS **C 2** 

Stand in front of a chair on one leg, with your arms crossed over your chest.



Perform single-leg squats.

Do 10-12 repetitions. Repeat three times on each leg.

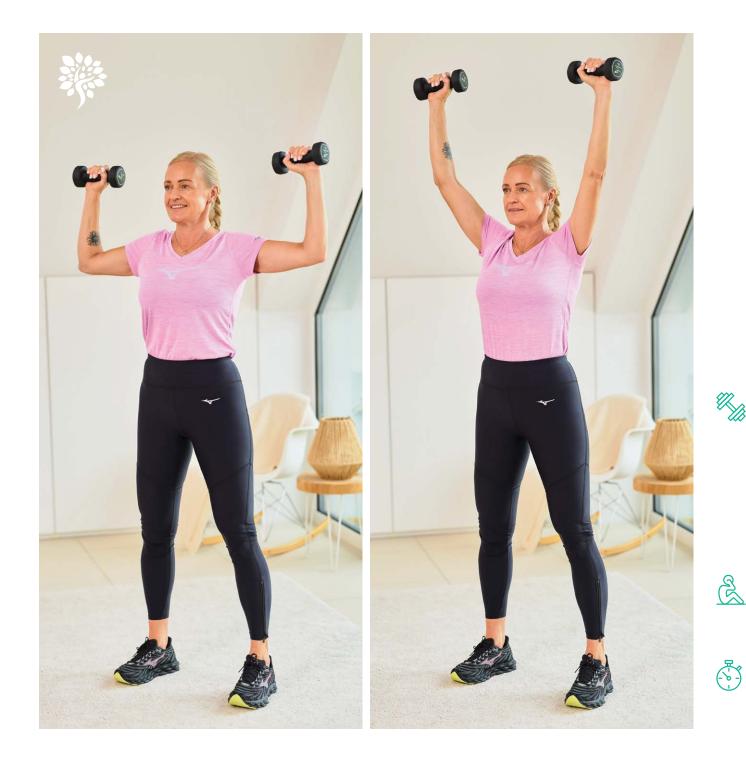


SEATED DUMBBELL OVERHEAD PRESSES

Sit on a chair, holding the dumbbells in your hands.

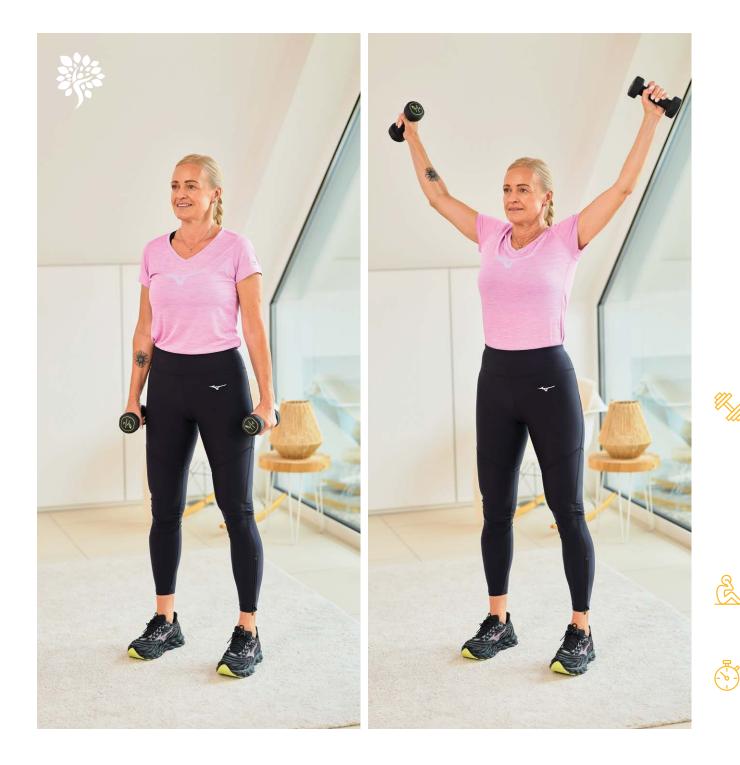
Raise the dumbbells overhead.

Do 10-12 repetitions. Repeat three times.



STANDING DUMBBELL OVERHEAD PRESSES

- Stand with your feet
  shoulder-width apart, your
  knees slightly bent, holding
  the dumbbells in your bent
  hands.
  - Raise the dumbbells overhead.
  - Do 10-12 repetitions. Repeat three times.



STANDING DUMBBELL OVERHEAD PRESSES

Stand with your feet shoulder-width apart, your knees slightly bent, holding the dumbbells in your hands.

Raise the dumbbells overhead.

Do 10-12 repetitions. Repeat three times. **B**1



# RESISTANCE BAND PULLS

- Stand with your feet apart on a resistance band, your knees slightly bent, holding the ends of the band in your hands.
- Pull the band alternately across the front and alongside the body.
  - Do 10-12 repetitions. Repeat three times.



**C**1

# BICEP CURLS AND OVERHEAD DUMBBELL PRESSES

- Stand with your feet shoulder-width apart, your knees slightly bent, holding the dumbbells in your hands.
- Begin with elbow flexion, then raise the dumbbells overhead. Next, abduct your elbows to the sides and extend your arms overhead.

Do 10-12 repetitions. Repeat three times.



**C 2** 

BICEP CURLS AND OVERHEAD DUMBBELL PRESSES

- Stand with your feet shoulder-width apart, your knees slightly bent, holding a dumbbell in your hand.
- Begin with elbow flexion,
  then raise the dumbbell
  overhead. Next, abduct
  your elbow to the sides and
  extend your arm overhead.

Do 10-12 repetitions. Repeat three times with each arm.



**A**1

ALTERNATING SEATED TORSO ROTATIONS WITH A BALL

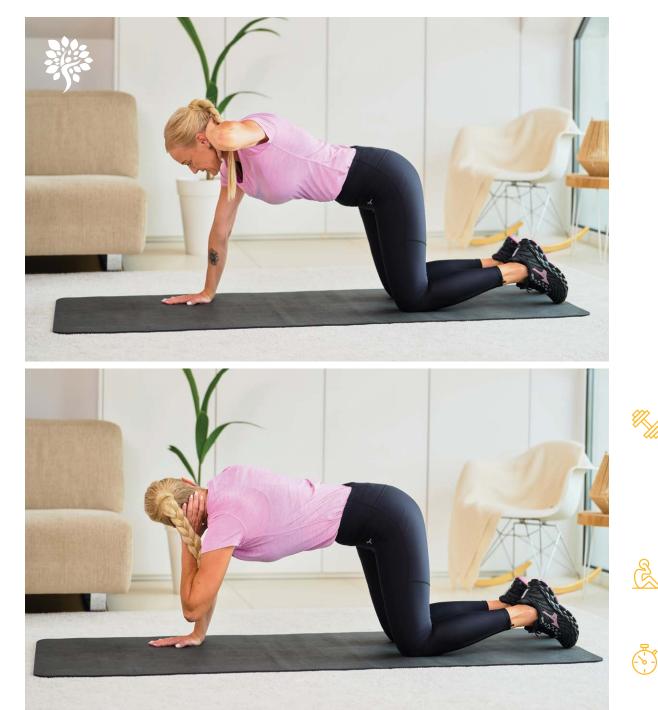
- Sit on a chair, holding a ball in your hands, with your shoulders pushed back and down.
- Alternate rotating your torso and head to each side.
- Do 10-12 repetitions.
  Repeat three times on each side.



