



resource® **ACTIV**

To help you implement the nutritional education and physical activity programme for the elderly,

Nestlé Health Science provides this guide to PHYSICAL EXERCISES

FOR PRE-FRAIL AND FRAIL ELDERLY PEOPLE

In this guide you will find a **series of exercises** in order to work on the following, **according to the elderly person's functional** capacity (severe limitation, mild and moderate limitation according to the SPPB and Gait Speed):

- Strength and power of both arms and legs.
- Balance and walking, in order to avoid falls.
- Flexibility.
- Resistance through cardio exercises.

All exercises describe the **procedure, the initial instructions, frequency and progression** for proper monitoring of the patients' prescribed exercises and for their improved health.





resource® ACTIV

In addition, to make each exercise easy to understand, it:

- Has been **designed following readability criteria**, under the supervision of Eduard Sanahuja Yll, lecturer at the Department of Language and Literature Teaching, University of Barcelona.
- Includes **graphic elements** that help readers to easily recognise **what type of exercise it is**.



























Flexing and extending with load

Flexing and extending with elastic band

Hand pressure

Opening arms horizontally with elastic band Opening arms
diagonally
with elastic band

SEATED EXERCISE ARM FLEXING AND EXTENDING WITH LOAD



SPPB: **4-6** GS: **0,5-0,8 m/s**





PROCEDURE

Sit with arms stretched at the sides of your chest and a dumbbell in each hand. Bend your arm at the elbows till you reach your chest, directing the weights to your shoulders (as in the picture).

START

- Establishing the weight: Choose a weight that allows you to perform the exercise correctly and without interruptions about 30 times. The weight should be enough for you to feel you have made an effort when you complete this exercise.
- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions



FREQUENCY: 2-3 sessions per week.

PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the weight you have been using. Choose a weight that allows you to perform the exercise correctly approximately 20 times, but heavy enough so that you feel you have made an effort when you complete it. Follow the same guidelines with the new weight. 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions















X

Flexing and extending with load

Flexing and extending with elastic band

Hand pressure Opening arms horizontally with elastic band

Opening arms
diagonally
with elastic band

SEATED EXERCISE - ARM FLEXING AND EXTENDING WITH ELASTIC BAND



SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**



PROCEDURE

Place the centre of the elastic band under both feet. Hold both ends of the band with your hands at knee height. Bend your arms towards your shoulders keeping your wrists straight, trying not to move your elbows away from your body (as in the picture).

START

Establishing the band resistance: choose a band that allows you to perform the exercise correctly and without interruptions about 30 times. When you have finished, you should feel that you have made an effort.

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



FREQUENCY: 2-3 sessions per week.

PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the resistance level you have been using. Choose a resistance band that allows you to perform the exercise correctly approximately 20 times, but strong enough so that you feel you have made an effort when you complete it. Follow the same guidelines with the new resistance band. 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions















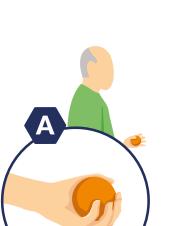


Flexing and extending with load

Flexing and extending with elastic band

Hand pressure Opening arms horizontally with elastic band Opening arms
diagonally
with elastic band

HAND PRESSURE EXERCISES



SPPB: **0-3** 6S: **< 0,5 m/s**

SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**

PROCEDURE

(Perform exercises A and B)

EXERCISE A: take a rubber ball or a stress ball in your hand and squeeze it gradually as tight as you can. Relax your hand. Once you have finished the sets, rest and repeat with the other hand.

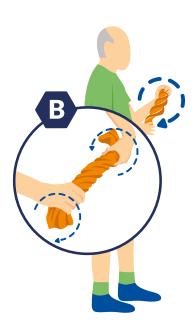
EXERCISE B: roll up a small towel into a tube shape. Take the towel by the edges and with both hands perform a movement similar to wringing out a soaked towel. Wring slowly, but as tight as you can.



Start with exercise A. When you are able to perform 20 pressure movements with the ball, easily and without stopping, then incorporate exercise B.

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.





PROGRESS

You can increase the exercise intensity by performing the whole procedure, with the difference that, at the end, you should squeeze the ball or towel tight, holding the position for 5-6 seconds.

