

Taking care of your feet



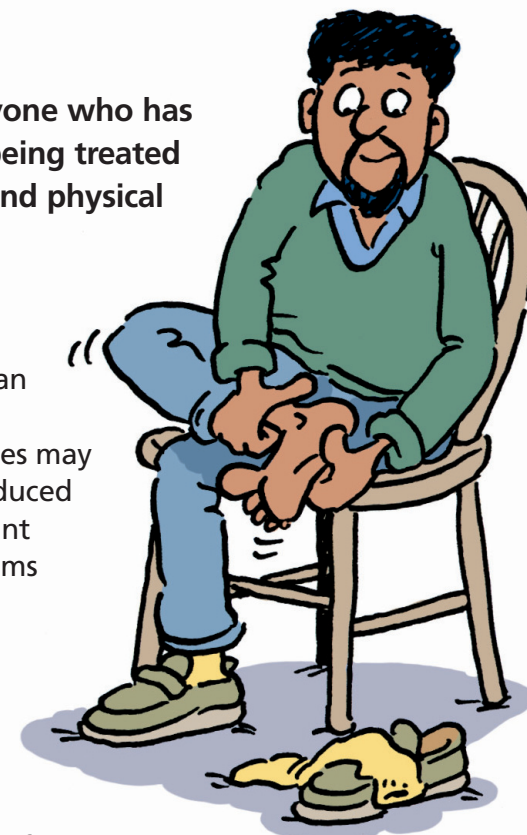
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Introduction

Foot problems can affect anyone who has diabetes, whether they are being treated with insulin, tablets or diet and physical activity only.

People with diabetes are more likely to be admitted to hospital with a foot ulcer than with any other complication of diabetes. This is because diabetes may lead to poor circulation and reduced feeling in the feet. It is important to understand how foot problems develop and how they can be prevented or detected early so that they can be treated successfully.



In this leaflet we tell you:

- how diabetes can affect your feet
- how you can take some simple steps to avoid problems with your feet
- what a foot examination involves.

An explanation of the medical terms used in this publication can be found in the glossary on page 17.

Also, there are some contact details that may be of help to people who have particular problems finding suitable shoes (see pages 15–16).

What is diabetes?

Diabetes is a common life-long condition where the amount of glucose in the blood is too high because the body cannot use it properly. This is because the pancreas does not produce any insulin, or not enough, to help glucose enter the body's cells, where it is used for energy, or the insulin that is produced does not work properly (known as insulin resistance).

Glucose comes from digesting carbohydrate and is also produced by the liver. Carbohydrate comes from many different kinds of food and drink, including starchy foods such as bread, potatoes and chapatis; fruit; some dairy products; sugar and other sweet food.

There are two main types of diabetes: Type 1 and Type 2

Type 1 diabetes develops if the body is unable to produce any insulin and usually appears before the age of 40, and especially in childhood. It is treated by insulin either by injection or pump, a healthy diet and regular physical activity.

Type 2 diabetes develops when the body can still make some insulin, but not enough, or when the insulin that is produced does not work properly. It usually appears in people over the age of 40, though in South Asian and black people often appears from the age of 25 but is also increasingly becoming more common in children and young people of all ethnicities.

It is treated with a healthy diet and increased physical activity but medication and/or insulin is often required.

The main symptoms of undiagnosed diabetes can include going to the loo all the time (especially at night), increased thirst, extreme tiredness, unexplained weight loss, genital itching or regular episodes of thrush, slow healing of wounds and blurred vision.

The main aim of treatment of both types of diabetes is to achieve blood glucose, blood pressure and blood fat levels as close to the target ranges agreed by the healthcare team. This together with a healthy lifestyle will reduce the chances of developing the long-term complication of diabetes such as damage to the eyes, kidneys, nerves, heart and major arteries.

How can diabetes affect your feet?

Diabetes, particularly if it is poorly controlled, can damage the nerves in your feet and legs. This nerve damage is called neuropathy. The Diabetes UK leaflet called *Neuropathy* covers this subject in detail and is available from the Diabetes UK's distribution department whose address is on page 17.

There are three types of neuropathy and they can all affect your feet:

Sensory neuropathy

This affects the nerves that carry messages from the skin, bones and muscles to the brain and affects how we feel temperature, pain and other sensations. It is the most common form of neuropathy, mainly occurring in nerves in the feet and legs and can lead to a loss of feeling and a failure to sense pain. This could mean that you might develop a blister or minor burn without realising it, which, if not treated properly could become infected or develop into an ulcer.

