

Step By Step Guide To The Best Lower Body Workouts For Seniors To Strengthen Your Back, Relieve Pain, Prevent Loss Of Bone Density, And Improve Coordination

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Lower Body Exercises for Seniors

Step-By-Step Guide To The Best
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To Strengthen Your Back, Relieve
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And Improve Coordination

Introduction

Have you been told that lower body exercises can treat osteoarthritis, but you are hesitant to adopt the idea because you do not know what exercises, in particular, you are meant to do?

Or have you been diagnosed with edema (or swelling) of the lower limbs and are looking for a guide that contains non-drug treatment interventions that are easy to understand?

If you have answered YES, keep reading because this is the book you have been looking for!

Seniors go through many lower-limb-related problems such as edema (lower limb swelling), osteoarthritis (affects knees, hips, and spine), bunions, and diabetic foot conditions, among others, which affect their entire lives. Yes, medicinal interventions do work, but for most seniors, the side effects associated with different medicines and the cost of purchasing some can be overwhelming. Therefore, it's essential to lean more towards exercises because; they are the best non-drug interventions that work!

Research affirms that physical activity is medicine for older adults^[1]. Specifically, strength training of the lower body, especially the legs, is very important for seniors because they are the balance and support system for the rest of your body. If you strengthen and build your leg muscles, daily activities such as standing up from chairs and climbing stairs become easier every day. In addition, having a healthy lower body will go a long way in lowering the risk of falls and other lower body-related illnesses!

However, if not done consistently and correctly, it may not give the results expected.

With the desire to exercise the right way in mind, having the following concerns is normal:

Why lower body workouts and not any other type of workouts?

How many types of lower body exercises can I choose from?

How much time should I give to working out?

What should I do when I get sores when exercising?

If these are some of the questions you have, you are reading the right book because it will answer them and much more in simple language!

The following are some of the topics you will find in this book:

- **Basics of the lower body**: Parts of the lower body and different challenges that seniors face with regard to these parts.
- Effective lower-body warm-up exercises for seniors.
- Types of Lower Body Workouts: Different exercises for different lower-body-related challenges that most seniors face.
- Rest and Recovery: Ways to ease post-workout sores.
- And much more!

It may be normal for most seniors to have lower body muscle mass problems, but it does not have to be so for you. This book will show you the easiest ways to strengthen different parts of your lower body, and by the time you are done with it, you will know how to have optimal lower body health!

Without much further ado, let us begin!

PS: I'd like your feedback. If you are happy with this book, please leave a review on Amazon.

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Chapter 1: Overview Of Lower Body Workouts For Seniors

For you to understand why lower body exercises are important, it is essential to understand the basic parts of the lower body and the challenges each part is likely to experience as we age. But before this, let us find a few statistics that prove that lower body exercises are essential for you.

How Effective Are Lower Body Workouts?

Falls have proved to be one of the most significant public health concerns that affect most seniors. A study done in 2014^[2] sought to get a tangible remedy to this situation. Results from this study agree that lower limb strengthening is the most effective solution in preventing falls in seniors!

Osteoarthritis, an illness that affects most seniors (more than 80 percent of seniors), is one of the leading causes of outpatient hospital visits by the elderly. In as much as medicinal interventions work, a study affirmed that lower body exercises focused on increasing strength, flexibility, and aerobic capacity are the most effective intervention in managing this illness. [3]

These few studies prove that lower body exercises are essential. With this in mind, let us dig into the basic parts of the lower body and look at the different factors that affect these parts in seniors.

The Basic Parts Of The Lower Body

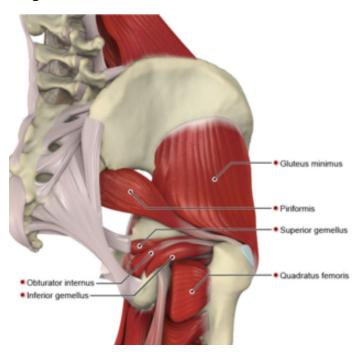
It is essential we understand the different parts of the lower extremities because taking them for granted may lead to problems with jumping, walking, running, standing, crouching, and so on.

Your lower body consists of the following parts:

- Hip
- Thigh
- Knee
- Foot
- Ankle

These parts are basic, but do you know what issues affect them as you continue aging? Let us look at this next chapter.

Chapter 2: Problems Affecting Lower Body Parts That Can Be Addressed By Lower Body Exercises Hips



Your hip joint is the largest joint of your body. It is a complicated part with several parts, such as; the femur, femoral head, and acetabulum, among other parts, and as we age, different problems may arise. These problems include;

Osteoarthritis

Osteoarthritis is a disease that has affected approximately 80 percent of people aged 55 and above [4]. This condition causes structural changes within single or multiple joints, resulting in pain and loss of

hip function. Osteoarthritis affects all joints but is more common in weight-bearing joints like the hips and knees.

Symptoms of osteoarthritis include:

- Joint swelling
- Stiffness
- Pain when moving
- Joint instability
- Sounds within the joints
- Reduced range of movement

A study done in 2022 affirms that [5] a combination of strengthening exercises with flexibility and aerobic exercises (we will look at different exercises that focus on hips in subsequent chapters) helps improve outcomes of pain and function for persons with osteoarthritis.

Rheumatoid arthritis

Research tells us that approximately 1.3 million older adults have rheumatoid arthritis^[6]. This is an autoimmune and inflammatory disease that causes painful swelling. This illness affects the lining of your joints which not only causes painful swellings but may also lead to bone erosion and, in other cases, joint deformity.

Some common signs and symptoms of rheumatoid arthritis are:

- Fatigue, fever, and loss of appetite
- Tender, warm, swollen joints
- Joint stiffness (it's mostly worse in the mornings and after a prolonged time of inactivity)

A study done in 2021 reveals that lower body workouts such as resistance exercises are among the best interventions for managing rheumatoid arthritis^[7].

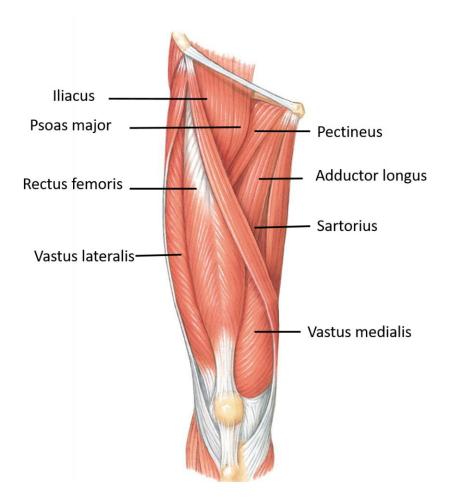
Ankylosing spondylitis

Research tells us that ankylosing spondylitis may be observed in young patients but is still common in seniors aged 50 and above^[8]. This is an inflammatory disease that causes bones in the spine to fuse. Ankylosing spondylitis affects the vertebrae in the lower back, the joint that's located between the base of the spine, the hip and shoulder joints, and the places where ligaments and tendons attach to bones along the back of the heel and/or in the spine area.

Some signs and symptoms of this illness include:

• Pain and stiffness in the hips and lower back, especially in the morning or after a long time of inactivity.

Thigh



Your thigh is located between the hip and the knee. It has muscles such as the adductors, hamstrings, pectineus, sartorius, and quadriceps, which help control the movement of your hips and legs. Your thigh has just one bone known as the femur that runs from your hip to the knee.

As we age, the thigh bone and its muscles are affected by several problems such as:

Muscle injuries

Research tells us that [9] for seniors aged 50 and above, the rate of muscle loss ranges from 1 to 2%. This means that 25 percent of people under the age of 70 and 40 percent of seniors over 80 years

are affected, sometimes to the point of being severely sarcopenic (this is the age-related loss of physical performance or muscle mass). As we age, inner thigh muscles, like the adductors weaken, leading to poor hip stability.

Bone conditions

The National Health and Nutrition Examination Survey, 2017 – 2018, reveals [10] that the prevalence of osteoarthritis among seniors was 12.6 percent. The inner thigh is affected by several bone conditions, such as osteoarthritis and femoroacetabular impingement. Osteoarthritis is a health challenge in which the cartilage on the ends of the bones breaks down, causing inflammation in the joints, while femoroacetabular impingement occurs when unwanted bone grows in the hip joint, causing rubbing and friction between other bones. Over time, these conditions damage the joints and cause pain in the thighs.

