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# The Foot Book







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# Foot Care Introduction

Welcome to **The Foot Book**. Our feet are the one part of our bodies that we take most for granted. How we take care of them affects our overall health.

When our feet hurt, it can affect our day and how we complete all those things we must do in a day. Sometimes pain can travel to other parts of our body and can cause problems.

This book will give you information on what matters most to you about your feet. It offers advice on daily foot care, what to do about foot pain, how to treat common foot problems, and how to purchase new shoes or work boots. The information is designed for everyone, because if we do not care for our feet, it can directly impact our daily activities. We rely on our feet to take us everywhere we go.

At the Edmonton North PCN, we strive to help you care for yourself in a number of different ways, including your feet. We have a foot care program that will teach you how to self-manage any foot issues you may have.



# Preventative Foot Care

Healthy feet start with you properly taking care of them. People often forget that their feet need to be cared for and that starts with some basic tips.

Once your feet are clean and dry, follow these simple steps:

1. Take a good look at your feet for open cracked skin, calluses and anything that appears abnormal
2. Look at your nails. Do they need to be trimmed? When cutting the nails follow the natural curve of the nail
3. File your nails using an emery board to remove the rough edges and to shape them. When filing go in one direction only as going back and forth can cause the nail to splinter and peel
4. Use a small pair of sharp curved scissors to cut into the corners of the nail carefully if they are ingrown. Make sure to file your nails afterwards
5. Use a paddle file to remove dry flaky or built up skin on the soles of your feet. *This works better when your feet are dry and should be done prior to having a shower*
6. Apply lotion to your feet. This will help maintain the moisture in your skin
7. If the skin on your feet is really dry, apply lotion in both the morning and evening. Wear socks for at least one hour after application
8. If your heels are really dry and prone to cracking, apply Flexitol Heel Balm or Uremol to help return the moisture balance



*A basic nail care kit should consist of:*

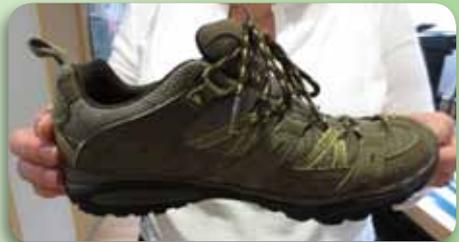
- *Nail nipper, not a clipper as it is harder to shape the nails and it takes large pieces of nail.*
- *Nail file to smooth the nails*
- *Foot paddle to remove dry skin on soles of your feet*
- *Small pair of curved nail scissors to remove the corners deep on the sides of the nail*
- *Lotion or cream to moisturize your feet (non-scented lotion is preferred)*

## Purchasing New Shoes

Having properly fitting shoes is important for good foot health. It doesn't matter if you pay \$30 or \$200 for shoes as long as they have certain characteristics and are well fitted to your foot.

Following these simple steps will help you to buy the best fitting and most comfortable shoes.

1. Purchase your shoes in the afternoon as your feet may swell five to eight percent throughout the day
2. If you wear orthotics, be sure to bring them with you
3. Have both feet measured for length and width as one foot may be slightly larger than the other, which is normal. Buy the size to accommodate the larger foot
4. The shoe should have a good heel counter. This means that the heel cup should be stiff to support your heel properly



5. The shoe should have a good shank. This is a bar on the bottom of the shoe which goes from the heel to the center of the shoe. When you bend the shoe, the only part that should bend is from the middle of the shoe to the toes
6. The inner sole of the shoe should be removable so it can accommodate an orthotic or other shoe inserts
7. Shoes should have laces or Velcro and tied snugly so that it can support your foot
8. They must be comfortable to walk in. Make sure you walk around the store for 15 minutes or longer to ensure the shoe is comfortable and fits properly



It is important to care for your shoes. The inner sole of the shoes should be removed and cleaned periodically. You can wash them with mild soap and water and allow them to dry overnight. Or, you can use peroxide and spray the sole and allow them to dry. Then re-spray and wipe the residue away and dry.