In the table below you can see an indicative example of a suitable progression:

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 5, 6, 7, 8, 9 & 10	3 sets / 12 repetitions
	Incorporate exercise B at any time

















Flexing and extending with load

Flexing and extending with elastic band

Hand pressure

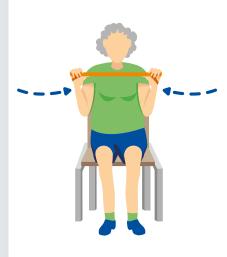
Opening arms horizontally with elastic band

Opening arms
diagonally
with elastic band

SEATED EXERCISE - OPENING ARMS HORIZONTALLY WITH ELASTIC BAND



SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**



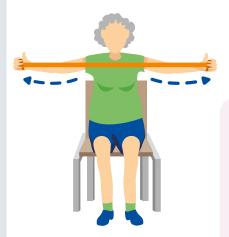
PROCEDURE

Hold an elastic band by the ends and grip it properly to avoid injury. Stretch the band at chest height and separate your arms performing a full extension of the elbow (as in the picture).

START

Establishing the band resistance: choose a band that allows you to perform the exercise correctly and without interruptions about 30 times. When you have finished, you should feel that you have made an effort.

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



FREQUENCY: 2-3 sessions per week.

PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the elastic band's resistance. Choose a band that allows you to perform the exercise correctly approximately 20 times, but when you have finished, you should feel that you have made an effort. Follow these guidelines: 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions

















Flexing and extending with load

Flexing and extending with elastic band

Hand pressure

Opening arms horizontally with elastic band Opening arms
diagonally
with elastic band

SEATED EXERCISE - OPENING ARMS DIAGONALLY WITH ELASTIC BAND



SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**



PROCEDURE

Hold an elastic band by the ends and grip it properly to avoid injury. Separate your arms diagonally, starting at knee height, with the elbow straight (as in the picture).

START

Establishing the band resistance: choose a band that allows you to perform the exercise correctly and without interruptions about 30 times. When you have finished, you should feel that you have made an effort.

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.





PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the elastic band's resistance. Choose a band that allows you to perform the exercise correctly approximately 20 times, but when you have finished, you should feel that you have made an effort. Follow these guidelines: 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions

















LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



Feet and calf muscles

Knee extension
Without With

SEATED EXERCISE

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles Hip separatior Without With

Without

Withou chair

With chair

SEATED EXERCISE FOR FEET AND CALF MUSCLES





PROCEDURE

Place a weighted ankle brace (filled with sand or some other heavy substance) or strap a weight to your ankle (with care, ensuring it cannot fall off).

Stretch up on your tiptoes to reach as high as possible and stay in this position for 3 seconds. Then lower yourself slowly until your heels are back on the floor.

START

- Establishing the weight: Choose a weight that allows you to perform the exercise correctly and without interruptions about 30 times. The weight should be enough for you to feel, when you have finished, that you have made an effort.
- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Continue with another set of 10 repetitions.



PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the weight you have been using. Choose a weight that allows you to perform the exercise correctly approximately 20 times, but one that is heavy enough so that when you have finished, you feel you have made an effort. Follow the same procedure with the new weight. 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions



and calf













Strength and power LEG EXERCISES



SEATED EXERCISE

Without With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

lip separation Vithout With

Without With load load

Vithout

LEG FLEXING EXERCISE

With chair

SEATED EXERCISE KNEE EXTENSION WITHOUT LOAD







SPPB: 7-9 GS: **0,9-1 m/s**

PROCEDURE

Extend one leg horizontally, trying to keep it as straight as possible (as in the picture). Once you have finished the recommended amount of sets, repeat with the other leg.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



FREQUENCY: 2-3 sessions per week.

PROGRESS

You can increase the exercise intensity by performing the whole procedure, but holding your leg up for a longer time, 5-6 seconds.

In the table below, you can see an indicative example of a suitable progression:

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 5, 6, 7, 8, 9 & 10	3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extensionWithout With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles Hip separation Without With Back thigh
Without Wit

Withou chair

With chair

SEATED EXERCISE KNEE EXTENSION WITH LOAD

SPPB: **0-3** GS: **< 0,5 m/s**

SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**



PROCEDURE

Place a weighted ankle brace (filled with sand or some other heavy substance) or strap a weight to your ankle (with care, ensuring it cannot fall off).