SEATED TORSO ROTATIONS WITH A STICK

- Sit on a chair next to a wall, holding a stick in your bent arms and pressing it against the wall.
- Rush the stick into the wall with torso rotations.
- Do 10-12 repetitions.

Repeat three times on each side.



## TORSO ROTATIONS WHILE KNEELING

- In a kneeling position with one hand on the ground, place your other hand behind your neck and lift your elbow.
- Rotate your torso and head towards your arm.
  - Do 10-12 repetitions. Repeat three times on each side.



**HIP RAISES IN A SIDE PLANK** 



🧏 Perform a side plank position on your forearm and your knee.

R Raise your hips.

Do 10-12 repetitions.

Repeat three times on each side.



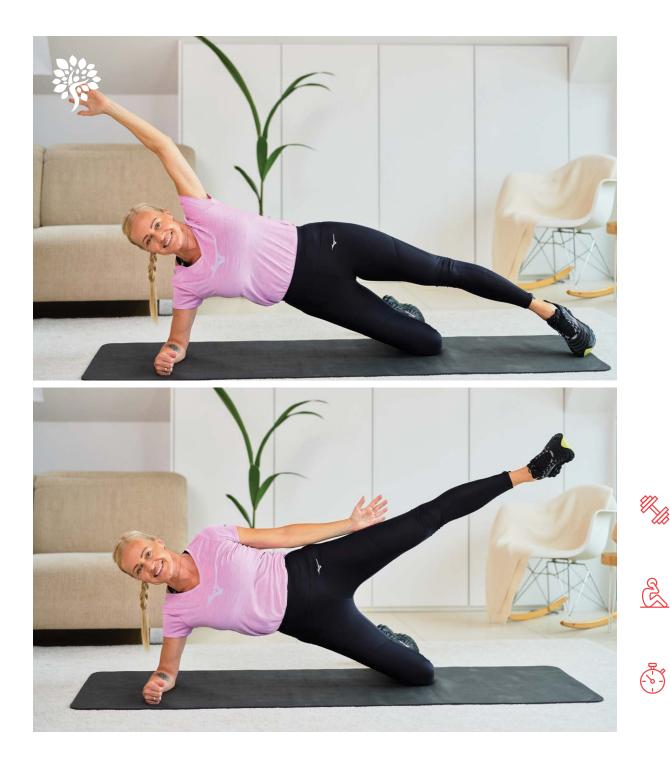
**C1** 

SEATED TORSO ROTATIONS WITH A RESISTANCE BAND

Sit on a chair, holding a resistance band with your arms extended.

Rotate away from the anchor point of the band.

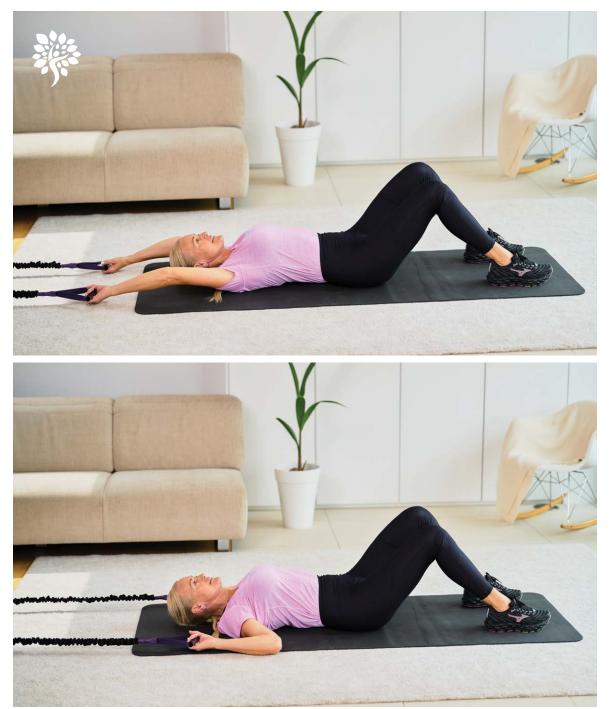
Do 10-12 repetitions. Repeat three times on each side.



SIMULTANEOUS RAISES OF YOUR UPPER LIMBS IN A SIDE PLANK

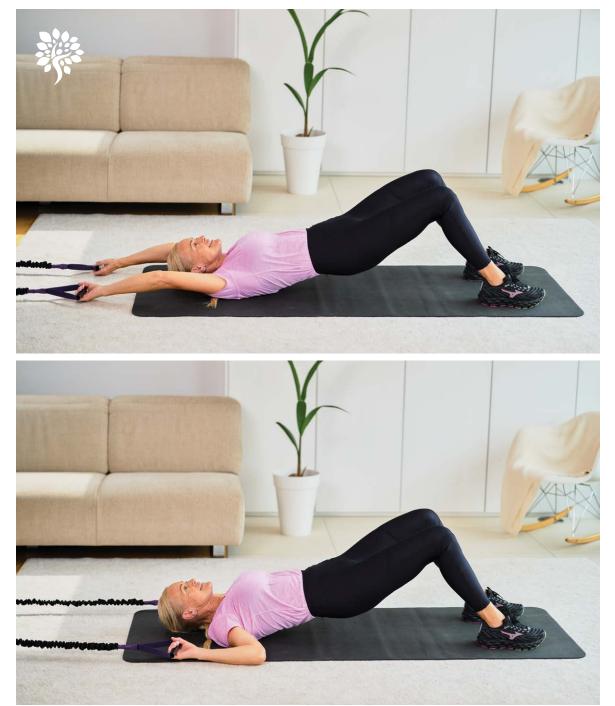
- Perform a side plank position on your forearm and knee.
  - Simultaneously raise your upper leg and arm.
  - Do 10-12 repetitions.

Repeat three times on each side.



# **RESISTANCE BAND PULLS WHILE LYING ON YOUR BACK**

- Lie on your back with your knees bent, holding a taut resistance band overhead with your arms extended.
- R Pull the band down, starting by pushing your shoulders down, then bending your elbows.
- (~) Do 10-12 repetitions. Repeat three times.