Motor neuropathy

This affects the nerves responsible for sending messages to the muscles about movements, such as walking. If the nerves supplying your feet are affected it could cause your feet to alter shape. Your toes may become clawed (curled). The arch/instep may become more pronounced or it could even cause the bones in your foot to fracture (break) when stressed. This is known as Charcot foot and you will need the help of a podiatrist for treatment.

Autonomic neuropathy

This affects the nerves which control activities which our bodies carry out all the time, which we have no control over. Damage to

these nerves may affect your sweat glands, reducing secretions and making your feet dry. If not looked after the skin may crack and become sore and prone to infection.

Diabetes may also affect the circulation by clogging up the arteries. This may affect the heart and other blood vessels, especially those supplying the feet. Without a good blood supply, you may have problems with skin and nails and with cuts and sores, which do not heal very well. As a result of poor circulation, you may also suffer from cramp and pain in your legs and/or feet. If your diabetes is poorly controlled, you run greater risk of poor circulation and the problems associated with a poor blood supply to your feet. High blood pressure, a high fat content in your diet and, in particular, smoking, all increase the risk of poor circulation.

Steps you can take to prevent this happening include:

- give up smoking
- keep your blood glucose, blood pressure and cholesterol levels as near normal as possible
- eat a healthy diet which is low in fat, sugar and salt and high in fruit and vegetables
- make sure that your feet are not exposed to extremes of heat or cold
- take regular physical activity. A brisk walk each day for example
- make sure that your socks and shoes are not too tight
- check your feet daily, including in between your toes
- keep any appointments with your podiatrist (chiropodist)* that you have been given. Many people only see a podiatrist (chiropodist) on a referral. (For younger people with diabetes, this may be just once a year as part of the annual review).

** Podiatrists, or foot specialists, are also known as chiropodists. Although the term chiropodist may be more familiar to you, the term podiatrist is being used more and more widely as chiropodists care for both hands and feet*

How do I look after my feet?

It is a good idea to check your feet every day, looking for signs of calluses (areas of thickened hard skin), changes in colour and breaks in the skin. A convenient way to do this is to use a mirror to see the soles of your feet. If this is difficult, or if your eyesight is not as good as it was, try to get someone else to check your feet for you.

Fortunately, you do not usually need to do anything very different from other people – general advice on footcare applies to you.

General hygiene

Wash your feet each day, use ordinary bathroom soap and warm water – check the temperature of the water before you put your feet in. Dry your feet carefully with a clean towel, especially between the toes. There is no advantage in soaking your feet: this just makes the skin soggy at first, then dry – and so more likely to become damaged.

Skin

Keep your skin healthy, use an emollient cream and discuss with your healthcare team which one is best for you. Do not apply any cream between your toes as this will make the area too moist and can cause fungal infections to occur. If you use talc between your toes, be careful not to use too much as often it becomes clogged and can be the perfect place for a fungal infection to develop. You may find a pumice stone helpful for areas of hard skin, but it must be used with care. If the hard skin is excessive, seek professional advice. Do not use over the counter products to treat corns and callous.

Nails

Keep your nails healthy, cut them to the shape of the end of the toes: once in every six to eight weeks is usually often enough.

It is safest to trim your nails with a pair of clippers and an emery board, which can be bought from your local pharmacist.

You do not need to cut down the sides of the nails or cut the nails short. They are there to protect your toes. Cutting a 'v' shape in the nail to stop it ingrowing is an old fashioned idea which is incorrect.

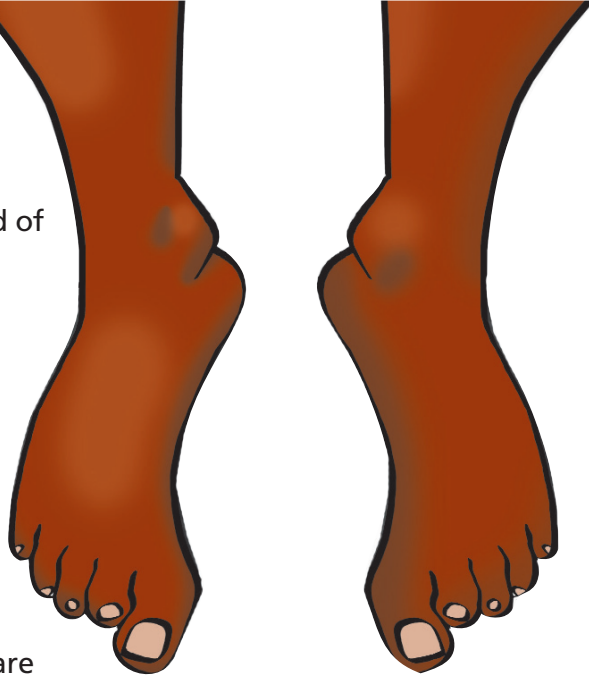
If you feel your nail is rubbing on your shoe, it may not be the nail which is too long but the shoe which is too short!