Extend one leg horizontally, trying to keep it as straight as possible. Once you have finished the recommended amount of sets, repeat with the other leg.

START

- Establishing the weight: Choose a weight that allows you to perform the exercise correctly and without interruptions about 30 times, but heavy enough so that when you have finished, you feel you have made an effort.
- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



FREQUENCY: 2-3 sessions per week.

PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the weight you have been using. Choose a weight that allows you to perform the exercise correctly approximately 20 times, but one that is heavy enough so that when you have finished, you feel you have made an effort. Follow the same procedure with the new weight. 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

Nithout With

Without With

Withou chair

With chair

SEATED EXERCISE HIP ABDUCTOR MUSCLES WITH ELASTIC BAND

(these are the muscles we use to move our legs apart)



SPPB: **0-3** GS: **< 0,5 m/s** SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**

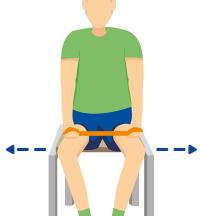
PROCEDURE

Place the elastic band on your knees (as in the picture). Firmly hold the elastic band against each knee. Spread your knees slowly as far as you can.

START

Establishing the band resistance: choose a band that allows you to perform the exercise correctly and without interruptions about 30 times, but when you have finished, you should feel that you have made an effort.

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



FREQUENCY: 2-3 sessions per week.

PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions	
Week 3	2 sets / 12 repetitions	
Week 4	3 sets / 12 repetitions	
Weeks 5 & 6	Increase the elastic band's resistance. Choose a band that allows you to perform the exercise correctly approximately 20 times, but when you have finished, you should feel that you have made an effort. Follow these guidelines. 2 sets / 10 repetitions	
Week 7	2 sets / 12 repetitions	
Weeks 8, 9 & 10	3 sets / 12 repetitions	



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

lip separation Vithout With Back thigh
Without With

Withou

With chair

FEET AND CALF MUSCLE EXERCISE



SPPB: 4-6
GS: 0,5-0,8 m/s

SPPB: 7-9
GS: 0,9-1 m/s

PROCEDURE

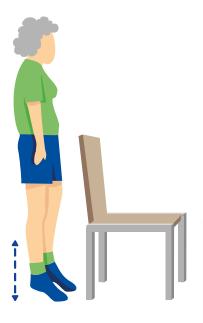
Stand up in front of a table or the back of a chair, with your feet apart in line with your shoulders (the distance between your feet should be approximately the same as that between your shoulders).

Stretch up on your tiptoes to reach as high as possible and stay in this position for 3 seconds. If you lose your balance, lean on the table or chair; do not lean if you are keeping your balance. Then go down slowly until your heels are back on the floor.

START

- Start with a set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Continue with another set of 10 repetitions.

FREQUENCY: 2-3 sessions per week.



PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 6, 7, 8, 9 & 10	3 sets / 12 repetitions















LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles Hip separation
Without With

SPPB: **7-9**

GS: **0,9-1 m/s**

Back thigh
Without With

Withou chair With chair

HIP SEPARATION EXERCISE



Stand up and, if required, hold on to a sturdy chair or table for support.

With a straight back, move one leg sideways away from the other leg without bending the knee (as in the picture). You must keep your legs straight and feet facing forward (not to the side). Return to the starting position. Repeat these movements the indicated number of times.



- Start with a set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Continue with another set of 10 repetitions.

FREQUENCY: 2-3 sessions per week.



PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 6, 7, 8, 9 & 10	3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE Feet Knee extension

STANDED EXERCISE

Feet and calf Hip separation With

Back thigh

HIP SEPARATION EXERCISE WITH LOAD

SPPB: **4-6** GS: **0,5-0,8 m/s**

SPPB: **7-9** GS: **0,9-1 m/s**



PROCEDURE

Place a weighted ankle brace (filled with sand or some other heavy substance) or strap a weight to your ankle (with care, ensuring it cannot fall off). Stand up and, if required, hold on to a sturdy chair or table for support.

With a straight back, move one leg sideways away from the other leg without bending the knee (as in the picture). You must keep your legs straight and feet facing forward (not to the side). Return to the starting position. Repeat these movements the indicated number of times.