*Once your shoes or work boots get worn down to the point where the soles of the shoes no longer have treads or have holes in the fabric or in the sole, it is time to replace them (no matter how comfortable they are). If they are not replaced, you may be more prone to injury.*



*The Canadian Standards Association (CSA) has been using symbols on safety footwear for more than 30 years. Each shape & color represents specific safety criteria for all safety footwear and apparel purchased in Canada.*

- *Serialized label indicates certification by CSA International*
- *Available only through CSA*
- *Will be side stitched or heat sealed to the top of the tongue or inside the quarter lining of the right shoe*



## Purchasing Work Boots

Work boots, hard hats, safety glasses and other safety apparel are required for the job site. This information will help you when you buy new boots.

### Work boots

- Are required as part of worksite safety equipment
- Need to be CSA approved and the correct type for the work standards
- Protect your feet from falling objects
- Have two main types of toe, either steel or composite

Before buying work boots, be sure to check your companies standards for what is allowed on your job site.

### When trying on boots

- Look for boots made of thick tough leather
- If working outdoors, look for a waterproof boot as a non-waterproof boot can be damaged with a small amount of water. This can change the safety capacity of the boot
- Make sure the ball of your boot is well covered by the steel or composite toe without squishing your toes
- Your heel should not slip or rub inside the boot
- Look for higher boots as they offer more protection
- You want to be able to crouch or squat, move sideways or backwards comfortably
- You want ½ inch space at the end of the longest toe

## Steel Toe vs. Composite Toe

When you are buying work boots, they typically have two different types of toes, steel or composite. Deciding which ones you will purchase are determined by a number of variables:

### Steel Toe

- 1 ½ - 2 ½ inch steel plates are available
- Will make the boot heavier
- Colder in the winter time
- Good for working in areas where there is the hazard of things being dropped on your foot

### Composite Toe

- Lighter than steel
- Does not contain any form of metal. Kevlar, plastic and carbon fibre are used to construct the cap
- Does not get cold in the winter time
- People who work with electricity or pass through metal detectors daily would choose a boot with a composite toe

## When to replace your boots

It is important to recognize when your work boots need to be replaced.

1. Once the seams break it is time to replace the boots. Broken seams will affect performance and safety
2. Replace boots once the soles start to wear down as the soles will lose the protective affect from punctures
3. When the soles wear down, the boots could also cause you to go off balance when working on uneven terrains





## Socks

Socks are important to help protect your feet and keep them warm.

### **Socks also:**

- Absorb moisture
- Provide padding and cushioning
- Support your feet – especially the arch
- Reduces the chances of blisters and rubbing of the skin on your shoe
- Can keep your feet cool in summer and warm in the winter
- Crew length socks can better protect the lower leg from rubbing on the tops of the boots causing irritation to the skin
- We recommend purchasing socks that contain merino wool or cool max material as they absorb moisture and help to keep your feet dry

## Going for a Pedicure

People go for pedicures for a number of reasons. It is very important to educate and protect yourself from potential complications. This is especially important if you are prone to infections, have diabetes or any other disorder that could become problematic if an injury should happen.

While complications are rare, you should be aware that you may be exposing yourself to plantar warts, athlete's foot, Hepatitis B and C, HIV, staph infections, and fungus.

Below are some questions you should ask when booking a pedicure.

### **Are the tools cleaned and sterilized after each use?**

*Yes, tools should never be used on more than one client without being cleaned and sterilized. Proper sterilization means the instruments are put into a pouch and heated to 270 degrees. This kills all the bacteria on the tools.*

### **Do you change the files and buffers after each client?**

*Yes, each client should receive new or sterilized files and buffers.*

### **Are emery boards disposed after each client?**

*The emery boards should be packaged individually and new ones are used on each client. They should be opened in front of each client.*

### **Are the basins disinfected with a high level disinfectant after each client?**

*Yes*

### **Are the filters in the basins removed on a daily basis, to clean debris from the screen?**

*Yes*



The following should be avoided with getting a pedicure:

- Women should not shave their legs 24 hours prior to going for a pedicure as it opens the skin to bacteria
- A credo blade (pictured left) is a tool used to remove thickened and callused skin from the heels. The Esthetician should not use a credo blade if your heels are not callused as the removal of tissue could leave the client vulnerable to injury and potential infection
- Paraffin wax treatment should be avoided. This is very important if you have decreased sensation from diabetes or other nerve disorders as you may not be able to gauge the temperature of the wax or how your skin will react to it. This treatment could cause blistering of the skin and leave you open to injury and infection



*A credo blade should never be used on anyone who has diabetes*



*A Dremel rotary tool (pictured left) should not be used unless you have thick nails. This could make the nails thin and sensitive to the touch, including when you wear socks and shoes.*



# Common Foot Problems

The following information describes some common foot problems, what causes them, how to prevent them and treatment options.