**A2** 

# **RESISTANCE BAND PULLS WITH YOUR HIPS** LIFTED

- Lie on your back with your knees bent and your hips raised, holding a taut resistance band overhead with your arms extended.
- R Pull the band down, starting by pushing your shoulders down, then bending your elbows.
- ( · Do 10-12 repetitions. Repeat three times.



**B1** 

# SEATED RESISTANCE BAND PULLS

- Sit on a chair, holding a taut resistance band overhead with your arms extended.
  - Pull the band down, starting by pushing your shoulders down, then bending your elbows.

Do 10-12 repetitions. Repeat three times.

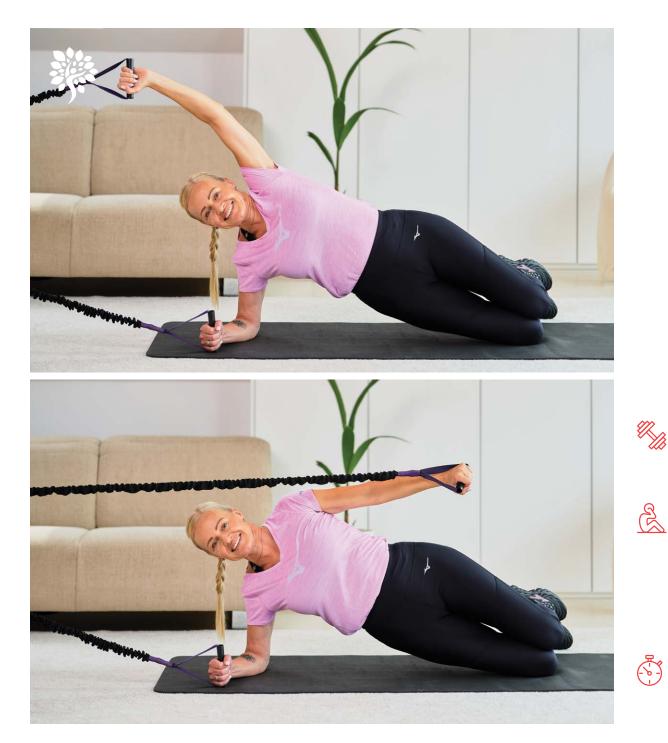


#### **B2**

# SEATED HEAVIER RESISTANCE BAND PULLS

- Sit on a chair, holding a heavier taut resistance band overhead with your arms extended.
  - Pull the band down, starting by pushing your shoulders down, then bending your elbows.

Do 10-12 repetitions. Repeat three times.



SINGLE ARM RESISTANCE BAND PULLS IN A SIDE PLANK

- Perform a side plank position on your forearm and your knee.
- Pull the resistance band downwards, starting by pushing your shoulder down, then bending your elbow.
  - Do 10-12 repetitions.

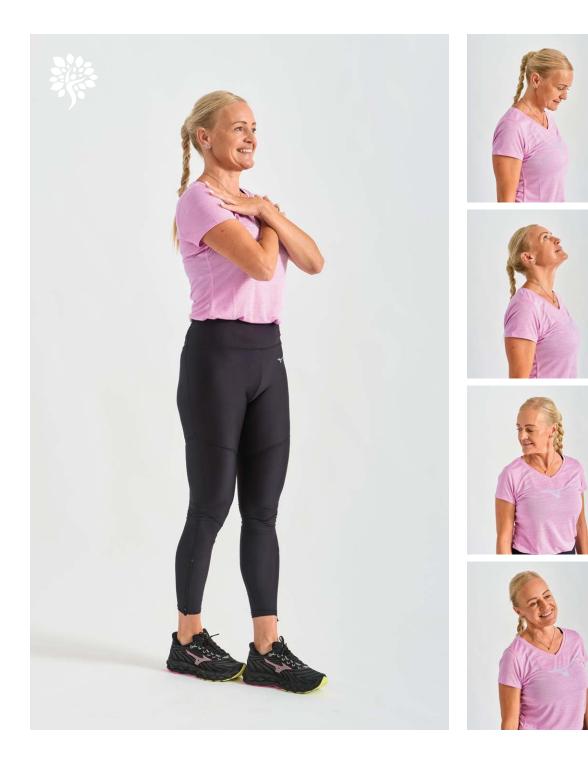
Repeat three times on each side.



**C**2

**PULL-UPS FROM SQUAT** POSITION

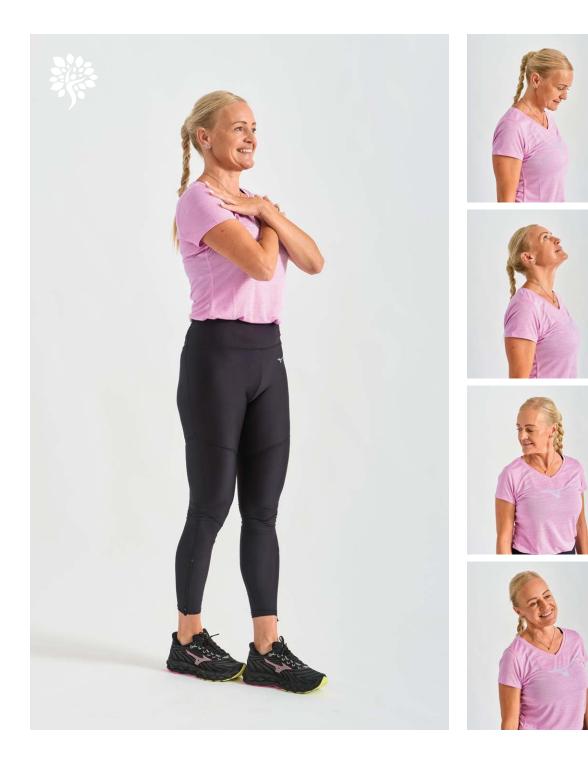
- Hold a taut rope with your hands overhead in squat position, lean back slightly.
- ß Pull yourself up to upright position. During the pulls, assist yourself by extending both legs.
- $\left( \begin{array}{c} \overline{\phantom{b}} \\ \overline{\phantom{b}} \end{array} \right)$ Do 10-12 repetitions. Repeat three times.



# TANDEM STANCE ON A FIRM SURFACE

Stand with one foot in front of the other, and your arms crossed over your chest.

- Maintain a balance position for
  20 seconds with each foot in front.
  Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, add head disturbances (alternate nods and tilts, twists, bends, and maintain position with your eyes closed).