START

- Establishing the weight: Choose a weight that allows you to perform the exercise correctly and without interruptions about 30 times, but heavy enough so that when you have finished, you feel you have made an effort.
- Start with a set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Continue with another set of 10 repetitions.



Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4	3 sets / 12 repetitions
Weeks 5 & 6	Increase the weight used so far. Choose a weight that allows you to perform the exercise correctly approximately 20 times, but one that is heavy enough so that when you have finished, you feel you have made an effort. Follow the same procedure with the new weight. 2 sets / 10 repetitions
Week 7	2 sets / 12 repetitions
Weeks 8, 9 & 10	3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With load

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

Hip separation Vithout With Back thigh Without With Withou chair

With chair

BACK THIGH EXERCISE WITHOUT LOAD



SPPB: 4-6 GS: **0,5-0,8 m/s** SPPB: 7-9 GS: **0,9-1 m/s**

PROCEDURE

Stand up and, if required, hold on to a sturdy chair or table for support. With your back straight, flex your knee backwards.

Return to the starting position. Once you have finished the recommended amount of sets, repeat with the other leg.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: 2-3 sessions per week.



PROGRESS

Start and weeks 1 & 2 2 sets / 10 repetitions

Week 3 2 sets / 12 repetitions

Week 4, 6, 7, 8, 9 & 10 3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With

Hip abductor muscles **STANDED EXERCISE**

Feet and calf muscles

Hip separation Vithout With Back thigh
Without With

Without chair

With chair

BACK THIGH EXERCISE WITH LOAD



SPPB: **4-6** GS: **0,5-0,8 m/s** SPPB: **7-9** GS: **0,9-1 m/s**

PROCEDURE

Place a weighted ankle brace (filled with sand or some other heavy substance) or strap a weight to your ankle (with care, ensuring it cannot fall off). Stand up and, if required, hold on to a sturdy chair or table for support.

With your back straight, flex your knee backwards. Return to the starting position. Once you have finished the recommended amount of sets, repeat with the other leg.

START

- Establishing the weight: Choose a weight that allows you to perform the exercise correctly and without interruptions about 30 times, but heavy enough so that when you have finished, you feel you have made an effort.
- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.



PROGRESS

Start and weeks 1 & 2	2 sets / 10 repetitions	Γ
Week 3	2 sets / 12 repetitions	
Week 4	3 sets / 12 repetitions	
Weeks 5 & 6	Increase the weight used so far. Choose a weight that allows you to perform the exercise correctly approximately 20 times, but one that is heavy enough so that when you have finished, you feel you have made an effort. Follow the same procedure with the new weight. 2 sets / 10 repetitions	
Week 7	2 sets / 12 repetitions	
Weeks 8, 9 & 10	3 sets / 12 repetitions	



and calf













Strength and power LEG EXERCISES



SEATED EXERCISE

Knee extension
Without With load

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

Tip separation

Without With

Back thigh
Without With

LEG FLEXING EXERCISE

Without chair

With chair

LEG FLEXING EXERCISE WITHOUT CHAIR



SPPB: 7-9 GS: **0,9-1 m/s**

PROCEDURE

Stand up behind a table. Start to squat bending your hips and knees as if to sit; then return to the starting position. If necessary, place a chair behind you for added security.



START

- Start with a set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: 2-3 sessions per week.

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Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 6, 7, 8, 9 & 10	3 sets / 12 repetitions



and calf













LEG FLEXING EXERCISE

Strength and power LEG EXERCISES



SEATED EXERCISE
Feet Knee extension

Without With

Hip abductor muscles STANDED EXERCISE

Feet and calf muscles

lip separation Vithout With

Without With

Without

With chair

LEG FLEXING EXERCISE ON CHAIR



SPPB: 7-9 GS: **0,9-1 m/s**

PROCEDURE

Sit on a sturdy armchair. Keep your feet firmly on the floor and stand up without leaning on the arms of the chair. If you cannot do this, support yourself with one arm only, and if you cannot, use both arms. Stay on your feet for 1 second and sit back down.

Rest for a few seconds and start again.



START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: 2-3 sessions per week.