Hernia

Research tells us that groin hernia, a condition caused by emergency procedures, is the most common illness affecting seniors. This type of hernia and another called femoral hernia impacts the thigh. For

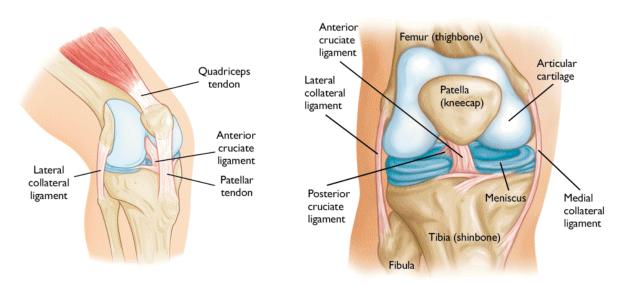
instance, femoral hernia sometimes appears as a painful lump in the inner upper part of the groin and the thigh.

Kidney stones

Kidney stones are minerals and hard salt deposits that form inside your kidneys. Kidney stones affect the thigh, mostly by radiating to the groin and the front areas of the thigh.

These illnesses can be eliminated by thigh exercises. In subsequent chapters, we will see how thigh exercises can help you attain optimal health!

Knee



The knee is one of the complex and largest joints in the whole body that joins the thigh bone and the shin bone. Other knee joint bones include the kneecap and the tibia bones. As we age, the muscles and ligaments get weaker. You see, your knee has two shock absorbers – the menisci. These two shock absorbers start to deteriorate as we age, so keeping them in topnotch working condition is essential.

With this in mind, seniors go through the following knee-related challenges:

Chondromalacia patella

This is the softening, thinning, and degradation of cartilage underneath the patella (it is located anterior to the knee joint and provides an attachment point for tendons and ligaments). A study done in 2014^[11] affirms that this illness affects seniors but can still be a challenge to younger patients too.

This illness has the following symptoms:

- Knee tenderness
- Dull, aching pain that is felt behind, below, and on the sides of the kneecap

• Knee osteoarthritis

Also known as wear and tear arthritis, knee osteoarthritis is caused by the wearing of the cushioning between the cartilage and the joints. A study done in 2001 discovered that [12] 25 percent of people aged 55 and above suffer from knee pain, and 10 percent of seniors aged 55 years and above suffer from knee osteoarthritis.

Here are some of the symptoms of knee osteoarthritis:

- Swelling
- Pain that becomes worse when you are active
- Feeling of warmth in the joint

- Stiffness in the knee, especially in the morning hours or after sitting down for a while
- Creaking, crackly sound when the knee moves
- Decrease in the mobility of the knee

Meniscal lesions

A meniscus injury occurs when/if one of the knee's shock absorbers gets torn due to age-related degeneration or trauma of the knee joint.

A study done in 2019 reveals^[13] that the prevalence of meniscal injuries in the general population is 12 to 14 percent which means it is a huge concern for seniors.

The following are some of the symptoms your knee may experience:

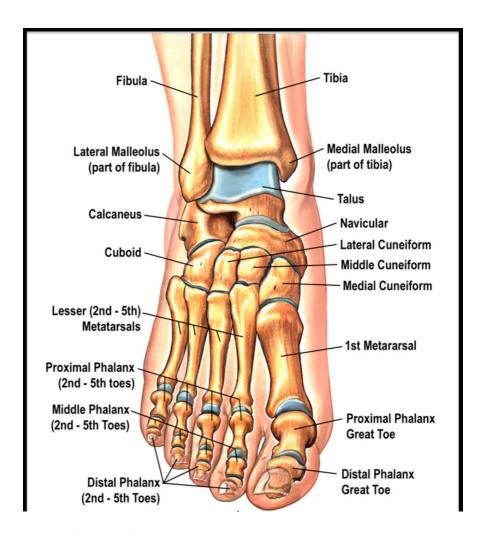
- Your knee may feel as if giving away
- A popping sensation
- Pain when rotating and twisting the knee
- Difficulties straightening your knee fully

"Exercise is one of the best solutions for knee pain," [14] according to Dr.

Lauren Elson who serves as an instructor in physical medicine and rehabilitation at the Harvard Medical School.

In subsequent chapters, we will look at the knee exercises that can help with different knee problems.

Foot



Your foot is divided into three sections:

- The forefoot
- The midfoot
- The hindfoot

Research [15] tells us that your foot has 29 muscles. Ten of these muscles originate outside the foot but cross the ankle joint to act on and help position it.

With aging comes the following are some of the foot problems that seniors face:

• **Fat pad atrophy-** This is the thinning and loss of the protective fat cushion located under the bones in the ball of the foot. Research tells us that [16] fat pad atrophy affects approximately 30 percent of seniors over 60 years.

Here are some of the symptoms of fat pad atrophy:

- Pain under your foot especially when walking on a hard surface without shoes
- A burning sensation in the heel or ball that gets worse after activity
- Dull aching in the heel
- Being able to feel your bone or bones under the ball of your feet through a thin layer of fat
- A knocking sound when walking on a hard surface
- **Morton's Neuroma** refers to the inflammation of the nerve tissue in the foot, usually between the third and fourth toes.

Here are some of the symptoms of Morton's Neuroma:

- Burning sensation in the ball of your foot. This pain at times extends to the toes
- Tingling or numbing sensations in the toe area
- **Bunions** This is basically a bony bump that is located on the inner edge of the foot, right where the bones meet. Bunions have become one of the biggest concerns for seniors as affirmed by <u>Research</u> [17] The results of this research shows that persons aged 18 and those past the age of 65 have bunions!

Here are the common symptoms of bunions:

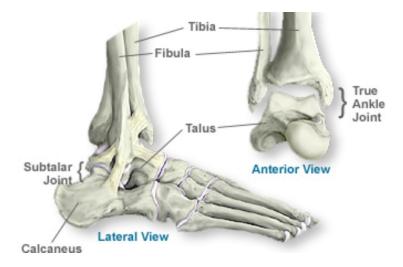
- Bulging bumps. These form mostly on the base of your big toe
- Persistent pain on the foot
- Challenges moving the big toe
- Swelling, redness, and soreness of the joint around the big toe

These few challenges we have discussed only try to give the big picture of what happens to the human foot. The question now remains,

"Can foot exercises really help?" Let us look at one statistic to prove

The results from a study done in 2020^[18] stated that foot exercises are best for patients suffering from diabetic foot diseases. The same study revealed that foot exercises have results that last longer as compared to addressing diabetic foot diseases by its own without incorporation of exercises.

Ankle



From the picture we have above, we can tell that the ankle is more of a crossroad (it's a joint) where the leg and the foot meets or links.

Your ankle includes the following parts;

- The talus
- The tibia
- The fibula

As we age, your ankle is affected by complications such as;

- Bursitis This results from inflammation of the fluid-filled sacs that cushions your joints. <u>Cooper University Health Care affirms that bursitis is more common in middle-aged and elderly persons [19]</u>, meaning that after 40, the risk of getting this illness is quite high. The symptoms of bursitis are quite easy to identify. You might experience severe pain in your joints and are likely to get red, swollen, or stiff.
- Gout Research tells us that the prevalence of gout in seniors is increasing each year^[20]. Gout is the buildup of unwanted quartzes in the joint area. Seniors who suffer from this illness caused by skyrocketed levels of uric acid in the blood mostly get swollen ankles.

The following are the main symptoms of gout:

- Intense joint pain
- Joint inflammation that causes tenderness and swelling
- Redness around the joint
- Limited range of motion as days go by
- Warmth in the joint

Pt Health, a body that offers care from the comfort of the home [21], states

that [22] despite bursitis being treated through interventions such as

medications, applying ice, resting, and surgery, it can be treated through stretching, strengthening, motion, endurance, and stability exercises.

Creaky Joints published an article in 2020 that urges all seniors with gout to engage in exercises^[23] because they help prevent excessive weight-bearing force on the joints, control the illness by lowering uric acid levels and ease one back into walking after getting a gout flare.

With all these problems and challenges in mind, one question comes to mind, "What exercises might help?" Let us look at different exercises that directly impact the lower body parts we have discussed so far.