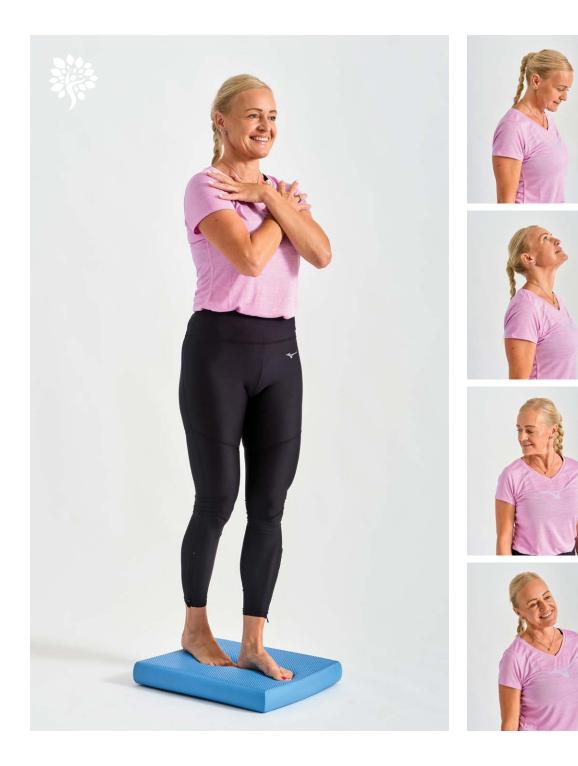


**A 2** 

# TANDEM STANCE ON A FIRM SURFACE

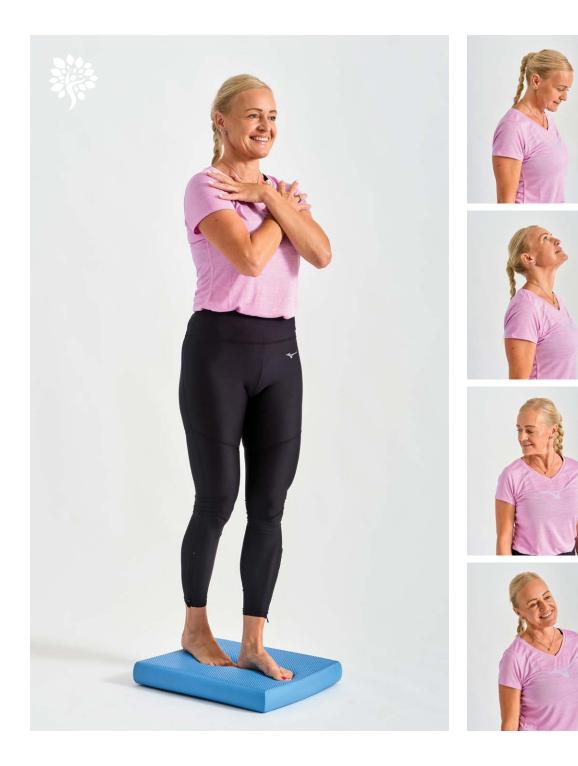
Stand with one foot in front of the other, and your arms crossed over your chest.

- Maintain a balance position for
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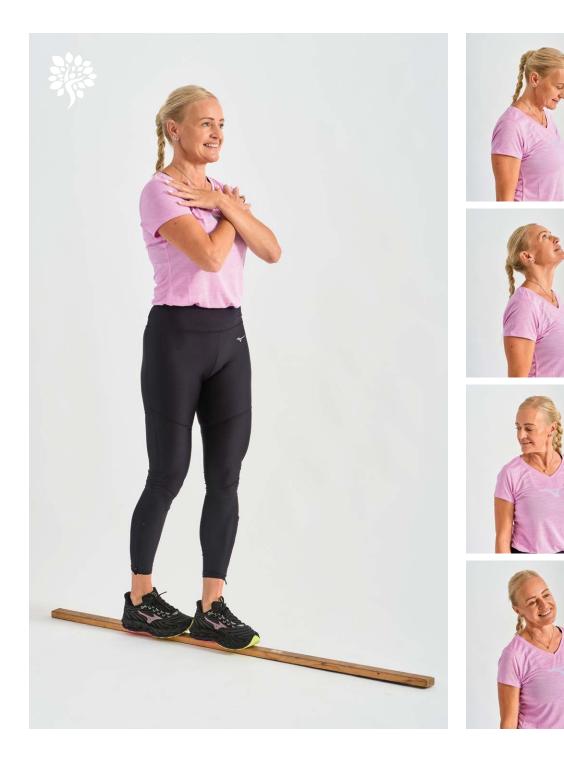
# TANDEM STANCE ON A SOFT SURFACE

- Stand barefoot with one foot in front of the other, and your arms crossed over your chest.
- Maintain a balance position for
  20 seconds with each foot in front.
  Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



# TANDEM STANCE ON A SOFT SURFACE

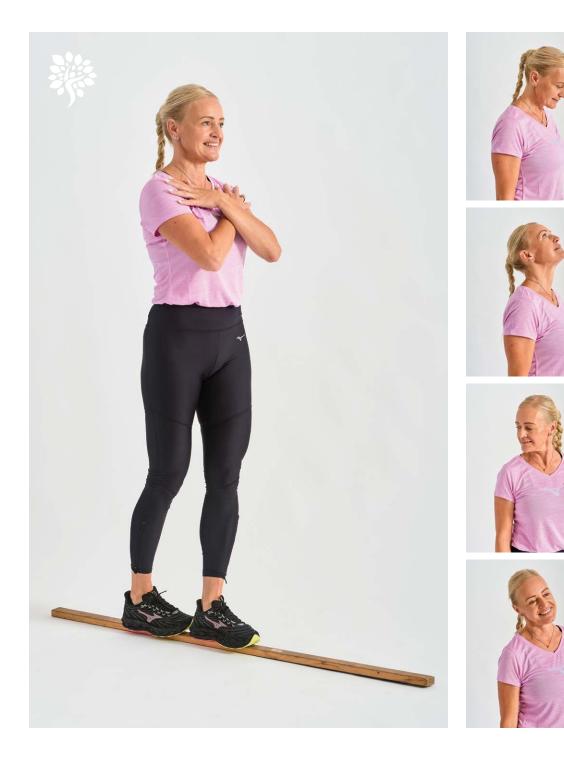
- Stand barefoot with one foot in front of the other, and your arms crossed over your chest.
- Maintain a balance position for
  20 seconds with each foot in front.
  Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