## Bunions

A bunion is a common, painful toe problem which can interfere with footwear and cause pain on the inside of the foot.

### Description

- An abnormal, bony bump that forms on the base of the big toe
- Forces the toes to crowd
- Can be very painful when rubbed against the side of the shoe
- Can cause the great toes to over/under lap the second toe
- Can also occur on the fifth toe as well (called a bunionette or tailor bunion)

### Cause

- Wearing shoes that are too tight or high heeled
- Wearing shoes that are pointed at the toe box as they squeeze toes into an unnatural position
- Can be inherited

### Prevention

- Wear proper fitted shoes

### Treatment

- Wearing proper fitting shoes that do not compress the toes
- Padding on the bunion itself (silicone, moleskin)
- Avoid high heel shoes
- Orthotics may help to remove the pressure on the bunion
- Surgical intervention is the only option to remove the bunion if it is painful



*Bunions are caused when there is pressure on the big toe joint pushing it outwards and beyond the normal profile of the foot*



*Above is moleskin. The image on the right shows the type of padding used for bunions.*

## Corns

Corns are painful areas of thickened skin that appear between the toes and on the soles of the feet.

### Seed or hard corns

#### Description

- Most often occurs on the ball of the foot and on the joints of the toes if you have claw or hammer toes
- Can feel like a stone under the foot
- Can be mistaken for a wart
- Can be easily removed with tweezers

#### Cause

- Improper walking motion, ill-fitting shoes or walking barefoot
- Constant pressure on the area causing dead skin cells to compact and become hard forming a rock like center

#### Treatment

- Only require treatment if they become painful
- Filing them down as they begin to get bigger will help keep them under control
- Mix three drops of tea tree oil with one teaspoon of grapeseed, apricot, olive, almond or avocado oil and massage into the corn
- A doctor can trim them down using a sharp blade

#### Prevention

- Most corns disappear with the removal of pressure on the area
- Properly fitting shoes and orthotics may be required to change how you walk
- Padding such as mole skin can be used



## Soft Corns

### Description

- Whitish patch of thickened skin with a soft rubbery texture
- Can look like an open sore
- Usually between the toes. Common between the fourth and fifth toes
- Can be painful when pressure is applied from wearing shoes



### Cause

- Pressure on a bony surface under the skin

### Treatment

- Soak the affected foot in warm water and use a pumice stone to remove the soft skin
- Place padding in between the toes (eg. toe separators (silicone or foam), bandaid, or moleskin)
- Mix three drops of tea tree oil with one teaspoon of grape seed, apricot, olive, almond or avocado oil and massage into the corn
- Your doctor or podiatrist (a doctor that specializes in feet) can trim it down using a sharp blade

### Prevention

- Wear properly fitting shoes that have a wide toe box

## Calluses

Calluses are areas of thickened skin caused by repeated friction and pressure.

### Description

- Hard rough feeling area of skin that can develop on the hands or feet
- Can cause a pressure area causing pain when walking

### Cause

- Dead skin cells that are compacted with constant friction
- Wearing ill-fitting shoes

### Treatment

- Using a file over the callused area as it starts to build up
- Apply padding over the area will reduce the friction over the callus
- Mix three drops of tea tree oil with one teaspoon of grapeseed, apricot, olive, almond or avocado oil and massage into the callus
- Your doctor or podiatrist can trim them down using a sharp blade (this should not be done on your own)

### Prevention

- Have both feet measured for length and width and buy your shoes ½ inch longer than the longest toe on your feet
- Replace or repair worn out shoes
- Women should avoid wearing pointed high heel shoes





## Plantar Warts

Plantar warts are painful skin growths on the soles of your feet.