Chapter 3: Types Of Lower Body Workouts For Seniors

This section will cover exercises that will focus on the following body parts:

- Hip
- Thigh
- Knee
- Foot
- Ankle

Lower Body Exercises: Hip Exercises

First thing that I believe is essential for you to note is the number of muscles in your hip area. There are 20 muscles which include;

- The outer thigh
- The hip flexors
- The inner thigh

These muscles are affected by several complications which affects everything from how low you can bend to how hard your body can work the spine. Specifically, the following are the most common hip related problems;

Hip pain is caused by several factors that include:

- **Bursitis** –This is the inflammation of the joint's fluid-filled sacs
- **Tendinitis** This is the bulging of sinews/tendons

- **Arthritis** This is the tenderness and/or swelling of one or more joints
- Fractures
- **Hip labral tear** This is an injury to the soft tissue that surrounds the hip's socket
- Avascular necrosis This is the death of the hip bone muscle
- **Sciatica** This refers to the pain that branches from your lower back area to the hips and buttocks and down the legs. Basically, it is pain from the sciatica nerve
- Cancer

With all these concerns in mind, let us answer one question;

Will hip exercises really help?

A study done in 2015 affirms the efficacy of hip exercises [24]. It states that persons with different types of low back pain can fully benefit from hip exercises because they work to reduce hip-related pain and improve hip function.

The following are the different types of hip exercises for seniors:

Different Types Of Hip Exercises For Seniors

The Standing Hip Flexor Exercise



With aging comes pain in the front part of the hip and/or the groin area. This may cause severe pain, weakness, and tenderness, especially when walking, climbing stairs, or lifting your knee towards the chest. To address these issues, do more standing hip flexor exercises.

Specifically, this type of hip exercise will stretch the front of your hip flexor. The standing hip flexor, also known as SHF, is a good exercise for you, especially if you have lower back pain. This exercise is also beneficial for building hip flexor strength.

To do this exercise, follow the steps below:

To make things easier, do this exercise while holding on to a chair or wall. If you become uncomfortable, leave this position and straighten your spine.

- Standing with your feet apart, then take a step forward with your right foot.
- Put your hands on your hips and rotate them forward and to the right.
- Next, slowly bend at the knees as you continue pushing your hips forward till you feel a stretch.
- Next, hold that position for around 90 seconds.

• Next, repeat the steps above, but this time, step forward with your left foot and rotate your hips to the left.

Standing Hip Extension Exercise



Most seniors experience what is known as pinched nerve or radiculopathy, which is caused by sitting down for long periods. When this happens, you might feel severe pain in the buttock, thigh, hip, groin, and hip area. You may also experience loss of movement, numbness, burning sensations, and tingling. Medication might help address such an issue, but exercises offer the best solution.

This hip extension exercise helps reduce/prevent lower back pains and stiffness experienced after prolonged walking, running, or standing. This exercise focuses on your gluteus muscles, fosters pelvic alignment, and gives support to your lower back. In addition, the standing hip extension exercise improves the stability and strength of your glutes, thus improving your balance and coordination.

To do this exercise, follow the steps below:

- Stand tall with your hands on a chair, a counter, or your hips. Add a resistance loop around your ankles to make the exercise harder.
- Next, squeeze your right glutes and push the right leg back until your foot is a few inches off the floor. Keep your legs straight,

and do not arch your back.

- Hold this position for five seconds, then reverse the movement to return to the original position.
- Last but not least, shift and repeat this exercise for the other leg.
 However, be keen to finish all reps on one side before you switch to the other side.

Butterfly Pose Hip Exercise



Having tightness in your hips, especially in old age, is dangerous. Hip tightness leads to illnesses such as ankylosing spondylitis, a type of arthritis that leads to severe pain. Hip tightness causes the hips to make a clicking or popping sound, especially when moving. Fortunately, exercise can address hip tightening issues.

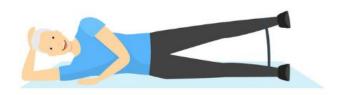
Specifically, if you have tightness in your hips, lower back, and inner thighs, the butterfly pose is the best exercise for you. It will not only work the abductors and the flexors but will also enhance flexibility in your lower back and loosen the hips, groin and inner thigh muscles tasked with drawing the legs together. The butterfly pose exercise will also boost stability and balance while stimulating the blood flow.

To do this exercise, follow the steps below:

- First, sit tall on the floor. To make this exercise more intense, move your feet closer in towards the hips.
- Next, bend your knee. Ensure the soles of your feet are at the center, making a butterfly-like posture, as seen in the picture above.

- Next, grab or hold each foot with your hands. Ensure that the spine is straight while the chin is tucked in towards the chest.
- Next, inhale and exhale. Ensure to hold your breath for around 5 seconds when you inhale and exhale.
- Hold this position for up to 2 minutes, then repeat this exercise ten times.
- To challenge yourself even further, bring your feet closer to your body. This will extend the hip muscles even further.

Side Hip Exercises



Most seniors experience spinal degeneration, a condition caused by many factors such as drying, tumors, arthritis, and infections. Exercises such as hip exercises will remedy all these situations by strengthening the muscles thus reducing the pain spasms.

The side hip raises exercise is basically a stabilizing exercise that strengthens the obliques, which are responsible for moving the spine. This exercise also stabilizes the pelvis and the lower back.

There are several side hip exercises:

• The Side Hip Openers (Fire Hydrants)



- First, start by being on all fours. Keep your knees directly underneath your hips and your hands underneath your shoulders.
- Next, lift one leg up, keeping its knee bent at a 90-degrees angle. Do this as you exhale and keep lifting until the leg is parallel to the ground.
- Next, lower the leg down. As you do this, inhale and keep the knee from touching the floor before you lift it again.
- Do this exercise 15 times. For the last movement, pulse your leg ten times in the upper position before you lower it.
- Next, repeat the same on the opposite side.

• Standing Side Leg Lifts Exercise



- First, stand facing forward with your left side near a wall, table, or chair.
- Next, use your left hand for support and balance, root into your left foot, and lift your right foot slightly off the floor.
- Next, lift your right leg to the side. Ensure to inhale and exhale, and keep your right toes facing forward.

- Next, slowly lower your leg. Do this as you exhale.
- Do 12 leg lifts on both sides.

Squats



If you follow the steps below correctly, squats will help reduce or even completely stop the pain in your hips. You see, you might be having hip problems because your glute muscles are not working as they should. So, what I am insisting on is, glutes help the buttock muscles open better, thus opening the hip joint and taking pressure off the hip pinching.

To do this exercise, follow the steps below:

- Stand straight with your feet hip-width apart. Place your hands on the hips or intertwine them in front of your chest.
- Next, tighten your stomach muscles. To do this perfectly, stand up tall, pull your shoulders gently and lift the chest. When breathing out, pull your navel into your back. This will engage your abdominal muscles, making the spine and pelvis stable.

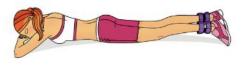
• Next, lower yourself down as if sitting in an invisible chair. To do this properly, bend your knees (ensure you keep your upper body as straight as possible) as if intending to sit down.

Lower yourself as far as possible without leaning your upper body more than a few inches forward. If you have knee issues, keep your squat not deeper than a 90-degree angle, but ensure that your thighs and the floor are in a parallel line.

Your knees should not go too far outward. In addition, do not let your knees cave inwards. Instead, press your knees outwards in a way that they stay aligned with your feet as you squat down.

- Next, lift back up. To do this, straighten your legs to lift back up, but avoid locking your knees when you finally get to a standing position.
- Next, repeat the movement Three sets of 15 reps will do just fine.

Prone Straight Leg Raise Exercise





Most seniors experience hip pain and challenges when moving the hip, knee, or ankle area. As stated earlier, osteoarthritis is a common hip challenge faced by most seniors, making functioning quite painful.

However, hip exercises will deal with such and other hip-related illnesses by making the hip muscles stronger and stable.

Specifically, the prone straight leg raise exercise ensures safe and effective movement at the hips, knees, and ankles. This helps relieve hip pain and improve the core muscles.