**C**1

# TANDEM STANCE ON A NARROW ELEVATED SURFACE

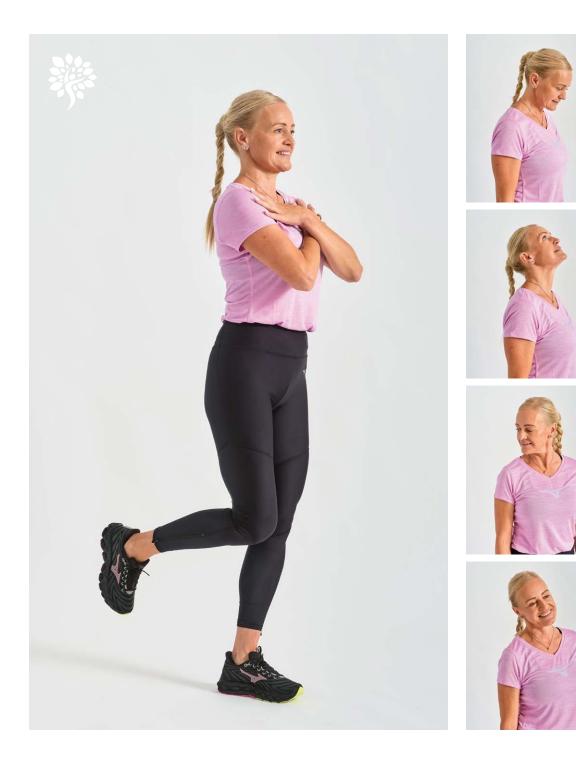
- Stand with one foot in front of the other, and your arms crossed over your chest.
- Maintain a balance position for
  20 seconds with each foot in front.
  Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



**C**2

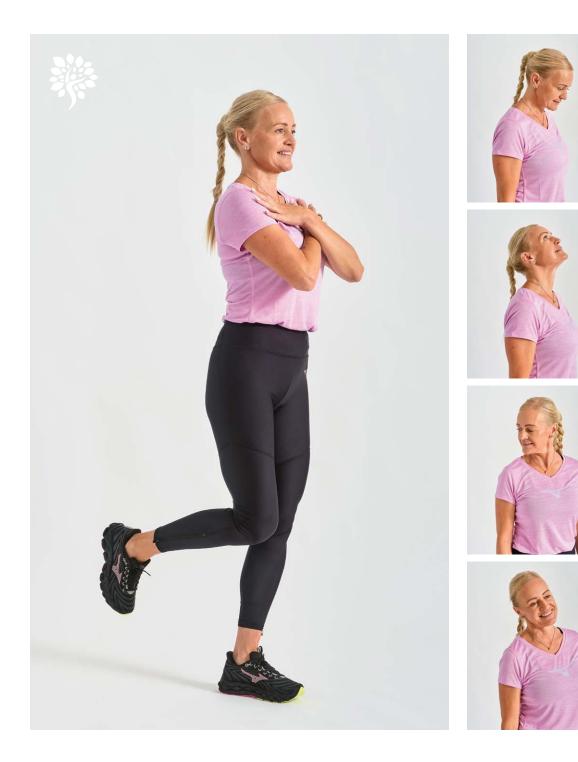
# TANDEM STANCE ON A NARROW ELEVATED SURFACE

- Stand with one foot in front of the other, and your arms crossed over your chest.
- Maintain a balance position for
  20 seconds with each foot in front.
  Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



# SINGLE LEG STANCE ON A FIRM SURFACE

- Stand on one leg on a firm surface with your arms crossed over your chest.
- Maintain this balance position for
  20 seconds on each leg. Repeat
  twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



# SINGLE LEG STANCE ON A FIRM SURFACE

- Stand on one leg on a firm surface with your arms crossed over your chest.
- Maintain this balance position for
  20 seconds on each leg. Repeat
  twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



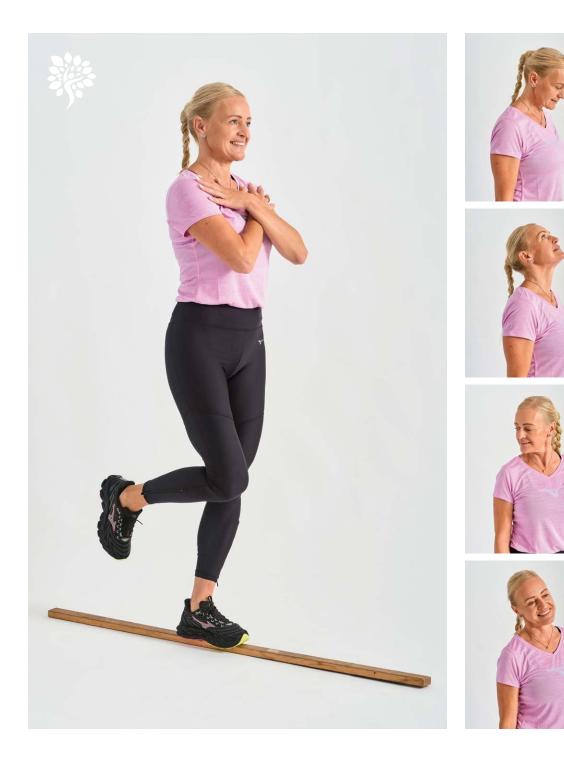
# SINGLE LEG STANCE ON A SOFT SURFACE

- Stand barefoot on one leg on a firm surface with your arms crossed over your chest.
- Maintain this balance position for 20 seconds on each leg. Repeat twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



# SINGLE LEG STANCE ON A SOFT SURFACE

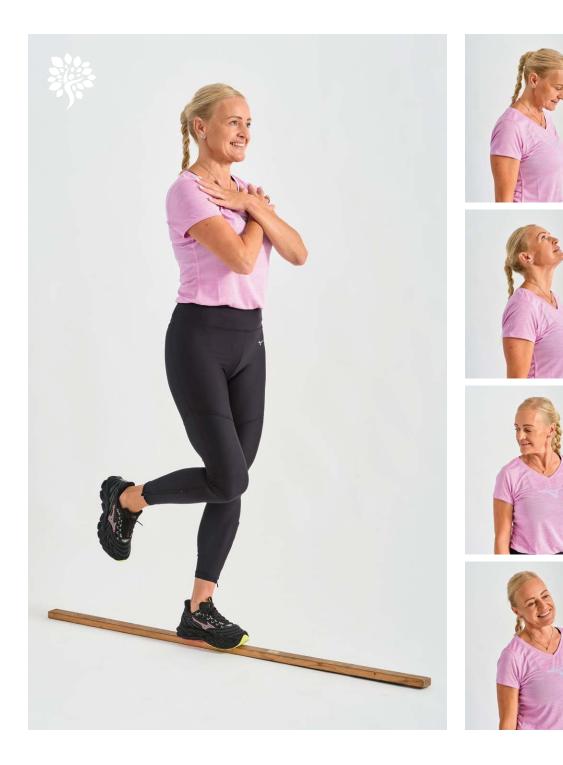
- Stand barefoot on one leg on a firm surface with your arms crossed over your chest.
- Maintain this balance position for
  20 seconds on each leg. Repeat
  twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