### Description

- Present as small red/black dots
- Can be painful when pressure is applied and can take a long time to heal

### Cause

- Caused by a virus which is contagious and often contracted in wet areas such as swimming pools

### Treatment

- Salicylic acid softens the wart so that the skin can be rubbed off
- Put occlusive tape (i.e. duct tape) over the wart for a day and remove. Reapply until the wart is removed. This should lift the layers off with removal of the tape
- Apply tea tree oil (full strength) to affected areas two to three times a day
- Liquid nitrogen freezes the wart but can be painful

### Prevention

- Wear water shoes when going swimming
- Do not share your shoes, socks or razor
- Dry your feet well and wear moisture absorbing socks

## Toenail Problems

Toenails provide a protective covering for your toes. Sometimes that covering can become injured or diseased. The following describes some problems that can affect your toenails.

### Involuted Toenails

#### Description

- Has a very pronounced curve, and digs sharply into the side of the toe. This may lead to a greater chance of developing ingrown nails

#### Cause

- Improper nail cutting
- Poorly fitting shoes
- Injury

#### Treatment

- Carefully trim the nail with nippers (*pictured right*) to remove the problem part of the nail
- Surgical intervention may be required to manage the nail; this is called a wedge resection

#### Prevention

- Proper fitting shoes that allow room for the toes to move
- Cut nails with nail nippers along the natural curve of the nail, flush with the skin



## Convuluted Toenails

### Description

- The toenail begins to roll up into itself and traps the nail bed (skin) in between it

### Cause

- Severe injury to matrix (base) of the nail
- An abnormal bony outgrowth within the toe

### Treatment

- When trimming nails, be careful as the nail bed is being pinched under the nail plate and you may cut the skin trapped between the nail bed and plate
- Surgical removal of the entire nail (nail excision)

### Prevention

- Wear closed toed shoes to protect the foot from injury
- Wear steel or composite boots when working with heavy equipment or machinery



Image:  
[sutherlandpodiatry.com.au](http://sutherlandpodiatry.com.au)

## Ingrown Toenail

### Description

- A rough edge or spike of nail pierces into the flesh at the side of the nail
- Swelling and redness may be present and is very tender to the touch
- Can become infected

### Cause

- Wearing tight fitting shoes or high heels
- Improper trimming of toenails
- Fungal infection
- Injury

### Treatment

- Seek medical advice from your doctor
- Be very careful when treating an ingrown nail yourself
- Use a small pair of curved scissors to carefully remove the problem spike

### Prevention

- Cut nails with the natural curve of the nail
- When cutting the nails, run your thumb along the end of the nail. If you feel more nail than skin, it is too long. If you feel more skin than nail it is too short



## Fungal Nail Infection

### Description

- An inflammatory condition caused by fungus
- Damage to the skin at the base of the nail; causing the nail to become discoloured, thickened and brittle with a disorganized growth pattern
- May affect any or all nails

### Cause

- Caused by fungus
- Risk factors include: diabetes, weakened immune system, psoriasis, using artificial nails, and smoking

### Treatment

- Tea tree oil, water and vinegar spray, Listerine, and Vicks Vapor rub
- Treatment prescribed by your physician

### Prevention

- Diabetes management—keep your diabetes in check; see a health-care professional regarding your diabetes and your feet at least once a year
- Avoid use of artificial nails



## Thickened Toenail

### Description

- Abnormal thickening of the toenail

### Cause

- Damage to the nail bed, nail plate or nail root; causing abnormal thickening of the nail that may be discoloured and become detached
- Risk factors include: trauma, psoriasis, rheumatoid arthritis, and cardiovascular disease

### Treatment

- Cut your nails using nail nippers, taking small pieces of the nail at a time
- Use a nail file to reduce the bulk of the thickened nail
- Speak with a healthcare professional if the nails become painful or you are unable to care for them yourself

### Prevention

- Wear proper fitting shoes allowing room for your toes
- File your nails regularly to prevent sharp edges
- Check your feet regularly for any skin or nail changes





*It is very important to pay extra attention to your feet in below freezing temperatures if you have diabetes or any peripheral vascular disorder (the narrowing of blood vessels that restrict blood flow and mainly occurs in the legs).*

## Exposed Feet

The following provides information on when feet are exposed to certain conditions.