Some people try to clean the edges and sides of their nails using the sharp point of nail scissors. This is very dangerous. If you feel that your nails need clearing of dirt and debris, simply use a nailbrush or an old toothbrush and brush from the base of the nail forward.

If it is difficult for you to care for your nails, you should seek help from a podiatrist.

Footwear

The right shoes and stockings/tights/socks will help to keep your feet healthy. This is why your choice of footwear is so important.



It is not normally necessary to buy special or expensive shoes. As long as you follow the guidelines below, you should be able to buy the right footwear in a high street store and at a reasonable price.

Shoes that do not fit well, even those that feel comfortable, can cause corns, calluses, ingrowing toe-nails, blisters and ulcers. If you have neuropathy or poor circulation, wearing unsuitable shoes is likely to make even simple foot problems worse.

Finding shoes that fit is not just a matter of buying a pair that feel comfortable or snug. For people with neuropathy, that you can feel the shoes at all means that they are far too tight!

Ideally, to ensure that the shoes you buy are suitable for you, you would have your feet measured for size and width by a trained shoe fitter each time you buy new shoes, but this is seldom available now. So take extra care.

Buy shoes which:

- are broad fitting
- have a deep and rounded toe area
- are flat or low heeled
- are fastened by a lace or buckle to keep the heel in the back of the shoe: the foot can then not slide forward and crush the toes at the end of the shoe.

If you are unsure of the fit or style that is most suitable for you, do ask a registered podiatrist for advice.

Always examine the inside of your shoes for sharp objects or stones before putting them on and replace ruffled innersole linings.

Avoid socks, stockings or tights with wrinkles or prominent seams. Garters and stockings or socks with elastic tops should also be avoided because they may restrict the circulation. Never wear socks with darned areas or holes – this is a common cause of ulceration.

What are the danger signs on the feet?

Swollen areas, changes in the colour of your skin or a slow healing wound could indicate poor circulation, an infection, the early stages of an ulcer, or gangrene.

Foot ulcers can be treated successfully, especially in the early stages. If they are left untreated, the risks of infection are high and, in **extreme cases**, this can lead to gangrene and even to amputation. The earlier the treatment, the more successful the outcome is likely to be.

Pain in the feet and legs should never be ignored. Your body is telling you that there is a problem. Even painless sores can be very serious and should not be ignored.

Sores and cuts that do not heal are important danger signs.

Seek immediate advice. Your diabetes may not be well controlled, you may have an infection or your circulation may have worsened. All of these can be successfully treated if discovered early.

Check your feet every day and if you notice any of the danger signs, you should make an appointment with your GP, podiatrist or nurse immediately.

Do not try to treat injuries, corns or other foot problems yourself. Seek professional help. And do not use corn plasters, they contain acid which can cause the skin to break down.

What is an infection?

An infection occurs when the body is unable to protect itself from micro-organisms (such as bacteria, viruses and fungi).

If you have diabetes, you may be more likely to get an infection, especially if your diabetes is poorly controlled or you have neuropathy. This is because you may not realise you have developed an infection until it is already widespread and harder to treat.

The signs of an infection on the skin are:

Colour	white skin will usually be bright pink or red; brown or black skin may become darker.
Pain	the infected area may throb and be very painful (though this may not be the case if you have neuropathy).
Swelling	the infected area may be puffy and appear swollen.
Movement	the pain and swelling may mean that it becomes difficult to move the infected area (though this may not be the case if you have neuropathy).
Temperature	the infected area may feel hot to the touch.
Pus	the area may be weeping a yellow/green matter called pus; this consists of dead cells and micro-organisms.

If any of these signs are present, arrange an immediate appointment with your GP, diabetes nurse or podiatrist.

If you cannot get an appointment for the same day, go to your nearest hospital Accident and Emergency department.

In the meantime:

- bathe your foot in a bowl of warm water. If you want to, you can add some ordinary kitchen salt (no more than a couple of handfuls)
- cover the area with a sterile dressing (these are readily available from the local pharmacist and should be kept in the first-aid kit at home)
- try to take the pressure off the area
- make sure you wear suitable footwear and try not to do anything that might hurt or irritate your foot.

How do I get help to look after my feet?

There are a number of ways to find help with footcare.