**C**1

# SINGLE LEG STANCE ON A NARROW ELEVATED SURFACE

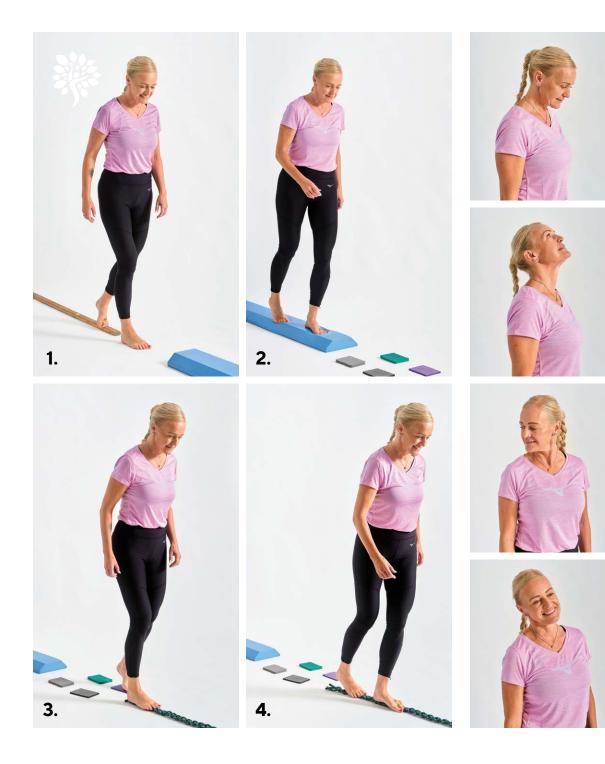
- Stand on one leg on a narrow elevated surface with your arms crossed over your chest.
- Maintain this balance position for 20 seconds on each leg. Repeat twice.
  - In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



**C**2

# SINGLE LEG STANCE ON A NARROW ELEVATED SURFACE

- Stand on one leg on a narrow elevated surface with your arms crossed over your chest.
- Maintain this balance position for
  20 seconds on each leg. Repeat
  twice.
- In the next set, pass a small ball between your hands. In the final set, include head disturbances (alternate nods and tilts, twists, and bends).



A-C

# WALKING ALONG A BALANCE COURSE

- Walk along the course. Change the order of different surfaces (hard, soft, elevated, etc.) in each training session.
- Select two ways of walking the course, with one always being forward (regular walking or tandem walking). You can also choose to walk backwards or sideways.
- Repeat each movement twice. Then, in the third round, include head disturbances (alternate nods and tilts, twists, and bends).

# **CONCLUDING PART OF THE EXERCISE – STRETCHING**



# **Static Stretching Exercises for the Whole Body:**

5 exercises, hold 30 seconds each exercise, repeat twice.



1.

2.

Twist from the wall.

Leaning on the chair.





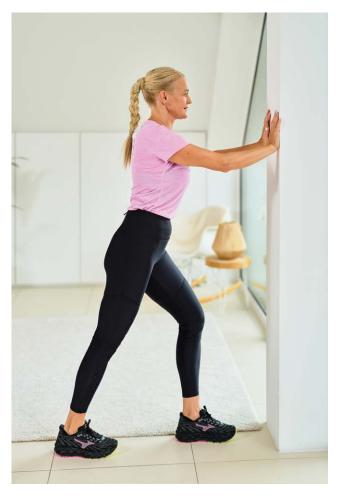


Side bend in the lunge position.



4.

Knee bend while supported against the wall.



5.

Heal trust down while supported against the wall.

Regular physical activity helps maintain functional ability, bone density, and proper joint function, reducing the risk of injury from falls. Overall, staying active is one of the most effective strategies for preventing falls and maintaining independence as we age.



# ABC+ MOVEMENT PROGRAM

# + BALANCE







# **Balance Exercises**

Part + BALANCE presents an exercise program to improve balance, which can be performed in pairs or in small groups. The basic instructions for performing the exercises in this section is:

Maintain balance position for 20 seconds on each leg or with each foot in front. Repeat twice.

If the exercise contains different roles, change the role after two repetitions. Balance 1: Object Handling -BALL EXERCISES

## Balance 2:

Dual Task Activities -

# **COUNTING AND SPELLING**

# Balance 3:

Pair/Group Exercise -

# **BALL PASSING BY NAME OR NUMBER**

## Balance 4:

Balance Forward -

# PREDICTABLE DISTURBANCE

# Balance 5:

Balance Forward -

# UNPREDICTABLE DISTURBANCE



# 2. 3.

# Balance 1

# Object Handling -BALL EXERCISES IN BALANCE POSITIONS

- Maintain a balance position and hold the ball, while practising different grips.
- Pass the ball in different directions (front, back, top, bottom).
- Try juggling the ball
  between hands while
  maintaing various balance
  positions.



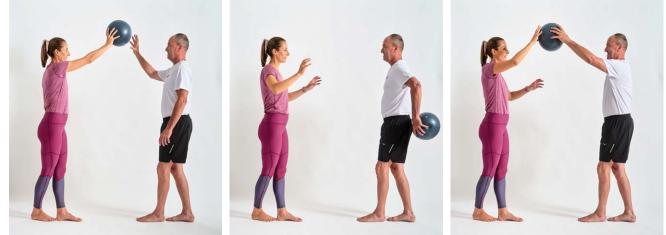
# **Dual Task Activities COUNTING AND SPELLING**



- Maintain various balance positions.
- ß Perform an activity while counting backwards, counting, spelling words aloud.



Pair/Group Exercise -BALL PASSING BY NAME OR NUMBER



Stand in a circle or pair up.

Rease the ball to someone when you call their name or number while maintaing various balance positions.



# Balance forward -PREDICTABLE DISTURBANCE

- Stand in a pair while holding elastic band.
- Pull the elastic band in different sides to create predictable disturbance.
- ·☆ Take turns and try to get your partner off balance.



# Balance forward -UNPREDICTABLE DISTURBANCE

- Stand in a pair on a soft or hard surface in different positions.
- Alternately pull an elastic
  band each to their own side,
  to create unpredictable
  balance challenges while
  maintaining balance
  position.

 Practice keeping balance after unexpected pulls also.

# **Progressive Balance Plan**

# **1. STATIC BALANCE PROGRESSION**

# Two-Leg Stance:

- 1. Stand on a firm surface with your eyes open.
- **2.** Stand on a firm surface with your eyes closed.
- **3.** Stand on a soft surface with your eyes open.
- 4. Stand on a soft surface with your eyes closed.

# Tandem Stance:

- 1. Stand heel-to-toe on a firm surface with your eyes open.
- **2.** Stand heel-to-toe on a firm surface with your eyes closed.
- **3.** Stand heel-to-toe on a soft surface with your eyes open.
- **4.** Stand heel-to-toe on a soft surface with your eyes closed.