### Frostbite

#### Description

- Red skin - begins as white and turns various shades of red
- Burning sensation - starts as a painful sensation
- Consists of throbbing and tingling sensations

#### Cause

- Occurs when the skin is exposed to below freezing temperatures
- Begins to freeze at  $-10^{\circ}\text{C}$
- Exposed skin will freeze within minutes at temperatures below  $-20^{\circ}\text{C}$

#### Treatment

- Rewarm the area quickly
- Drink warm non caffeinated fluids
- Seek medical attention as soon as possible

#### Prevention

- Wear socks and foot wear that are appropriate to the different climate conditions
- Pay close attention to your feet and warm them as needed according to the temperature outside

## Trench Foot

### Description

- Tingling or itching sensation, pain, swelling or cold blotchy skin when your feet are exposed to wet, unsanitary or cold conditions
- Can turn to gangrene if not treated

### Cause

- From prolonged exposure to wet, unsanitary cold conditions

### Treatment

- Clean and dry feet thoroughly
- Affected area should be warmed by soaking in warm water or warm packs
- Seek medical attention immediately

### Prevention

- Proper foot hygiene
- Keep feet dry
- Wear moisture absorbing socks
- Avoid rubber or vinyl foot wear
- Accommodate your foot wear for the different climate conditions



*Caused by prolonged exposure to wet, unsanitary cold conditions*

## Athletes Foot

### Description

- Fungal infection of the skin
- Can spread from one person to another

### Cause

- Wearing tight, non-breathable foot wear
- Usually in locker rooms or swimming pools

### Treatment

- Keep feet clean, dry and cool
- Wear moisture absorbing socks (merino wool)
- When possible remove your shoes and allow your feet to cool
- Add 20 drops of tea tree oil to a foot bath and soak for 15 minutes, three times a day
- Apply tea tree oil full strength to affected areas

### Prevention

- Do not wear foot wear that is too tight
- Wear moisture absorbing socks
- Dry well between toes



## Cracked Heels

### Description

- Very thick callus on the outer edge of the heels
- Thick discolored skin that opens with added pressure
- Painful with walking
- Can be itchy

### Cause

- Walking barefoot or wearing open back shoes
- Inactive sweat glands
- Obesity

### Treatment

- File your heels with a paddle when the feet are dry
- Apply lotion to your feet every day. Creams containing urea are very effective

### Prevention

- Wearing socks and closed back shoes
- Filing the heels on a regular basis
- Apply moisturizer often





# Diabetes and Your Feet

Diabetes can cause nerve damage and poor blood flow to your legs and feet. As a result, people with diabetes are less likely to feel a foot injury (ie. cut or blister). Diabetes can also make these foot injuries more difficult to heal. This is why daily inspection of feet and proper foot care is very important.

Below is a guideline to care for your feet if you have diabetes.

Action	What to do
Inspect your feet daily	<ul style="list-style-type: none"><li>• Bring your foot up on your knee or use a mirror with a magnifier</li><li>• Check for cuts, blisters, redness, swelling or nail problems</li><li>• If you notice cuts or cracks, have them examined by your physician or foot care nurse as these can become infected</li><li>• See a foot care specialist once a year or more if needed</li></ul>
Wash your feet daily	<ul style="list-style-type: none"><li>• Test water temperature with your elbow to ensure water is warm, not hot</li><li>• Use a mild soap</li><li>• Dry thoroughly, especially between the toes</li><li>• Use soft towel to dry feet</li><li>• Use the corner of a face cloth to dry between the toes</li></ul>
Moisturize your feet daily	<ul style="list-style-type: none"><li>• Do not apply moisturizer between the toes as this could encourage a fungal infection</li><li>• We recommend lotions and creams that are non-scented</li></ul>
Cut nails carefully	<ul style="list-style-type: none"><li>• Have a good, easy grip nail nipper that is easy to hold and use</li><li>• <b>Do not</b> use a clipper as it tends to cut too much nail at a time</li><li>• Cut small pieces of nail along the natural curve but not too short as this can cause ingrown toenails</li><li>• File edges of cut nails with a nail file</li></ul>