Your GP is usually the best place to start. S/he will then help you to make an appointment with one of the following:

- the podiatrist who works in the GP practice
- the community podiatry service
- the hospital podiatry service
- the local diabetes centre
- a registered podiatrist who works in private practice
- the diabetes specialist nurse.

All these services are free of charge, except if you choose to see a registered podiatrist who works in private practice.



What can I expect at a foot examination?

Your legs and feet should be examined by a healthcare professional at least once a year. You will be asked to remove your stockings/socks and shoes and, if you wear trousers, you will be asked to roll up your trouser legs so that your legs, as well as your feet, can be examined.

You will probably be asked questions about your present and past medical health; do include any medication you are taking.

If you are seeing a podiatrist you may wonder why s/he needs information which does not seem to apply to the feet directly. The most important reason for these questions is that the examiner needs to get a full picture of your health before they can recommend the best treatments for you.



You may also be asked questions such as:

- do you have any problems with your feet such as ulcers?
- how do you look after your feet?
- do you check your feet?
- how often you do check your feet and what do you check for?
- how stable is your diabetes?

This is an important opportunity for you to ask questions and seek advice.

The following tests will be carried out – and none of them cause any discomfort or pain.

Neuropathy testing

The examiner will have a range of simple instruments to test for any numbness in your feet. Sensation will be checked with either gentle pressure to the under side of your toes and the ball and heel of your foot using a fine plastic strand called a monofilament or vibration using a tuning fork. The examiner may also test your reflexes to discover if you can feel the difference between hot and cold on your skin.

Circulation testing

The examiner will feel the pulses that you have in your feet and legs to check how well the blood is circulating to your feet.

Equipment may be used to listen to the sound of the blood moving in the arteries of the legs and feet.

Your blood pressure may be taken in the same way as the doctor or nurse does, only this time you may have the blood pressure taken in your legs.

Foot inspection

Your feet will be checked for corns, calluses and nail problems. As a result of the inspection, you may be asked to see a podiatrist who will suggest the best ways to look after your feet and keep them healthy.

Always seek help with your feet if:

- you notice any of the danger signs described on page 10
- you have had diabetes for many years and have never had your feet checked
- you find it difficult to check or care for your feet
- you have any questions about caring for your feet.

Caring for your feet when you're on holiday

If you have good circulation and no problems with your feet, there is no need to take special precautions when on holiday other than check your feet each day and keep them clean and dry. If you would like further information about diabetes and caring for your feet when you're on holiday, you can order *Travel and diabetes – managing away from home*, code 8025, from the Diabetes UK *Catalogue*, (see page 17 on how to get a copy).

Specialist footwear

Having diabetes should not, in itself, cause you difficulties in finding suitable shoes. If you do have problems, it may be helpful to discuss these with your diabetes team or one of the following organisations:

British Footwear Association 3 Burystead Place, Wellingborough, Northants NN8 1AH Telephone 01933 229005

Email info@britfoot.com **Web** www.britfoot.com

The British Footwear Association is a trade association representing British footwear manufacturers and British based footwear brands.

The website offers a wide range of information from the companies which make up the British footwear industry to consumer help about hard-to-find footwear; consumer rights and much more.

Disabled Living Foundation 380–384 Harrow Road, London W9 2HU **Helpline** 0845 130 9177 **Minicom** 020 7432 8009
Email info@dif.org.uk **Web** www.dlf.org.uk

The Disabled Living Foundation aims to make everyday life easier for people with disabilities and carers, by giving impartial advice about equipment for overcoming problems in daily living, including information about footwear and clothing.

Society of Chiropodists and Podiatrists 1 Fellmongers Path, Tower Bridge Road, London SE1 3LY **Tel** 020 7234 8620
Web www.feetforlife.org

The Society is the leading professional body for HPC registered chiropodists and podiatrists in the UK. The website includes patient information on common foot problems and provides a free list of private practice podiatrists in the United Kingdom.

The Society of Shoefitters, The Anchorage, 28 Admiral Walk, Hingham, Norfolk, NR9 4JL **Telephone** 01953 851171
Email secretary@shoefitters-uk.org **Web** www.shoefitters-uk.org.

Founded in 1959 the society is a 'not for profit' organisation, and membership is through qualification only. The society is made up of shoe fitters, chiropodists, podiatrists, company representatives and agents, technicians and laboratory staff connected to footwear.

Occasionally it may be necessary for you to obtain your footwear from a mail order company. If this is the case, choose a company that provides specialist footwear. It is very important that you seek advice from a registered podiatrist before you wear any footwear that has been bought via mail order. They will ensure the footwear is suitable and a comfortable fit for you. Most companies are more than happy to give a full refund if their products is unsuitable.