# Single-Leg Stance:

- **1.** Stand on one leg on a firm surface with your eyes open.
- 2. Stand on one leg on a firm surface with your eyes closed.
- **3.** Stand on one leg on a soft surface with your eyes open.
- 4. Stand on one leg on a soft surface with your eyes closed.



# 2. SENSORY ORGANIZATION

# (Surface and Vision)

- Change surface type (firm/soft) and vision (open/closed) as per above progression.
- Add variations with changing head positions to alter visual inputs.

# **3. EXTERNAL/INTERNAL DISTURBANCE**

# **External Disturbance:**

 Apply gentle pushes from different directions while standing in a specific position (e.g., singleleg stance) to challenge balance.

# Internal Disturbance:

• Partner exercises, such as elastic band pulls, to introduce predictable balance challenges.



# **4. COGNITIVE CHALLENGE**

- Introduce a dual-task component while performing any of the static balance exercises.
- Examples:
  - Count backward by threes.
  - Spell simple words aloud.
  - Recite months of the year in reverse.

# **5. UNPREDICTABLE DISTURBANCE**

- Use a rope tied around your waist, with a partner giving sudden tugs to create unexpected balance challenges.
- Perform on both, hard and soft, surfaces.

# **6. WALKING EXERCISES**

## **Basic Walking Progression:**

- 1. Walk in a straight line on a firm surface.
- **2.** Walk with your eyes closed.
- **3.** Walk on a soft surface.
- 4. Walk heel-to-toe (tandem walking).
- **5.** Add cognitive challenges (e.g., counting backward while walking).

## Variations with Disturbances:

- Use an elastic band attached to the waist while walking, with a partner adding resistance or sudden pulls.
- Walk while carrying an object to add complexity.

This progressive approach allows for gradual development of balance skills, from simple static positions to dynamic, complex tasks, addressing both physical and cognitive components of balance.

# No matter the age, stay active



# + BASIC MOBILITY ABC+ MOVEMENT PROGRAM





# **Learning basic mobility and movement** for older adults

Older adults often fall at home or in the vicinity of their home. Falls are caused by a combination of several factors related to the environment and the effects of physical ageing. Reduced muscle capacity and joint mobility, poorer balance and coordination, and reduced reaction time can increase the risk of falls.

Getting up from the ground after a fall requires a certain amount of mobility and strength. As with movement in general, there is no one and only rule for getting up from the floor, but you can help yourself using a pictorial description of the movements, to make getting up from the floor easier and to improve mobility in everyday life.



- **1.** Sitting to standing.
- **2.** Transition from standing to fourlegged position.
- **3.** Transition from fourlegged position to side-lying.
- **4.** Transition from side-lying to lying on a back.
- **5.** Transition from lying on a back to lying on your stomach.
- **6.** Getting up from lying on your back via side support.
- 7. Getting up from lying on your stomach.
- 8. Safe lifting of loads active position
  (slightly bent knees, co-contraction of core stabilizers).
- **9.** Sitting-rising test.

# 1. Sitting to standing





## 1.

Sit toward the front edge of a sturdy chair. Your knees should be bent and your feet should be flat on the floor, shloulder-width apart, and underneath your hips. Breathe continuously and slowly.



2.

Activate your deep abdominal muscles by gently pulling your navel toward your spine. Place your hands lightly on each side of the seat. Keep your back and neck as straight as possible, with your chest slightly forward.



3.

Lean forward and slightly shift your weight to the front of your feet. Try not to support any weight with your hands.



4.

Stand and pause for a full breath in and out.



## 5.

Sit down slowly. Tighten your core and abdominal muscles to control your lowering as much as possible. You should lower yourself back to the chair slowly, not just drop back into the seat.



## 6.

Breathe out slowly as you sit on the chair. Do 10-12 repetitions. Repeat 3 times.

Additional instructions:

• If the exercise is too difficult, use a chair with sturdy armrests, and push off the armrests to help you rise to the standing position. You can also use the armrests to help slowly lower yourself back to sitting. As this gets easier, try to use your arms less. You can also place a firm cushion or pillow on the chair to make the surface higher. • If this exercise is too easy, do not use your arms to help raise or lower yourself. You can also wear a weighted vest, use hand weights, increase your repetitions, or try a lower chair.

# 2. Transition from standing to fourlegged position





## 1.

Activate your deep abdominal muscles by gently pulling your navel toward your spine.



2.

Place one foot forward and kneel. You can lean on your front leg with your hand.



3.

Bring your legs together into a kneeling postion (in case of knee pain, perform the exercise on an exercise mat or cover your knees with a roll of towel).



4.

If necessary, lean on a chair / wall while moving into a kneeling position.



5.

Lean on your hands and lower yourself to fourlegged postion. Knees and. Knees are hip-width apart and below them, palms are shoulder-width apart and below them.



## 6.

Stand up in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side (kneel with your right then with your left leg).

• If this exercise is too hard, you can lean on a chair, railing or wall when lowering down.

• If this exercise is too easy, do not lean on your front leg when standing or lowering down.



# 3. Transition from fourlegged position to side-lying





1.

In a fourlegged position on the floor, activate the deep abdominal muscles by gently drawing the belly button towards the spine.



2.

Lower yourself into a side-sitting position.



3.

Maintain a side-sitting position. The legs are slightly bent.



## 4.

Lean on the elbow on the side you will lie down on and use the other hand to slowly lower yourself.



5.

Slowly lower yourself into a side-lying position, lower arm outstretched.



## 6.

Return to the starting position in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side.

# 4. Transition from side-lying to lying on a back





## 1.

Lying on your side, activate your deep abdominal muscles by gently pulling your navel toward your spine.

Push off the ground with the hand on the side you will be facing.

## 2.

Extend your lower leg and bend your upper leg slightly.

Begin the transition with your lower body by pushing your knees from the floor towards the ceiling. Then move the upper part of your body by pushing yourself onto your back with both hands.

## 3.

Return to the starting position in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side.

# 5. Transition from lying on your back to lying on your stomach







2.

Fold your arms over your chest.



3.

Bend one leg. Start the transition to the side with the legs (push off the floor with the foot of the bent leg), followed by the upper body.



Lying on your back, activate your deep abdominal

muscles by gently pulling your belly button towards



### 4.

1.

Once on your side, extend your lower leg and slowly turn onto your stomach. Then fully extend your other leg as well.



## 5.

Return to the starting position in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side.



# Additional instructions:

- Try the movement with each leg separately to find your dominant side where turning will be easier for you.
- Practice turning on both sides.

# 6. Getting up from lying on a floor via side support





## 1.

Lying on your side, activate your deep abdominal muscles by gently pulling your navel toward your spine.

## 2.

Push off the ground with your upper arm, so you can place the elbow of your other arm into support.