To do this exercise, follow the steps below:

- First, start by lying face down on the floor. You can use a mat.
- Next, tighten your core muscles by sucking in your stomach, but remember to keep breathing.
- Next, slowly lift one leg up. Ensure to keep your stomach on the ground and your buttocks tight. After 3 seconds, gently lower your leg. Avoid rotating your back or pelvis while lifting your leg.
- Repeat this exercise ten to fifteen times.
- Lastly, repeat the same exercise on the other leg.

Standing Hip Abductors Exercise



Loss of mobility for you and other seniors is not an uncommon thing. With old age, your physical activity reduces, strength and balance become

impaired, and illnesses such as diabetes and arthritis make things worse.

The standing hip abductor exercise boosts stability and strength specifically in the hip abductor muscle so that running and walking becomes easier. Your core will be strengthened and pains when walking will be a thing of the past.

To do this exercise, follow the steps below:

- First, stand with your legs shoulder-width apart. You can place your hands on a table or chair for more stability.
 - -To protect your back from injury, perform an abdominal draw. An abdominal draw is done by pulling the belly button in towards the back.
- Next, raise one leg off the ground and move away from your body as if you were going to kick the wall. Next, return the foot to the ground. Hold this position for 3 seconds before you return to the center.
- Repeat this exercise 10 to 15 times, then switch your legs and repeat the exercise on the opposite side. Ensure to maintain an upright posture and avoid leaning to one side.

Hip March Exercise



This exercise is best for seniors with hip pains that cause walking challenges. Since these pains are caused by weakness of the hip muscles, this type of hip exercise activates the hamstrings and glutes; hence is perfect for increasing core stability, fostering the ability to walk, and relieving knee and hip pain.

- First, sit on a chair, and keep your feet flat on the floor. Avoid slouching by ensuring that your back is upright against the chair. As for the hands, let them rest at the sides of the chair.
- Next, lift the right knee as high as comfortable, then lower it.
- Next, alternate the lifting of knees and repeat ten times on each side. Ensure to breathe regularly all through.

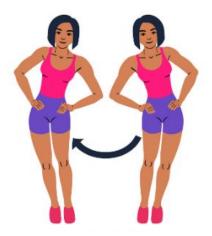
Knee-To-Chest Pose Exercise



If you spend much time seated, e.g., when reading or watching your favorite show, you are likely to experience tightness in your back area, which can lead to severe hip pains. To address this situation, do more kneeto-chest poses. This exercise will ease any muscle imbalances brought about by prolonged sitting, promotes good posture, improves blood circulation, and increases mobility.

- First, lay down on your back (you can use a mat) and fold your knees. The knees should be above your chin or the chest. Also, keep the knees bent and wrap your arms around them.
- Next, pull your knees and chin until you feel a stretch around the lower back area. Hold this position for around 20 seconds.
- Next, unfold the knees and neck while still laying on the mat with the legs extended and lifted.
- In between the rests, ensure that your legs are lifted. Basically, your feet should not touch the floor.
- Repeat this exercise around ten times.

Hip Circle Exercises

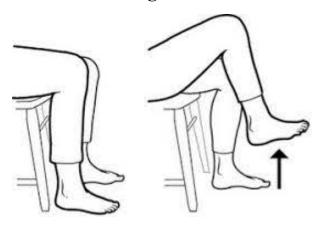


As a senior, you might experience severe tightness of the back and hip muscles, weakness of the core, and complications with the waist. The tension and stress around your hip area may make it hard for you to be flexible enough to make any movement. However, through the hip circle exercise, your general leg mobility will increase, and your glutes will become stronger.

- Stand upright, keeping your feet a little wider than your shoulderwidth distance.
- Next, bend your knees slightly, then place your hands on the hips.
- Next, rotate your hips slowly while making big circles and keeping your toes firm on the floor.
- Do a complete set in a clockwise direction and repeat the same for the anti-clockwise direction. For each rotation, hold for 30 seconds in each direction.
- There may come a time when you may have trouble with balance. If this happens, reduce the circle size, or hold onto a firm object for

support.

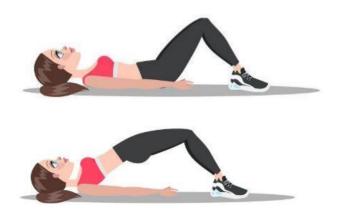
Seated Marching Exercise



It is common for seniors to get challenges climbing stairs or getting up from chairs, but these problems will disappear through the seated marching exercise. This is because; this exercise strengthens hip flexor muscles (the muscle responsible for lifting legs).

- First, sit back in your chair. Ensure that your back is straight.
- Next, lift your legs up and down alternatingly as if you are marching up the stairs.
- Repeat ten times on each leg, rest for about 30 seconds and repeat the exercise.

Bridges Exercise



Most seniors have trouble moving around in bed or getting up off the floor or the couch. Through the bridge exercise, glutes will be strengthened, making it easy for you to address these challenges. This exercise will also provide strength and stability for your legs, thus helping with balance and coordination.

- First, tighten your abdominal and buttock muscles. To do this perfectly, push your low back to the ground.
- Next, raise the hips till it creates a straight line from the knees to the shoulders.
- Next, squeeze the core and pull your belly button back towards the spine.
- Hold for 30 seconds. Lower the hips to the original position.

Clamshells Exercise



Most seniors have trouble standing straight. One of the best exercises that address standing balance issues is clamshells. This exercise will help strengthen glute muscles, making it possible to have enough support and stability for the pelvis.

To do this exercise, follow the steps below:

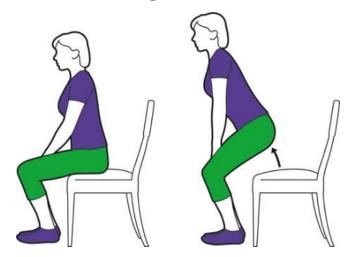
- Start by lying on your back. Bend your knees and firmly and flatly place your feet on the floor. Use a resistance band place it around your thighs, right above the knees. Ensure that your feet are kept flat/ push your knees out to the side against the band.
- Hold for around 5 seconds, then bring your knees back together.
- Repeat ten times.
- Finally, rest, then repeat for a total of three sets of ten repetitions.

If you would want to take this exercise a notch higher, follow the steps below:

• First, lie on your side (say the right side) with your knees bent. Stack a resistance band around the thighs by setting it above the knees.

- Keeping your ankles together, lift your left knee towards the ceiling. Kindly do not allow your body or hips to roll backward.
- Next, repeat this exercise ten times.
- Switch sides such that you are now lying on your left side.
- Finally, rest, then repeat for five sets of ten repetitions on each side.

Sit-To-Stand Hip Exercises



You might be experiencing weaknesses in the legs, core, and back either due to weakness that comes with aging or due to other complications. The good news is that the sit-to-stand hip exercise may help remedy this, as it will strengthen your core, legs, and back muscles. This will give you more stability, especially if you have ever had hip or knee surgery or are having challenges getting up from a couch, out of a car, or up from a toilet seat.

To do this exercise, follow the steps below:

• First, sit on a chair that's placed on a firm surface to avoid sliding. Also, find a chair with a firm seating surface because using a couch or soft chair will make it hard for you to stand up.

- Next, lean your body forward such that your nose is in line with your toes.
- Next, use your legs to push yourself up from the chair. Remember not to use your hands.
- Next, once you stand upright, squeeze your glutes at the top to help fully extend your hips. Hold this position for five seconds, then push your hips back and slowly lower yourself back onto the chair without plopping down.
- Repeat this exercise ten times.
- Once done, rest for around 5 minutes.
- Repeat for three sets, ten repetitions each.

If you would like to take this a notch higher, follow the steps below:

- Stand in front of a chair or a table.
- Next, push your hips back and slowly lower yourself towards the chair. Ensure that you lean backward and that your knees are traveling over your toes.
- Next, lightly tap the chair with your buttocks, then return to the standing position.
- Repeat this exercise ten times.
- Rest for five minutes, then repeats this exercise do three sets that have ten repetitions each.

Straight Leg Raise Exercise



The straight leg raise primarily addresses lower back pain, which is a major concern for seniors, by helping strengthen the quadriceps and the upper thigh. If you have any knee condition, this exercise is best for you as it does not stress the knee joints.

To do this, follow the steps below:

- Lie on a mat with your back and keep your hands by your sides or underneath the glutes.
- Next, raise your legs until you get to an L-shape. Hold this position for around 10 seconds. Lower both legs to the original position.
- Last but not least, repeat three sets of ten repetitions each.