Glossary

Arteries	the main blood vessels which carry blood to all areas of the body
Callus	an area of thickened hard skin
Corns	small painful areas found in callus (may be painless in people with neuropathy)
Emollient	a cream that locks moisture into the skin
Infection	a disease caused by micro-organisms
Micro-organisms	very small living material which can cause infection; the most common examples are bacteria, viruses or fungi
Neuropathy	a condition in which the nerves become damaged, usually affecting the feet and legs, causing loss of feeling. This condition is common amongst people with diabetes
Podiatrist/chiropodist	a foot specialist
Skin ulcer	an open sore on the skin caused by destruction of the tissues. May become infected

We hope you have found this leaflet helpful in understanding more about how to take care of your feet. Never be afraid to ask for advice – your diabetes team is there to help.

The Diabetes UK *Catalogue* describes our full range of books and leaflets. For copies of this and other Diabetes UK publications, please contact:

Diabetes UK Distribution
PO Box 1057
Bedford
MK42 7XQ
Telephone 0800 585 088

About Diabetes UK

Diabetes UK is the charity for people with diabetes, their family, friends and carers. Our mission is to improve the lives of people with the condition and work towards a future without diabetes.

Diabetes UK stands up for the interests of people with diabetes by campaigning for better standards of care. We are one of the main funders of diabetes research in the UK which includes research into cause and prevention, care and treatment and finding a cure. We provide practical support and information and safety-net services to help people manage their diabetes.

Did you know?

There are 2.5 million people in the UK diagnosed with diabetes and over 500,000 people that have the condition but don't know it.

- Our website www.diabetes.org.uk has over 5,000 visitors a day.
- We have a **network of offices throughout the UK** – see back cover.
- Diabetes UK Careline staff answer **over 200 enquiries a day**.
- We spend over **£7 million a year on diabetes research**.
- We produce a wide range of **magazines, books and leaflets** covering all aspect of diabetes.



All of this and more is made possible through donations, fundraising and by people becoming members of Diabetes UK.

How can you help?

You can be actively involved in the work Diabetes UK does. For details call **0207 424 1000** or visit our website about:

- Diabetes Campaigners Network** – www.diabetes.org.uk/campaigns
- Fundraising ideas and events** – www.diabetes.org.uk/fundraise
- Make a donation** – www.diabetes.org.uk/donate

Become a member today

Every week over 400 people with diabetes join Diabetes UK. If you've been diagnosed with diabetes why not join them to add your voice to our work.

Diabetes UK membership gives you:

- **Balance** our bi-monthly members' magazine
- Diabetes UK Careline with trained counsellors, who provide confidential advice to your questions and concerns about living with diabetes
- a range of dietary, exercise and diabetes booklets
- more than 350 local support groups across the UK
- updates on the latest breakthroughs in diabetes research
- specially-designed insurance and financial products to meet the needs of people with diabetes
- the opportunity to add your voice to our campaign work and support the 2.5 million people diagnosed with diabetes in the UK.



To join visit www.diabetes.org.uk/become a member or call free **0800 138 5605**

For more information call our Customer Services team on **0845 123 2399** during office hours

Diabetes UK

National and regional offices

Central Office	Telephone 020 7424 1000
Diabetes UK Cymru	Telephone 029 2066 8276
Diabetes UK Northern Ireland	Telephone 028 9066 6646
Diabetes UK Scotland	Telephone 0141 245 6380
Diabetes UK Eastern	Telephone 01376 501390
Diabetes UK East Midlands	Telephone 0115 950 7147
Diabetes UK London	Telephone 020 7424 1116
Diabetes UK Northern & Yorkshire	Telephone 01325 488606
Diabetes UK North West	Telephone 01925 653281
Diabetes UK South East	Telephone 01372 720148
Diabetes UK South West	Telephone 01823 324007
Diabetes UK West Midlands	Telephone 01922 614500

Visit www.diabetes.org.uk/in_your_area/ for email addresses

Useful contacts

Become a member	Telephone 0800 138 5605
Customer Services	Telephone 0845 123 2399
Diabetes UK Careline (or if hearing impaired)	Telephone 0845 120 2960* Textphone 020 7424 1031
Publications orderline	Telephone 0800 585 088

Visit www.diabetes.org.uk for further information

***Diabetes UK Careline** is here to help. Call **0845 120 2960** for support and information (although unable to provide individual medical advice). Calls cost no more than 4p per minute. Calls from mobiles usually cost more.



The charity for people with diabetes

10 Parkway, London NW1 7AA

Telephone 020 7424 1000 Fax 020 7424 1001

Email info@diabetes.org.uk Website www.diabetes.org.uk

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