## 3.

Lean on the elbow of your lower arm. Raise yourself to a semi-sitting position with the help of your hands.

## 4.

By supporting yourself on your palms, lift your torso off the floor and stand on the floor (resting on your knees and palms).

## 5.

Hold the four-legged position. Knees are hip-width apart, palms shoulder-width apart.





## 6.

In an all-fours position move to the nearest chair or another stable object nearby.

## 7.

Straighten your spine and place one foot forward for support. Rest your hands on a nearby chair/furniture.

## 8.

Stand up with support if needed.

## 9.

Return to the starting position in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side.

## ∽\_ Additional instructions:

- If the exercise is too hard, you can help yourself when standing up by leaning on a stable chair/furniture.
- If the exercise is too easy, stand up without resting your hands on the support.
- Practise getting up from the floor in parts of the movement pattern, and as you get better at it, do the whole pattern at once.

# 7. Getting up from lying on your stomach





## 1.

Lying on your stomach, activate your deep abdominal muscles by gently pulling your belly button towards your spine.

# 2.

Raise yourself up on your forearms and push your elbows back so they are under your shoulders.

## 3.

Leaning on your forearms, lift your torso off the floor and get into a low, fourlegged position (supporting yourself on your knees and forearms).

## 4.

Raise yourself on your palms. Hold the fourlegged position. Knees are hipwidth apart and palms shoulder-width apart.





**5.** Straighten your spine and place one foot forward for support. 6.

Lean on the leg with your hands in support and try to stand up slowly in support and stand up. 7.

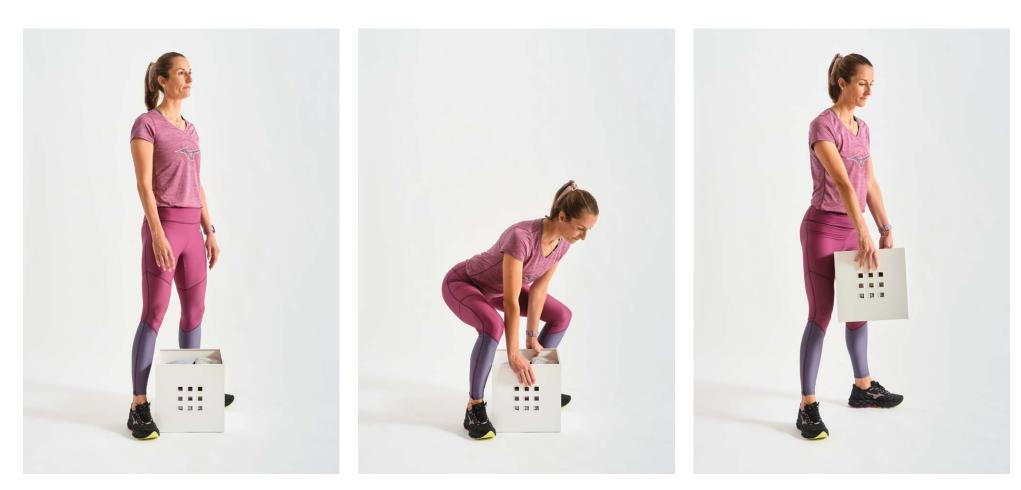
Return to the starting position in the reverse order. Do 10-12 repetitions. Repeat 3 times on each side.



- If the exercise is too hard, you can help yourself stand up by leaning on a stable chair that is securely placed against a wall.
  If the exercise is still too hard, turn from the prone position to the side into the lateral position (see exercise 6 Getting up via the side support from the supine position).
- If the exercise is too easy, stand up without hands on the leg in support.

# 8. Safe lifting of loads





## 1.

Stand with your legs apart. Before lifting the load, activate the abdominal muscles deeply by gently pulling the belly button towards the spine. At the same time, activate the muscles of the pelvic floor (as if trying to hold back the leakage of urine and wind).

## 2.

Bend your knees into a slight squat, keeping your spine straight. Keep the load close to your body. Use your leg muscles to lift the load. While lifting, maintain a straight spine and active deep abdominal and pelvic floor muscles.

## 3.

Lower the load slowly to the ground, following the lifting rules.

# 9. Sitting-rising test





## 1.

Stand upright and ensure you have enough space around you (clear away any potential hazards!).

## 2.

Carefully lower yourself into a crosslegged sitting position. Try not to use your arms or hands as leverage or support.

## 3.

Once stably seated, attempt to stand back up, trying not to use your hands or knees for support.

## 4.

You can achieve a total of 10 points: each additional support used (e.g. hand or knee) means a deduction of one point, and half a point for any loss of balance during the movement (see scorecard on the following page).





Hand support: -1 point

Knee support: -1 point



Support on the forearm: -1 point



Support with palm on knee: -1 point



**Side support:** -1 point

GOOD: 8-10 points

FAIR: 3,5-7,5 points

POOR: 0-3 points

## Scoring:

The maximum possible score on the test is 10 points: a possible total of 5 points for sitting down, and 5 points for rising from the floor to a standing position. Using your hand, forearm, knee, or the side of your leg to press up from the ground—or bracing your hand on your knee—results in a deduction of one point. An additional 0.5 points is deducted if the evaluator perceives an unsteady execution or partial loss of balance in any of the movement.

## **Authors**

**Prof. Dr. Maja Dolenc** is a full professor at the Faculty of Sport, where she teaches in the field of sports recreation and fitness. She is the author of ten university textbooks and more than 130 scientific and 160 professional articles. Her research focuses on physical activity as a key component of a healthy lifestyle, particularly in the context of aging, fall prevention, and health promotion. Prof. Dolenc has supervised over 125 bachelor's and master's theses and has conducted more than 50 training courses, attended by 3,700 participants. In addition to her teaching and research work, she is actively engaged in various professional bodies and committees at the Faculty of Sport, the Olympic Committee of Slovenia, and the Slovenian Sports Union. She has participated in numerous national and international projects aimed at promoting physical activity, health, and active lifestyles. Her achievements have significantly contributed to the development of sports recreation in Slovenia and beyond.





**Tjaša Knific** has a Master's degree in physiotherapy and is a former elite athlete. She is employed as a developmental associate at the National Institute of Public Health (NIJZ) in the Centre for Preventive and Health Promotion Programs, where she leads the expert group on physical activity, sedentary behavior, and sleep. Her work includes research, management, and implementation of strategies in clinical practice, as well as lecturing in the fields of public health, physiotherapy, health promotion and prevention, daily physical behavior in adults, and active and healthy ageing. She actively participates in the training of healthcare professionals, the development and implementation of health programs, and the preparation of public health policies. Additionally, she is a lecturer at several Slovenian health faculties and the author or co-author of numerous articles, master's and bachelor's theses, manuals, and teaching materials on physical activity for health, physical fitness, and reducing sedentary behavior.