Action	What to do
Never treat corns or calluses	<ul style="list-style-type: none"> <li>• See a foot care specialist as soon as possible</li> <li>• Do not use over the counter products without talking to your doctor or foot care specialist first</li> </ul>
Keep feet warm and dry	<ul style="list-style-type: none"> <li>• Always wear socks in your shoes in winter &amp; rainy weather</li> <li>• Change your socks as soon as possible if your feet get wet</li> </ul>
Wear clean dry socks	<ul style="list-style-type: none"> <li>• Wear light colored socks it is easier to notice drainage from an open sore</li> <li>• Change your socks daily</li> <li>• Wear socks that are not constricting or tight</li> <li>• There are over-the-counter diabetic socks available at drug stores and Healthcare Solutions</li> </ul>
If feet get cold at night	<ul style="list-style-type: none"> <li>• Wear socks to bed</li> <li>• Never use heating pads or hot water bottles as there is decreased sensation in your feet</li> </ul>
Never walk bare-foot in the house or outdoors	<ul style="list-style-type: none"> <li>• Due to decreased sensation in your feet, protect them by wearing shoes</li> <li>• Wear closed toe shoes with socks</li> </ul>
Shake out your shoes and feel inside prior to putting on shoes	<ul style="list-style-type: none"> <li>• You may not feel a rock or foreign object inside your shoe</li> <li>• Wipe the bottom of your feet prior to putting on shoes</li> </ul>
Wear properly fitted shoes	<ul style="list-style-type: none"> <li>• Should have a wide toe box</li> <li>• There should be at least ½ inch at the end of the shoe for your toes</li> <li>• Have both feet measured for proper size</li> <li>• Purchase shoes in the afternoon as your feet swell throughout the day</li> </ul>
Get regular foot exams	<ul style="list-style-type: none"> <li>• A yearly foot exam is recommended</li> <li>• Foot care education is also recommended to teach prevention strategies</li> </ul>
Take care of your diabetes	<ul style="list-style-type: none"> <li>• Follow a healthy diet</li> <li>• Keep fit by exercising</li> <li>• Monitor your blood sugar</li> <li>• Take your medication as recommended by your physician</li> <li>• If you smoke, consider a smoking cessation program to help quit</li> </ul>

# Foot Pain

Foot pain can affect your day to day activities. If you have foot pain, just getting up first thing in the morning can be difficult. Chronic foot pain is pain that continues or recurs over a prolonged period of time. It can be caused by an injury or disease. Some people can function with chronic pain if they have proper pain management. This can include physical therapy and other forms of treatment.

## What are some of the causes of foot pain?

- Chronic disease such as Diabetes or Peripheral Vascular Disease
- Sprains and strains, especially if you are active in sports
- Acute or repeated trauma. This refers to any specific sharp pain with a quick onset or the result of a specific traumatic event, such as stubbing your toe or stepping on something sharp
- Walking on concrete all day
- Wearing steel toed boots
- Being overweight
- Wearing poor fitting shoes



# Foot Pain Conditions

## Plantar Fasciitis

### Description

- A painful swelling of the fibrous band of connective tissue on the sole of your foot
- Tiny tears in a ligament that attaches to the underside of the back of the heel
- This is very common in people with flat feet, which is also known as Pes Planus

### Cause

- Over-stressing the fascia in the arch of the foot
- Frequent in women who are overweight
- Associated with certain foot types
- Related to repeated difficult activity that may cause bruising
- Swelling of the back of the heel

### Treatment

There are a number of different treatment options for plantar fasciitis, depending on the severity:

#### Rest

- Take the strain off your feet as much as possible
- Do not do any extra walking and sit as much as possible
- Elevate the affected foot

#### Ice

- Applying ice will help to reduce the swelling. Use a water bottle and freeze it. While wearing a thick sock to protect the skin from freezing, roll the frozen bottle of water under the foot for 10-15 minutes
- Repeat three to four times a day



*There are a number of different treatment options for plantar fasciitis:*

- *Rest*
- *Apply ice*
- *Stretching*

### Stretch

A tight calf muscle is a big contributor to plantar fasciitis. Here are a few stretches you can do to help:

#### Wall Calf Stretch

- Stand a little less than arm's length from the wall
- Step your right leg forward and your left leg back, keeping your feet parallel
- Bend your right knee and press through your left heel
- Hold for 20-30 seconds and switch legs



Image: media2.onsugar.com

#### Curb Stretch

- Find a curb or a step
- Alternate hanging your heels off the edge
- Hold for 10-15 seconds
- Try slightly bending the knee of the calf you're stretching to deepen the stretch



Image: media2.onsugar.com

There are a number of other activities you can do to help:

**Arch Ball Roll** – this is useful to massage the muscles in the arch of the foot

1. Place a normal rubber ball or golf ball under the arch of the foot
2. Roll the ball to the ball of the foot and the toes
3. Roll the ball to heel of the foot





**Toe Towel Curl:**

1. Place your foot on a tea towel or face cloth
2. Grab the towel with your toes towards the big toe
3. Repeat grabbing the towel towards the fifth toe
4. Repeat with the other foot, repeating approximately 10 times

**Orthotics:**

Orthotics is an appliance designed to support, straighten or improve the function of a body part.