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Start and weeks 1 & 2	2 sets / 10 repetitions
Week 3	2 sets / 12 repetitions
Week 4, 6, 7, 8, 9 & 10	3 sets / 12 repetitions













X

STAND UP AND WALK SLOWLY

SPPB: 0-3; GS: < 0,5 m/s</p>

WALKING

SPPB: 4-6; GS: 0,5-0,8 m/s

SPPB: 7-9; GS: 0,9-1 m/s 10-30 min. 30-45 min.

STAND UP AND WALK SLOWLY EXERCISE





PROCEDURE

The cardio programme will only be started when the older person has improved their muscle strength.

Stand up from the chair with the help of a person or a walker. Walk at your own pace for the number of seconds indicated. Stop, rest and then walk again. Repeat as per the guidelines (shown below).

START

- Walk for 5 seconds. Stop and rest for 10 seconds without sitting. Repeat this procedure 5 more times.
- Start again and walk for 10 seconds. Stop and rest for 20 seconds without sitting. Repeat this procedure a minimum of 3 times and maximum of 5.

FREQUENCY: 3 days per week
Perform this exercise twice a day.

PROGRESS

When you notice that your ability to walk has improved, you can then intensify your exercises following the schedule below:

Start and weeks 1 & 2	Walk for 5 to 10 sec., rest for 10 sec. Repeat 5 to 7 times
	Walk for 10 to 15 sec., rest for 20 sec. Repeat 5 to 7 times.
Week 3 & 4	Walk for 10 to 15 sec., rest for 20 sec. Repeat 5 to 7 times
	Walk for 15 to 20 sec., rest for 20 sec. Repeat 10 to 15 times.
Weeks 5, 6 & 7	Walk for 15 to 20 sec., rest for 20 sec. Repeat 5 to 7 times
	Walk for 20 to 30 sec., rest for 20 sec. Repeat 6 to 8 times.
Weeks 8	Walk for 30 sec., rest for 20 sec. Repeat 5 times
	Walk for 45 sec., rest for 20 sec. Repeat 6 to 8 times.
Weeks 9 & 10	Walk for 45 to 60 sec., rest for 20 sec. Repeat 12 to 15 times.











WALKING

STAND UP AND WALK SLOWLY

SPPB: 0-3; GS: < 0,5 m/s</p>

SPPB: 4-6; GS: 0,5-0,8 m/s

SPPB: 7-9; GS: 0,9-1 m/s 10-30 min. 30-45 min.

WALKING EXERCISE





Walk looking forward, not to the floor, shoulders relaxed and arms swinging slightly.

- Walk for 20 seconds. Stop and rest for 10 seconds without sitting. Repeat this set 5 times.
- Start again and walk for 25 seconds. Stop and rest for 20 seconds without sitting. Repeat this set 3 to 5 times.





PROGRESS

When you notice that your ability to walk has improved, you can then intensify your exercises following the schedule below:

Start and weeks 1 & 2	Walk for 20 sec., rest for 10 sec. Repeat 5 to 7 times
	Walk for 25 to 30 sec., rest for 20 sec. Repeat 5 to 7 times.
Week 3 & 4	Walk for 20 to 25 sec., rest for 20 sec. Repeat 5 to 7 times
	Walk for 25 to 35 sec., rest for 20 sec. Repeat 10 to 15 times.
Weeks 5, 6 & 7	Walk for 25 to 35 sec., rest for 20 sec. Repeat 5 times
	Walk for 35 to 45 sec., rest for 20 sec. Repeat 8 to 12 times.
Weeks 8	Walk for 45 sec., rest fo <mark>r</mark> 20 sec. Repeat 5 times
	Walk for 60 sec., rest for 20 sec. Repeat 6 to 8 times.
Weeks 9 & 10	Walk for 50 to 70 sec., rest for 20 sec. Repeat 12 to 15 times.













STAND UP AND WALK SLOWLY

SPPB: 0-3; GS: < 0,5 m/s</p>

WALKING

SPPB: 4-6; GS: 0,5-0,8 m/s

SPPB: 7-9; GS: 0,9-1 m/s 10-30 min. 30-45 min.

WALKING EXERCISE - 10-30 MIN.





PROCEDURE

Walk looking forward, not to the floor, shoulders relaxed and arms swinging slightly.