Pigeon Pose Exercise



Just like knee-to-chest exercise, the pigeon pose exercise is perfect for seniors who spend most of their time seated. Through this exercise, the muscles that surround your hips and lower back get stretched. In simple terms, the pigeon pose exercise works as a hip opener and forward bend. It will not only stretch your hips but also stretch your back, psoas, and piriformis.

- Start by being on all fours on a soft surface or a yoga mat. Support your knees with something soft if it gets uncomfortable.
- Next, lift your right knee towards the chest and bring it forward until it rests on the floor between your hands.
- Next, stretch your left leg out behind you.
- Next, lift your chest and use your hands to get more balanced. Remember to always keep your hips in a square position.
- Next, support your right hip with a pillow or blanket if you feel a stretch in your left hip flexors. Hold this position for ten breaths (one

breath should be done once through the nose and out through the mouth).

• Once done, repeat the steps above on the other side.

Mini Squats Exercises



Most seniors do not want to work out because of the pain they have around the hip area. With such pain, you might have trouble bending or even walking. However, the mini squats will help strengthen and tone your hip muscles, which will, in turn, prevent/reduce the pain in your hip area.

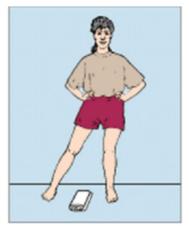
Mini squats will improve your flexibility and coordination while at the same time increasing your strength. In simple terms, practicing this exercise will make doing simple house chores easier for you meaning you will not have to depend on others too much!

- Start this exercise by standing upright with both feet firmly placed shoulder-width apart. You can use a chair, wall, or table to get more balance, although this is not mandatory.
- Next, keep the feet flat on the ground and carefully bend your knees and lower body into a squat position. Ensure that your back is straight and your torso is leaning forward.
- Once you bend your knees such that they are directly above the toes, hold this position for 5 seconds. Return to a standing position.

• Repeat this exercise ten times. Do three sessions of this exercise.

Side-Step Exercise

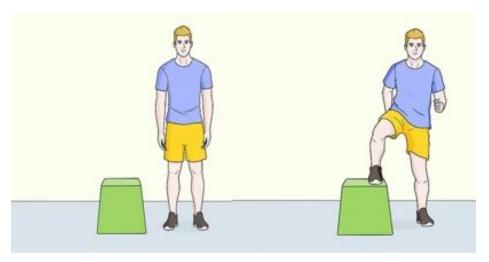


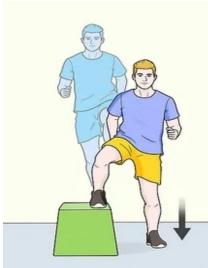


Most seniors have low back injuries such as facet joint osteoarthritis, spinal compression fracture, and lumbar spinal stenosis. To address these issues, you should adopt side-step exercises. Side-step exercises will strengthen your underused muscles while at the same time improving balance, coordination, and flexibility and increasing spatial awareness.

- First, start with your knees slightly bent while your feet are together.
- Next, take a side step using your left foot, then step with your right foot to meet the left foot.
- Step 3 times, but keep steps comfortable and short.
- Repeat these steps in the opposite direction.
- Lastly, do this exercise for 2 to 3 minutes per set.

Lateral Step-Up Exercise





As a senior, you might experience weaknesses in the leg and knees and/or have trouble standing straight. To eliminate these problems, adopt this form of hip exercise. Lateral step-up will improve your balance and reduce weaknesses that limit leg strength, improve your hip stability, stress your knee extension, boost metabolism, and keep your heart rate up.

To do this exercise, follow the steps below:

• First, stand with an exercise box or bench on your right side.

If this is your first time performing this exercise, start with a bench of about 3 inches in height, but if you are accustomed to it, choose a bench height of around 6-12".

- Next, lift your right leg, step slightly to the side, then plant your right foot firmly on the bench.
 - Ensure that all your toes are in line.
- Once comfortable, shift your weight to your right foot while at the same time keeping the left foot firmly on the ground.
- Next, with your weight still on the right foot, use your core to pull
 your left leg up. The trick is to lift your hips and shoulders until they
 are even. Doing this should leave you standing tall with your left foot
 hovering in the air.
- Next, bend the right knee to lower the left foot smoothly on the ground. Relax for 5 seconds. As you come down, firmly plant your heel on the ground because if you lift it, you might lose your balance.
- Finally, repeat these movements for you to do a complete set. Do ten reps.

Chapter 4: Lower Body Exercises: Thigh Exercises

Having strong thighs for seniors cannot be underestimated. This is because seniors go through several thigh-related problems such as:

Pinched Spinal Nerve- This happens when too much pressure or compression is applied to the nerves by surrounding tissue. It is characterized by numbness or tingling in the thigh, weakness in the thigh muscles, and difficulty rising or sitting, among others.

Spinal Stenosis- This is the narrowing of spaces in the spine, a state that puts pressure on the nerves traveling through the spine. This illness mostly affects the lower back and neck area. It is manifested by pain in the thighs and legs and feelings of numbness in the thighs.

Trauma- This is a traumatic blow to the thighs that leads to swelling and tenderness (it's often very painful).

Quadriceps/ Hamstring Tendonitis- This problem can be caused by overexerting of physical activities, and it is characterized by pain in the back and front of the thigh, difficulty in going up the stairs or walking due to pain, or a feeling of weak muscles in the back or front of the thighs.

The truth is, these thigh-related complications are serious, and exercising might seem like a less-likely effective intervention. However, several facts proved otherwise:

The European Journal of Applied Physiology agrees [25] that having a strong

leg extension helps prevent falls. Another study done in 2001 affirms [26] that

thigh exercises such as drop squats reduce the pain of a jumper's knee in a 12-week period!

So, what are the different types of thigh exercises available?

Different Types Of Thigh Exercises For Seniors

The Stability-Ball Hamstring Squeeze Exercise



As we age, our hamstrings tighten more than they did when we were young. In addition, spending too much sitting makes things more worse. You may have also noted that your buttocks lose shape and flatten due to the low amounts of fat in them. These two main challenges can be addressed by the stability ball hamstring squeeze exercise.

This exercise is simple but effective. It will strengthen your hamstrings, core muscles, and glutes. Since this exercise uses a ball, your body will have more instability, forcing you to pull in your core for stability. If you have hip or knee injuries and cannot do traditional exercises such as lunges or squats, this exercise is for you because you will do it lying on your back.

- Start by lying on your back. Your arms should be by your side, and your feet on top of the stability ball.
- Next, squeeze your abs and glutes, then lift your body up. Ensure to lift until you get into a straight line, with only the shoulders and head

relaxed on the mat.

- Next, pull your heels towards your glutes (the ball should be rolling inwards), then push the ball back out. Continue with this pattern for the desired number of reps.
- Finally, lower your body back to the mat.

Lateral Lunge Exercise



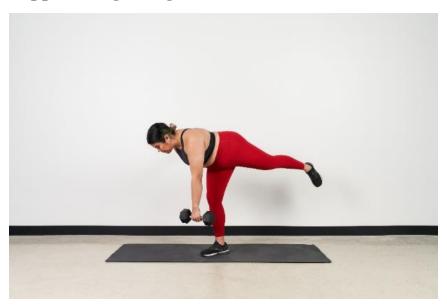
As you age, you may have noticed that your stability fails. This is happening because your body is losing its sensory ability – by this I mean, the ability to pass information and coordination. The lateral lunge exercise addresses stability and balance issues by adding muscle balance around the hip, inner thighs, outer thighs, and knee joints, which will go a long way in preventing future injuries.

- First, stand with your feet hip-width apart.
- Next, make a big step towards the left side, bend your left knee, then push the hips back and lower yourself until the left knee is bent at a-

90 degrees.

- Finally, push back to the original position.
- You can either alternate or complete all reps (do 12 reps) on one side before moving on to the other side.
- Kindly note that your torso may lean forward as you step side to side. However, this should not raise any alarm. Just ensure that your back remains flat.

Support Single-Leg Deadlift Exercise



The support single-leg deadlift exercise mainly works the hamstrings and, to some extent, the erector spinae. You see, tight hamstrings contribute to lower back pain. This exercise is particularly helpful for seniors with tight hamstring muscles arising from too much sitting.