- Designed to fit into your existing shoes by removing the insert that came with the shoes
- If you need to purchase new shoes, make sure to have the orthotics with you

**Night Splints:**

A night splint (pictured right) holds the plantar fascia and Achilles tendon in a lengthened position overnight to help with stretching. This is more common in severe cases of Plantar Fasciitis or other disorders affecting the soles of the feet.



*If you are looking for custom orthotics see page 37 for a listing of professionals.*



### **Medications:**

- 1.** Non-steroidal anti-inflammatory drugs (NSAIDs)
  - Using ibuprofen (Advil, Motrin) and naproxen (Aleve) may ease the pain, though they will not treat the underlying problem
- 2.** Corticosteroids (to be prescribed and administered by a doctor)
  - Delivered by an injection
  - Multiple injections are not recommended as they can weaken the plantar fascia and cause it to rupture and can also shrink the fat pad covering the heel bone

### **Prevention**

- Maintaining a healthy weight
- Wearing properly fitted supportive shoes
- Avoid going barefoot especially on hard surfaces
- Wearing a shoe even inside the house will go a long way to absorb the shock of walking and help prevent foot pain

## Heel Spurs

### Description

- A calcium deposit on the underside of the heel bone
- They are often painless but can become painful and are often associated with Plantar Fasciitis
- Pain is described as a knife or pin sticking into the bottom of the foot, especially first thing in the morning

### Cause

- Walking abnormalities that place excessive stress on the heel bone, ligaments and nerves near the heel
- Running or jogging on hard surfaces
- Inadequate warm up prior to exercising
- Poor physical conditioning
- Poorly fitted or worn shoes
- Obesity

### Treatment

- Orthotics
- Stretching
- Proper fitting shoes

### Prevention

- Stretching your calves and heels
- Good strength and endurance
- Ideal body weight
- Avoiding activities that place a constant strain to the feet
- Wearing properly fitting shoes with a good arch support





Image:

[healthandfitnesstalk.com](http://healthandfitnesstalk.com)

## High Arched Feet

High arched feet, also known as Pes Cavus, is the opposite of a flat foot (Pes Planus). It typically happens at an early age and affects both feet. Affected feet are not able to absorb the shock of the heel strike during normal walking. This can affect the knees, hips and lower back.

### Description

- When a person with a high arch stands, their instep looks hollow
- Most of the weight is on the heel and the ball of the foot
- Your foot may roll outwards or the heel will tilt inwards from behind
- Painful balls of the feet
- Claw toe formation
- Callus build up on the heads of the toes and the balls of the feet
- Corns on the tops of the toes from being in a hammer position
- Difficulty finding proper fitting shoes
- Instability in the ankle

### Cause

- Hereditary (runs in the family)
- Congenital condition such as cerebral palsy or club foot
- Neuromuscular disease such as poliomyelitis or Charcot-Marie-Tooth disease
- Nerve trauma

## **Treatment**

- Orthotics help to increase the foot surface area contacting the ground
- Wearing padding to remove the pressure for the balls of the feet, especially if the toes are clawed
- In severe cases, surgical intervention may be considered

## **Prevention**

- As high arched feet are caused from a hereditary condition, there is no preventative measures you can take



## Metatarsalgia

### Description

- Excess pressure on the ball of the foot that can cause pain and swelling in the bones of the foot

### Cause

- Activities that involve running or jumping
- Wearing poorly fitting shoes

### Treatment

- Conservative treatments such as ice and rest will often relieve the symptoms
- Wearing properly fitting shoes and arch supports with shock absorption
- Use a metatarsal pad. A metatarsal pad is made of silicone and is placed in between the third and fourth toe. There are also metatarsal pads that sit inside the shoes to provide support to the metatarsal region of the foot

### Prevention

- Wear proper fitting shoes, especially when performing activities that involve running or jumping



Image: pedistep.com

*If you do not have access to the internet, please look up these stores in the phonebook to see which one is closest to you.*







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