START

- Walk for 4 minutes. Stop and rest for 30 seconds without sitting.
- Start again and walk for 4 minutes. Stop and rest.

FREQUENCY: 3 days per week, twice a day.

When you notice that your ability to walk has improved (from week 8), you may walk just once per day (as shown below).

PROGRESS

When you notice that your ability to walk has improved, you can then intensify your exercises following the schedule below:

Start and weeks 1 & 2	Walk for 4 minutes, then rest for 30 sec. Start again and walk for 5 minutes.
Week 3 & 4	Walk for 5 minutes, then rest for 30 sec. Start again and walk for 5 minutes.
Weeks 5, 6 & 7	Walk for 5 minutes, then rest for 30 sec. Start again and walk for 5 minutes and rest for 30 sec. Start again and walk for 5 minutes.
Weeks 8	Walk for 7-10 minutes once a day.
Weeks 9 & 10	Walk for 10-15 minutes once a day











X

STAND UP AND WALK SLOWLY

SPPB: 0-3; GS: < 0,5 m/s</p>

WALKING

SPPB: 4-6; GS: 0,5-0,8 m/s

SPPB: 7-9; GS: 0,9-1 m/s 10-30 min. 30-45 min.

WALKING EXERCISE - 30-45 MIN.





PROCEDURE

Walk looking forward, not to the floor, shoulders relaxed and arms swinging slightly.

START

- Walk for 8 minutes. Stop and rest for 30 seconds without sitting.
- Start again and walk for 8 minutes. Stop and rest.

FREQUENCY: 3 days per week, twice a day.

When you notice that your ability to walk has improved (from week 8), you may walk just once per day (as shown below).

PROGRESS

When you notice that your ability to walk has improved, you can then intensify your exercises following the schedule below:

Start and weeks 1 & 2	Walk for 8 minutes, then rest for 30 sec. Start again and walk for 10 more minutes.
Week 3 & 4	Walk for 10 minutes, then rest for 30 sec. Start again and walk for 10 more minutes.
Weeks 5, 6 & 7	Walk for 10 minutes, then rest for 30 sec. Start again and walk for 10 minutes and rest for 30 sec. Start again and walk for 10 more minutes.
Weeks 8	Walk for 15-20 minutes once a day.
Weeks 9 & 10	Walk for 25-30 minutes once a day.

















Walking exercise with feet on a straight line

Balancing on one leg exercise

Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles

WALKING EXERCISE WITH FEET ON A STRAIGHT LINE



SPPB: **7-9** GS: **0,9-1 m/s**



Stand up near a table, wall or family member. Place the heel of one foot in contact with the tip of the other foot. You will be taking small steps in a straight line, putting the heel of the advancing foot in front of the toe of the other foot (see picture).

If it makes you feel safer, stand up using a table or railing for support.

START

- Walk a set of 10 steps. Stop and rest for 10 seconds without sitting.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat.

FREQUENCY: Daily.

PROGRESS

When you notice that your ability to walk has improved, you can then intensify your exercises following the schedule below:

• Walk 3 sets of 10 steps each.

- Change the position of your arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug.
- Close your eyes, but only if someone is with you to help you.

















Walking exercise with feet on a straight line

Balancing on one leg exercise Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles

BALANCING ON ONE LEG EXERCISE





PROCEDURE

Stand up. Bend one leg while the other remains straight and keep it elevated for about 5 seconds (as in the picture); put your leg back down on the floor and do the same with the other one.

If it makes you feel safer, stand up using a table, a sturdy chair or a rail for support.

START

- Hold the position counting to 10 with each leg.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat for each leq.

FREQUENCY: Daily.

PROGRESS

When you notice that your ability has improved, increase the time you keep your leg up counting to 30.

- Change the position of your arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug, sand, foam, lawn, etc.
- Close your eyes, but only if someone is with you to help you.













X

Walking exercise with feet on a straight line

Balancing on one leg exercise

Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles

BALANCING EXERCISE ON ONE LEG AND ARMS FOLDED



SPPB: **7-9** GS: **0,9-1 m/s**



PROCEDURE

Stand up. Fold your arms over your chest (as in the picture).

Bend one leg while the other remains straight and keep it elevated for about 5 seconds; put your leg back down on the floor and do the same with the other one.

START

- Hold the position counting to 10 with each leg.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat for each leg.