The single-leg deadlift will strengthen and tone your buttock muscles and improve balance.

To do this exercise, follow the steps below:

• First, stand.

- Next, with pull your weight on one leg.
- Next, hold a dumbbell with the other hand. While doing this, place your other palm is facing the thigh.
- Next, use the free leg that is not on the ground stepping a few feet behind the body.
- Next, lift the heel of the leg that has the body's weight on it but ensure that the toes are placed tight and firm on the floor.
- Next, bend that leg slightly.
- Next, lean forward. This means you will be hinging at the hips. Ensure that your back is straight.
- Next, return to the original position.
- Do ten reps on each side, rest for 45 seconds, then do the exercise two more times.

You can also follow the below steps:

- First, stand.
- Next, move your body's weight to one of your legs and drive the other heel right into the ground. Ensure it is firm.
- Next, push your bottoms back.
- Next, pull the shoulder joint downwards and backwards.
- Next, left one of the legs behind you. Do not overlift. Rather, maintain a slight bend in the right knee area.
- Next, lower your body.
- Next, drive your right foot through to stand back.
- Next, switch the feet then redo the steps above.

The Resistance Band Lateral Step-Out Squat



Due to decreased muscle loss around the hip and thigh area, doing heart warming activities such as picking your up your grandchildren becomes painful and almost impossible. It is through this exercise that your buttocks, thighs, and hips will be strengthened and not forgetting the core and the back, thus improving balance and stability.

- First, stand.
- Next, 'wear' a resistance band. Slide it up until it reaches right below the knee as the above picture illustrates.
- Next, interlock your hands.
- Next, part your feet slightly then give it a slight bend (you can call this a squat posture).
- Next, take 5 to 10 steps to the left, then take other 5-10 to the right.
- Perform ten repetitions on each side, rest for 45 seconds, then repeat for two more rounds.

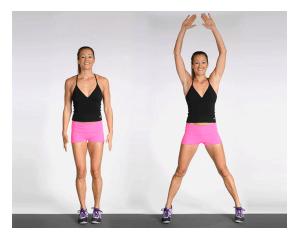
Jumping Jacks



Have you ever looked at your thigh muscles while in front of a mirror and notice that they have sagged and appear malnourished? Well, not to worry because this exercise will prevent further loss of muscle mass while at the same time, toning those sagging muscles!

There are different jumping jack variations suited for seniors:

Clap Jumping Jacks



To do this exercise, follow the steps below:

• First, stand straight

- Next, join your hands. Curve your shoulders backwards, extend your hands and engage the core
- Next, jump and split your legs apart.
- Next, while in the air, move your hands away from your body then while going down, bring them to the side of the body.
- Next, land softly.
- During this motion, bend your knees slightly
- Repeat this exercise 20 times.
- For effective results, do three sets of 20 repetitions each.

• Alternating Jumping Jacks



To do this exercise, follow the steps below:

- First, stand straight
- Next put your feet as close together as possible.

How do you do this well?

Well, position your hands by the side of the body.

Also, place your palms facing your body, shoulders pushed backwards, and the core engaged.

- Next, put your legs apart then jump.
- When coming down, bend the knees slightly.
- Next, jump and alternate the feet with one being infront and the other being at the back. Alternate the hands too.
- Do three sets that have 25 repetitions each

The Bulgarian Split Squat Exercise



The CDC states that 36 million falls have been recorded in seniors, among which 32,000 have resulted in deaths^[27]. To help you not become a statistic, I suggest you do this form of exercise.

The Bulgarian-spilt squat exercise will strengthen your leg muscles, making your feet and back more stable while, at the same time, increasing your leg strength.

To do this exercise, follow the steps below:

- First, get yourself a raised surface, let's say a stool.
- Next, stand 3 feet in front of the raised surface.
- Next, extend one of the legs behind you and put the toes on the tool.
- You can decide to either put yout toes in two positions; pluckered or flat. What is important is, to keep the shoulders as firm and square as possible.
- Next, Lower yourself and hold for about 5 seconds.
- Finally, go to the original position.

The trick to this exercise is to ensure that your weight is evenly distributed on your foot. While doing this exercise, do not move forward

on the toes or overdo the pushing through the heel movement.

Step-Up Exercises



When you got to the fourth floor, that is 40 years, you may have not noticed but you lost muscle mass by 15 percent every single year. It is due to these increasing muscle loss that you found it difficult to perform physical activity.

It is through the step up exercises that your body will retain some muscle mass, thus building muscles such as the quadriceps, glutes, hamstrings, and adductors.

- First, get an object with a high step such as a small stool or bench or a plyometric box (this is a special box specifically used to perform different types of exercises).
- Next, stand in front of the said box.
- Next, place your right foot on top of the elevated surface.
- By this time, you should be standing on it but the foot should be left hanging right behind you.
- Finally, step down gently with the left leg and perform the next repetition leading with the left foot.

For this exercise, you can use your body weight or hold dumbbells throughout the movement.

Sumo Deadlift Exercise



Lower back pain is a major disabling health condition for seniors aged 60 and above. What's scary is that the causes of lower back pain are mostly non-specific and self-limiting, so it is essential to get an intervention that gives long-term solutions. One of the best solutions is the sumo deadlift exercise.

As we have discussed so far, weight lifting is efficient for senior adults [28]

because it works the entire body, and in this case, it works the thighs. Specifically, the sumo deadlift focuses on the glutes and quads and helps relieve pressure on the lower back.

To do this exercise, follow the steps below:

 First, stand behind a loaded barbell. Your stance should be wide, and your toes slightly pointed out. Kindly note that your stance should be broad enough for your arms to be inside your knees. In addition, your elbows should be inside your knees, with your hands on the bar inside your feet.

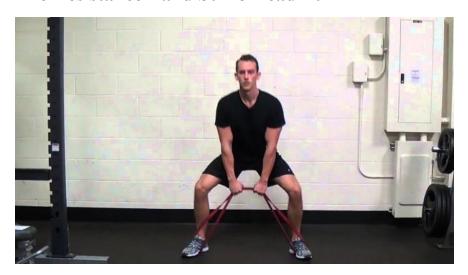
Your shin should remain perpendicular to the floor, while at the same time, your back should be flat and your shoulders above the bar.

Your knees should be wide and pushed out, your outer hip muscles should feel activated and strong, and your torso should be upright.

- Next, bring your hips towards the bar. This should brace your core. Ensure you engage the lower back, glutes, and legs.
- Next, turn your quadriceps. This will rotate your femur open in the hip sockets. It will also line up your knees together with your toes and feet.
- Next, grasp the bar using an overhand or a mixed grip and slide your shoulder blades back and down. This should lock your shoulders into place.
- Next, inhale and drive your legs to the floor. Do this while you pull the bar up. Ensure that your chest is high and that your hips are down.
- Next, pull your bar along your legs. Pull as close as you can towards your body and press through the heels the same way you push your legs to raise up.
- Next, squeeze your glutes and lock out your knees and hips.
- Next, slowly and carefully go to your original position. Ensure you
 keep your bar close to your body. This will help avoid injury to your
 lower back.
- Repeat this exercise ten times.

There is one other variation	of this exercise	that is perfect	for seniors, that
is:			

The Resistance Band Sumo Deadlift



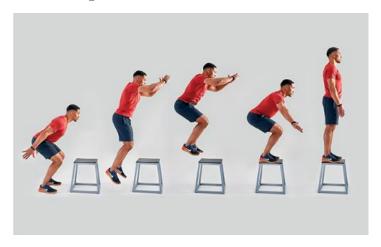
- First, hold your resistance band as shown in the picture above. Ensure your chest is high and your hips are down.
- Next, lock out your hips and squeeze your glutes.
- Now lower your back down gently to your original position.
- Repeat ten times. Do three sets of 10 reps. Rest for 45 seconds in between the rounds.

You might be wondering what deadweight is perfect for you. Go through the following table to find your perfect weight.

