# <u>PodiatryNZ</u>

## Diabetes (The High Risk Foot)

Fact Sheet

Diabetes can have a devastating impact on your feet because of the way it affects your **sensation** (your ability to feel) and your **circulation** (the blood flow to your feet). The result is a serious risk for developing wounds, infections and ulcerations on the feet - which is why it's so important to pay special attention to your feet and why it is referred to as the 'high-risk' foot.

The symptoms of diabetes on your feet may start small, but will progressively worsen over time. This means that foot care, advice and management strategies need to be specific to the symptoms you're currently experiencing and that these will change over time. This is why it's very important to have **annual diabetic foot health checks** to keep you informed about how to best manage your foot health.

## What are the symptoms of diabetes on your feet?

When we talk about the way that diabetes affects the feet, we talk about the way it affects your **sensation** and your **circulation** at the feet.

### Diabetes impairs your ability to feel (Peripheral Neuropathy)

Diabetes causes damage to the nerves in your feet and legs. As the nerves are responsible for our ability to feel by relaying messages from the nerve endings on our skin to the brain, nerve damage means that our ability to feel worsens, can become mixed up, and may eventually be lost altogether. This is called peripheral neuropathy. These altered sensations often affect the extremities, with changes in the feet typically occurring before the hands. Symptoms include:

- Numbness
- Tingling
- Pins and needles
- Burning or pain

Ultimately, you may **completely lose sensation in the feet**. Unlike the blanket-like feeling of numbness, any feeling in the affected areas of the foot will simply be absent and you may not even realise that the sensation isn't there. This is the most dangerous symptom as it renders you vulnerable to incurring an injury such as a cut or burn and not being able to feel it, hence not taking action to treat and manage it. This injury may easily be something small like a pin, nail, or splinter. Any wound that results will be susceptible to infection, and when continued to be left untreated, the area may ulcerate.

#### Diabetes impairs your circulation

Diabetes also causes damage to the blood vessels, impairing the blood flow to the feet. A poorer blood supply to the feet means less oxygen and nutrients are delivered to a wound within a certain length of time, meaning that the body will take longer to heal any cuts and breaks in the skin. If blood flow to the feet is impaired, you may experience:

- Cold feet
- Pale skin appearance
- Dry skin
- Brittle nails

When paired with an increased likelihood for undetected cuts and wounds from a diminished ability to feel, this is a very dangerous combination. It poses a significant risk of infection, ulceration, and at its worst, amputation. Diabetes is currently the leading cause of lower limb amputation, other than traumatic injuries.

#### What causes diabetes?

While type 1 diabetes is present at birth, type 2 diabetes can develop at any point throughout your life. It occurs when your cells become resistant to a hormone called insulin, which functions to direct sugar out of the bloodstream and into the cells. This means that sugar can build up in the bloodstream and cause damage to the vessels.

#### Managing diabetes at home

While diabetes requires a whole-body management plan, you can help manage the effects on your feet by:

- Checking your feet daily look for cuts, blisters, bruises, colour changes, swelling and open sores. If you notice anything out of the ordinary, report it to your Podiatrist or GP immediately
- Using a mirror to check the soles of your feet if you can't see them otherwise
- Always protecting your feet wear suitable footwear inside and outside your house, like slippers and sneakers
- Checking the inside your shoes regualrly - for any sharp objects and rough edges that may pierce and damage the skin
- Washing your feet carefully taking care to wash with an antibacterial soap and drying well between the toes
- Applying moisturiser to feet daily to help manage dry skin that may further reduce sensation
- Cutting toenails straight across and filing rough edges, to reduce the risk of piercing the other foot with sharp nails in bed
- Keeping wounds covered with a dry non-stick dressing until you're able to see your Podiatrist or PG
- Having your feet checked regularly by a podiatrist

#### How your Podiatrist can help

Your Podiatrist will start by performing **annual assessments** of your sensation and circulation, so you know the status of your foot health and your risks. They will give you advice and management strategies to help reduce the risk of complications and achieve the optimum outcomes for your feet.

During your assessment, every surface of your foot will also be examined, including between your toes, to look for warning signs or changes from your last appointment. If they do find anything out of the ordinary, they will be able to take immediate action on it themselves or refer you appropriately. Podiatrists can also help manage any **wounds** that develop, recommend **diabetic-friendly footwear**, and use devices like **orthotics** to help you feel more comfortable on your feet and reduce your risk of injury.

Disclaimer: This document is an informative guide only and is not a tool for diagnosis. If you suspect that you have diabetes, we recommend that you see your GP to investigate further. If you have already been diagnosed with diabetes and are worried about any changes you notice, we recommend that you book in with your Podiatrist immediately for an assessment. Referrals are not required to see your Podiatrist.