FREQUENCY: Daily.

PROGRESS

When you notice that your ability has improved, increase the time you keep your leg up counting to 30.

- Change the position of your arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug.
- Close your eyes, but only if someone is with you to help you.













X

Walking exercise with feet on a straight line

Balancing on one leg exercise Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles

TOE-HEEL BALANCING EXERCISE





PROCEDURE

Stand up. Keep your balance, while placing all your weight on your toes. Stay in this position for a few seconds and then keep your balance while placing all your weight on your heels.

If it makes you feel safer, stand up using a table or railing for support.

START

- Stand on your toes and count to 10; then count to 10 again but this time standing on your heels.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat the set.





PROGRESS

When you notice that your ability has improved, then increase the time counting to 30.

- Change the position of your arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug.
- Close your eyes, but only if someone is with you to help you.













X

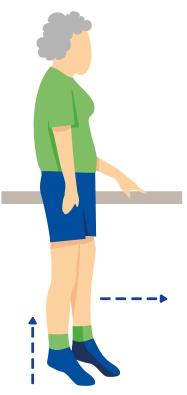
Walking exercise with feet on a straight line

Balancing on one leg exercise

Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles

WALKING ON TOES AND HEELS EXERCISE WITH HELP





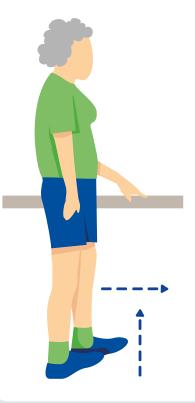
PROCEDURE

Stand up using a table or railing for support. Walk while placing all your weight on your toes. Pause and then start again but this time walking on your heels.

START

- Tiptoe counting to 10. Stop and count to 10 this time walking on your heels.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat the set.

FREQUENCY: Daily.



PROGRESS

When you notice that your ability has improved, increase the time counting to 30.

- Change the position of the arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug.
- Close your eyes, but only if someone is with you to help you.













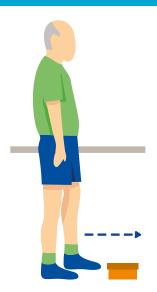
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Walking exercise with feet on a straight line

Balancing on one leg exercise

Balancing exercise on one leg and arms folded Toe-heel balancing exercise

Walking on toes and heels exercise with help Walking exercise avoiding small obstacles



WALKING EXERCISE AVOIDING SMALL OBSTACLES



PROCEDURE

Place small obstacles 10-15 cm (4-6 inches) in size, such as shoe boxes, sports shoes, etc. over a short trail.

Stand up using a table or railing for support. As you follow the trail, step over the obstacles without treading on them.

It is recommended that this exercise is performed with someone's help.



START

- Walk in a relaxed manner over the obstacles.
- Place 5 obstacles to start.
- When you reach the end of the trail, start again.
- Repeat 8 times.





PROGRESS

When you notice that your ability has improved, increase the difficulty and incorporate some of these guidelines:

- Change the position of your arms; for example, fold your arms or place them in a cross against your chest.
- Perform the exercises on different surfaces, for example on a rug.
- Close your eyes, but only if someone is with you to help you.















X

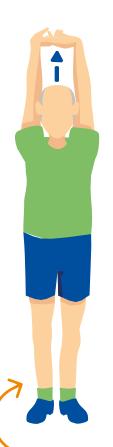
Arm stretching

Back shoulder

Neck muscle Side neck muscle Ankle flexibility

Arm muscle Thigh muscle

ARM STRETCHING EXERCISE



Standing

or sitting



PROCEDURE

Stretch your arms up with your hands interlinked, reaching up to the ceiling. Hold the position for 10-12 seconds. Then pause, relax your arms for 5 seconds and start again.

This exercise can be done sitting or standing.

START

- Start with 1 set of 3 repetitions (i.e. perform the movement 3 times), holding the position for 10 seconds.
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 3 repetitions more.

FREQUENCY: It is recommended that this exercise is performed daily, always after the muscle strength and cardio resistance session; it must be done at least 2-3 times a week.

PROGRESS

When you notice that your flexibility has improved, try to push a little higher, but without feeling joint or muscle pain, and hold the position for 12 seconds.