Age	Beg.	Nov.	Int.	Adv.	Elite
50	154	219	299	392	492
55	142	202	277	362	455
60	130	185	252	331	415
65	118	167	228	299	375
70	105	150	205	268	336
75	94	134	183	240	301
80	84	120	164	214	269
85	76	107	147	192	241
90	68	97	132	173	217

These weight measurements are from the Strength Level. [29]

Box Jumps



With aging comes poor coordination and balance due to decreased bone density. However, through box jumping, you can increase your bone density, which will help boost your balance and coordination because it targets all muscle groups such: as the glutes, quadriceps, calves, and hamstrings.

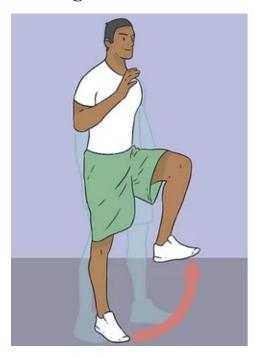
To do this exercise, follow the steps below:

- First, get yourself a box or something that you can step on that is a little higher from the ground
- Next, stand feet shoulder-width apart.
- Next, bend your knees slightly and drop down. Ensure to bring out your arms behind you.
- Next, lift yourself upwards as you jump onto the box.
- Finally, land softly on both feet with knees slightly bent.

Step back down to the original position and repeat. If you aim to increase your explosiveness, do 3 to 4 sets of 5 reps with 5-minutes rest between the sets.

- If you seek to achieve endurance, choose a lower box, then complete three sets of up to 20 reps maximum with 1-minute rest between sets.
- Choose a box that is on the shorter side until you get accustomed to the exercise. If you are 5' 4 ft tall, use a 14 or 16-inch box; if you are 5 foot 9 inches or taller, use a 16- or 20-inch box.

Walking Exercises



As this book has already mentioned, aging comes with joint and lower body muscle-related issues. Therefore, regular walking will help tone your legs and abdominal muscles, which helps manage or prevent illnesses such as arthritis.

Walking incorporates various types of resistance and allows you to change your direction. Walking will basically bring your inner thighs together while, at the same time, increasing your range of motion. It also shifts the pressure and weight from your joints to your muscles.

When walking, make sure to lift your knees as high as you can with every step. Keep your knee and hip in line.

If you wish to make your walk more challenging, hold your knees at the top of the movement for about 3 seconds before making the next step. The high-knees should be done for 30 seconds at a time and should be repeated two to four times.

Chapter 5: Lower Body Exercises: Knee And Foot Exercises

As mentioned in chapter two, one of the knee's primary roles is joining the thigh and shin bone. This connection needs good 'shock absorbers' (the menisci) but aging deteriorates them. This is one of the main reasons that exercising is needed.

Also, to recap what we discussed in chapter 2, your feet are flexible structures made of joints, bones, muscles, and soft tissues that allow you to stand upright and perform activities such as jumping, running, and walking.

The flexibility of your foot and knee reduces as you age and that is the reason behind the persistent soreness and foot related pains. To help address these issues, I recommend that you do the following exercises because they provide better foot and knee support and protection

The knee and the feet can experience several problems such as:

- Strained and sprained ligaments
- Cartilage tears
- Arthritis
- Tendonitis
- Knee dislocation

These problems are mostly treated through surgeries and medication. However, there are several knee exercises that you can add to the other interventions to speed up the healing process. This chapter will cover ankle exercises that improve the four main ankle movements:

Plantarflexion



This is a movement where the top of your foot points away from your leg. This movement helps you stand on the tip of your toes or point your toes.

Dorsiflexion



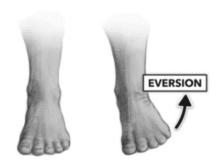
This movement is the backward bending and contracting of your foot or hand.

Inversion



This is the movement that occurs when you twist your foot upward, making your ankle roll inward.

Eversion



This is the movement of the sole away from the median plane (this bisects the body vertically through the midline by the navel, dividing the body into the right and left sides).

Different Types Of Knee Exercises For Seniors

Calf Raises

Harvard University published an article^[30] that showed that mobility is one of the main things desired by seniors. Whether you need to walk across your house to the bathroom or the dining room, get up from a chair or your bed, or simply go for a walk or to your garden, you need a huge sense of mobility.

Calf raises will target the muscles on the back of your lower legs, specifically the gastrocnemius muscle, which runs down your leg. Calf raises also target the soleus muscle, a muscle of the calf of your leg located just beneath the gastrocnemius muscle (this is the chief muscle of the calf of your leg).

This guide has rounded up 3 of the most effective calf raises for you to get the best results on your mobility. You can rotate these exercises weekly to keep things fresh and to hit your calves from every angle.

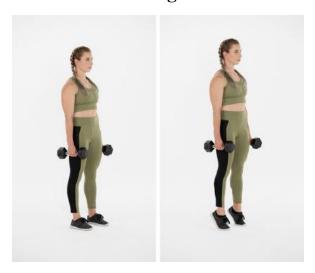
These variations include:

The Single-Leg Calf Raise Exercise



- Stand on an elevated surface, e.g., a weight plate, an aerobic bench, or an incline bench.
- Next, hold a dumbbell in your right hand by the side and place the ball on your right foot.
- Next, cross the left ankle behind your right and hold onto the wall or any firm surface.
- Next, slowly lower the right heel towards the floor.
- Next, lift the heel of your right foot.
- Hold this position for a few seconds.
- Next, lower yourself back to the starting position. Ensure to perform equal reps on both sides.

• The Standing Calf Raise Exercise



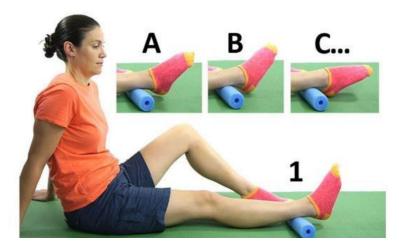
- First, stand holding your pair of dumbbells at the sides. Ensure the dumbbells are at your sides with your feet hip-width apart and your toes facing forward.
- Next, rise onto your feet-balls and squeeze your calf muscles once you reach the top of the move. As you rise, squeeze your calf muscles.
- Hold this position for about 5 seconds. Lower your heels slowly to the original position. The trick is to go slow because going too fast will work your Achilles tendons more, while the goal is to work the calf muscles.
- Repeat this exercise as desired. Just be sure to slow down the tempo.

• The Donkey Calf Raise Exercise



- First, stand on a short step (you can use a weight plate). Tip toe on the edge of the step.
- Next, use both hands to hinge forward at your waist and hold onto a bench.
- Lift your heels as high as possible while squeezing your calf muscles at the top of the move.
- Hold for two seconds.
- Finally, lower your heels to the floor and repeat this exercise around ten times.

The 'Alphabet Exercise"



This exercise will help you build ankle and foot strength, which will help you become more balanced (you will need this to prevent falls).

- First, sit on a carpet or yoga mat with your legs in front of you.
- Next, rest your right calf on a rolled towel.
- Next, write the letters of the alphabet using your foot in mid-air.
- Do this exercise three times each day or more

Resisted Ankle Flexion (Plantar) Exercise



Having challenges flexing your ankles comes from having too tight calves. To untighten the calves, do more of the resisted ankle flexion exercise because it targets the plantaris muscle!

- Sit on the floor with your left leg bent at the knee. The heel and the right leg should be on the floor
- Next, get a resistance band and half-wrap it around the front part of the straightened foot as shown in the picture above and hold both ends.
- Next, wiggle the toes. That is take the toes forward and back.
- Do three sets of 10 wiggles on each foot.
- Do this exercise at least three days a week.

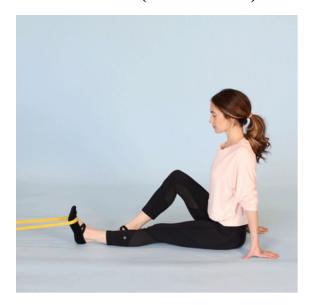
Toe Raises And Heel Drops On A Step Exercise



Every senior requires a strong ankle because, as we mentioned earlier, a good balance and mobility factor reduces the risks of falling. The toe-raises and heel-drops exercise will strengthen your ankles (specifically the largest tendon, the Achilles tendon).

- First, stand as if you are tip-toeing.
- Next, lift your hands to shoulder height as shown in the picture above
- Next, do 2 or 3 sets of 10 lifts each.
- It's recommended to do this exercise every day.
- You can also take the exercise a notch higher by holding some weights while doing this exercise.