Arm stretching

Back shoulder

Neck muscle Side neck muscle Ankle flexibility

Arm muscle Thigh muscle

BACK SHOULDER MUSCLE STRETCHING EXERCISE









PROCEDURE

Place your hand on the opposite shoulder and keep your elbow on your chest. Pull your elbow with the other hand until you feel some tension in the back shoulder muscles.

Hold this position for 10-12 seconds (see picture). Pause, relax your arms for 5 seconds and start again.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.
- Then do the same with the other shoulder.

FREQUENCY: It is recommended that this exercise is performed daily, always after the muscle strength and cardio resistance session; it must be done at least 2-3 times a week.

PROGRESS

When you notice that your flexibility has improved, try to pull your elbow a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.















Arm stretching Back shoulder

Neck muscle

Side neck muscle Ankle flexibility Arm muscle Thigh muscle

NECK MUSCLE STRETCHING EXERCISE









PROCEDURE

You can either sit or stand while doing this exercise (if you do it sitting, put a pillow or cushion behind your back).

Turn your head to the right until you feel a certain tension in the neck muscles and hold the position for 10-12 seconds. Pause for 5 seconds and start again, turning to the left side.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: It is recommended that this exercise is performed daily, always after the muscle strength and cardio resistance session. It must be done at least 2-3 times a week.

PROGRESS

When you notice that your flexibility has improved, try to turn your head a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.















Arm stretching

Back shoulder

Neck muscle Side neck muscle

Ankle flexibility

Arm muscle Thigh muscle

SIDE NECK MUSCLE STRETCHING EXERCISE









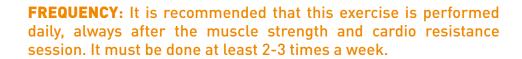
PROCEDURE

You can either sit or stand while doing this exercise (if you do it sitting, put a pillow or cushion behind your back).

Lower your head to the right until you feel a certain tension in the neck muscles and hold the position for 10 seconds (as in the picture). Pause for 5 seconds and start again, lowering to the left side.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.





PROGRESS

When you notice that your flexibility has improved, try to lower your head a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.















Arm stretching Back shoulder

Neck muscle Side neck muscle Ankle flexibility

Arm muscle Thigh muscle

SEATED EXERCISE - ANKLE FLEXIBILITY









PROCEDURE

Flex your foot upwards, pointing your toes towards your body (as in the picture). Hold the position for 8-10 seconds. Pause; then stretch your foot downwards to get the opposite effect.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: It is recommended that this exercise is performed daily, always after the leg muscle strength and cardio resistance session. It must be done at least 2-3 times a week.



PROGRESS

When you notice that your flexibility has improved, try to flex a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.















Arm stretching Back shoulder

Neck muscle Side neck muscle

Ankle flexibility

Arm muscle Thigh muscle

ARM MUSCLE STRETCHING EXERCISE







PROCEDURE

Sit on a chair away from the backrest with your arms hanging at the side. Then move your arms back, trying to reach the backrest (as in the picture). In this position, stretch your chest forward to cause tension in the muscles of the arms. Hold this position for 10 seconds. Then relax the stretch for 5 seconds without removing your hands from the backrest. Repeat.



- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: It is recommended that this exercise is performed daily, always after the muscle strength and cardio resistance session. It must be done at least 2-3 times a week.

PROGRESS

When you notice that your flexibility has improved, try to stretch your chest forward a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.

















Arm

muscle

Thigh muscle

THIGH MUSCLE STRETCHING EXERCISE





PROCEDURE

Stand behind a sturdy chair or a table. Bend one leg while the other is still stretched (as in the picture); try to pull on the leg with your hand until you feel a certain tension in the muscles of the back thigh. Hold the position for 10 seconds.

Pause for 5 seconds and start again with the other leg.

START

- Start with 1 set of 10 repetitions (i.e. perform the movement 10 times).
- Take a break of at least one minute but no longer than 3 minutes.
- Repeat another set of 10 repetitions.

FREQUENCY: It is recommended that this exercise is performed daily, always after the muscle strength and cardio resistance session. It must be done at least 2-3 times a week.

PROGRESS

When you notice that your flexibility has improved, try to bend your leq a little more, but without feeling joint or muscle pain, and hold the position for 12 seconds.