Ankle Flexion (Dorsiflexion)



As we discussed earlier, plantar exercise is important to seniors because it flexes any tight calves. Dorsiflexion exercise works the anterior compartment of your leg, and just like the plantar exercise, it will increase your stability and balance.

- First, sit. Get yourself a sturdy surface such as a floor. Your bed can suffice too.
- Next, spring your legs out in front of you.
- Wrap a resistance band around a chair or table. You should use something stationary and firm
- Now wrap the resistance band around one foot.
- Gently and slowly point your toes to have the feet looking upwards and towards you.
- Finally, return to the original position.
- Do three sets of 10 flexes on each foot.

Do this exercise three times a week.

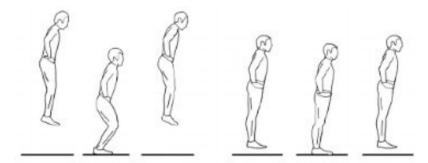
Toe-Heel Walks



Walking for over 50 years will definitely cause strain to your ankles. Therefore, you need exercises that will help your ankle withstand the stress of movement every day. The toe-heel exercise is one of the best interventions for strengthening your ankles.

- First, walk for around 30 feet while standing on your toes.
- Next, turn around and walk back while standing on your heels.
- Repeat this exercise 5 times. Do it thrice every day.

Ankle Jump Exercise



Aging comes with weak quads, glutes, calf muscles, and hamstrings. The ankle jump exercise targets all these muscles at once! With all these muscles targeted, concerns about being a statistic among those seniors who fall will truly fade!

- First, stand facing a squat rack and place the bar at about chest height on the rack.
- Grab onto the bar. Ensure that your hands are leaning forward.
- Next, keeping your legs straight, use your calves to jump up making sure you jump as high and quick as you can.
- Do three sets of 10 repetitions each.

Resistance Push Exercise



Resistance training as a whole is an essential component for any senior who desires to have a healthy lifestyle. The resistance-push exercise, for example, helps rehabilitate and prevent ankle injuries.

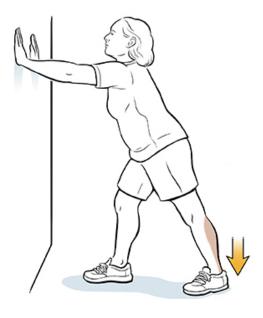
- First, wrap a resistance band around your back, right below your armpits. Hold its handles, loop the band, and tighten it.
- Next, kneel, place the handles against the floor, and extend your legs until you are in a plank position.
- Gently lower your chest to the floor. Ensure you keep your body long, then press back up until your arms are straight.
- Do three sets of 10 reps each.

Shin Stretch Exercises

You will probably argue and say that shin splints affect athletes alone. The truth is, you might also get them! Shin splints are basically tendon, tissue and muscle inflammation that affects the shin bone area.

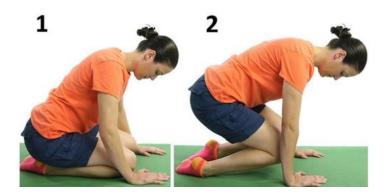
Doing shin stretches will target the anterior tibialis muscle, which will help you run or/and walk better. This exercise is simple, but with this simplicity, the chances of forgetting are also high. Therefore, to do this perfectly, go through the different shin stretches variations below:

Gastrocnemius Calf Stretch



- First, stand facing a wall (be 3 feet apart from the wall).
- Take one step towards the wall with your right foot.
- Next, lean forward while keeping your left leg straight and the left heel on the floor. Hold this position for 60 seconds.
- Lastly, switch and repeat this exercise. Do three sets of 10 reps each.

Anterior Tibialis Stretch Kneeling



- First, sit on your feet. Ensure that the toes are slightly point in, and hands in front of you.
- Next, stretch forward and raise yourself, resting on your toes.
- Hold this position for 30 seconds.
- Do three sets, ten times each.

Sample Shin Splint Stretch



To do this exercise, follow the following steps:

- First, move into a stretch position until you feel some tension. The trick is to ensure you do not stretch until you feel discomfort.
- Next, hold this position for 30 seconds.
- Lastly, come off the stretch gently and perform the stretch on the opposite side.
- Repeat this exercise 5 times.

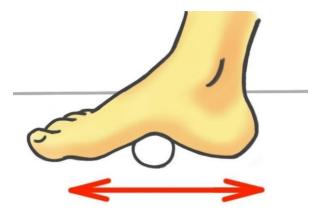
Towel Curl Exercises



Weak calves and feet can be strengthened by towel curls. To some good extent too, towel curls also has the power to improve feet flexibility and balance. All you ned to have is an exercise band or a small towel for this exercise. You can also have a bench or chair to sit on.

- First, smooth your towel and place one foot on it. Ensure that there is extra fabric in front of your foot.
- Next, sit on a chair. The heels should be under your knees, legs and feet parallel to each other and toes pointing back.
- Keep your heel still and pull the towel towards you
- Next, create a deep dome under the arch area.
- After five reps, take a break and smooth the towel or band.
- Repeat the move at least five times, switch your foot, and repeat the above steps. Do this exercise each day.

Golf Ball Roll Exercise



As we have seen in this chapter, seniors have a lot of tight and constricted muscles and ligaments. To remedy this, regularly engage in the golf ball foot exercise because it helps relax those ligaments and muscles. In addition, the golf ball foot exercise temporarily numbs pain signals from the nerves in the foot and triggers a healing response that addresses inflammation and swelling.

- First, sit on a chair, then plant your feet on the ground in front of you.
- Next, place a golf ball below one foot then proceed to roll it starting from the ball of the foot towards the heel bone. As you do this, be sure to use as much pressure as you can. But if you feel uncomfortable, be keen to notice excruciating or sharp pain.

Big Toe Extension Exercise



Just like most foot and ankle exercises we have discussed in this section, the big toe extension exercise will improve mobility and flexibility while at the same time boosting foot, toes, and ankle strength! This means that some illnesses, such as plantar fasciitis and bunions, will not bother you any further!

To do this exercise, follow the steps below:

- First, sit then clasp your heel. Use one hand.
- Pull your big toe back using your free hand.
- Next, pull your toe back. As you can see from the picture above, you should pull upwards and towards the ankle.
- Hold this position for about 30 seconds.
- Repeat this exercise 5 times.

Doing all these exercises will help you stay healthy and active in your senior years. However, exercises can cause sore muscles from either using

new muscles, straining your muscles, or getting small tears in the muscle fibers.

Let us discuss some of the tips you can use to ease post-workout soreness.

Chapter 6: Easing Sore Muscles From Lower Body Exercises

You cannot avoid muscle sores, but this should not be the reason barring you from regularly committing to your lower body workout schedule. The following tips to help lessen the intensity of soreness:

Drink Enough Water

Water will help control your body temperature, transport nutrients easily so that your body can create more energy, and will help loosen your joints. Drinking the recommended amount of water will also help prevent muscle cramps, dizziness, fatigue, and more serious symptoms.

A general rule for dehydration is to take one-third of your body weight and drink that number of ounces. So, for example, if you weigh 210 pounds, drink 70 ounces of water every day.

Have Rest Days

Rest for two to three days each week to get the results you desire. Actually, seniors should take a bit more rest time because muscle recovery slows down as we age. In addition, do at least 150 minutes of moderate-intensity activity every week. You may also choose to do 75 minutes of intense activity once you get accustomed to the exercises we have already discussed.

Warm-Up Before Beginning Your Exercise Routine

Warming up wakes up muscles by increasing blood flow. To warm up, do the following light exercises:

Run In Place



Do this for 90 seconds. To do this warm-up correctly, stand straight which your chest open, pull your knees, and gently land on the balls of your feet.

Modified Jumping Jacks



To do this correctly, start with placing your feet together and your hands at the sides of the body. Next, step to one side and bring your hands above your head. Finally, return to the original position and repeat the same on the opposite side. Do this for 60 seconds.

Finally ensure that you stretch after every workout.

Conclusion

As this book has proved, lower body exercises work the muscles below your waist, and despite being a senior, these exercises will help boost your overall health so that you can enjoy life as much as you would if you were young! All you have to do is never quit!

Good luck.

PS: I'd like your feedback. If you are happy with this book, please leave a review on Amazon.

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