

## Patient Guide Living with Diabetic Foot Syndrome (DFS)





## Living with Diabetic Foot Syndrome (DFS) „Diabetes“ - a widespread disease

Around 430 million people worldwide suffer from diabetes mellitus. As a result of this disease, the so-called „diabetic foot syndrome“ can develop, which can lead to open sores on the feet. With this patient guide, we would like to help you take responsibility for protecting your feet.

In the event of a wound developing, we will show you how different therapeutic shoes work.

## What is Diabetic Foot Syndrome (DFS)?

Due to diabetes and increased blood sugar levels (hyperglycaemia), the blood vessels and nerves of the feet are damaged. As a result of this nerve destruction, the toes and feet in particular gradually become numb and stimuli such as pain, pressure and temperature are not perceived or are sensed too late. This can lead to open sores on the feet and toes that are difficult to heal. The consequence can be a severe inflammation of the affected area, which in the most extreme case can lead to a partial amputation of the toes or the foot. Therefore, intensive preventive measures must be taken in order to avoid a possible amputation.

### Take precautions!

- Inspect your feet, bandages and orthopaedic aids daily!
- Check your feet regularly with a hand mirror!
- Are your feet swollen, are you constricted by socks or shoe seams?
- Are there blisters, redness, cracked skin, corns or severe calluses?
- Are there ingrown nail corners or are the toenails thickened, yellow or white in colour?
- Is the skin between the toes intact?

In case of occurring disorders, specific questions, delays in wound healing or unauthorised discontinuation of therapy, please consult your doctor or your medical supply store!

### Risks for foot sores

- Unsuitable footwear: shoes that are too tight, too narrow, too pointed, high heels.
- Foot deformity, e.g. hollow splay feet, flat or flat feet, claw or hammer toes, crooked toes (hallux valgus)
- Calluses
- Incorrect pedicure (e.g. a callus scraper should not be used).
- Polyneuropathy: nerve damage affecting the motor, sensory and autonomic nerves
- Damage to the arteries and veins, e.g. peripheral arterial occlusive disease = PAD
- Injuries of all kinds, e.g. pebble in the shoe, burns caused by too hot water or hot sand (on the beach)

### Things you should look for if you have a sore

- Do the bandages show strong wrinkles, are they slipped or strongly discoloured?
- Do the hook- and loop-fasteners of the orthopaedic aids (e.g. therapy shoes) stay in place?
- Does the cushioning sole of the orthopaedic aid (e.g. therapy shoes) have the necessary restoring force (cushioning effect over time) or does it need to be replaced?
- Does the outsole (e.g. of the therapeutic shoes) have sufficient tread to enable safe standing and walking?

## What to do in the event of a sore?

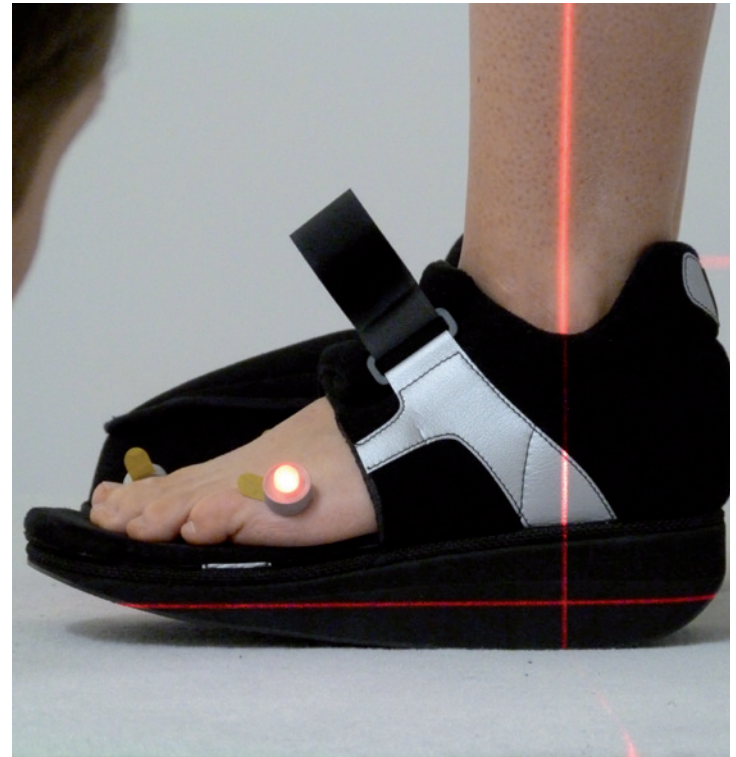
Sores on the lower extremities are among the most frequently treated forms of modern wound management. In addition to wound treatment according to the stage, holistic wound care and protection includes therapeutic shoes adapted to the user.

## Which therapeutic shoe is suitable for you?

The partial foot relief shoes in the Streifeneder ortho.production therapy programme provide the necessary pressure relief on the forefoot and back foot. Surgical shoes not only have the task of accommodating often voluminous bandages, they also protect the injured feet from dirt, splash water and cold.

Depending on the type of sore in the area of the foot and ankle, different therapeutic shoes can be used.

Please note that a therapeutic shoe requires qualified, individual and indication-appropriate fitting to the patient by qualified personnel. On the following pages we will introduce you to a selection of therapeutic shoes for pressure relief.



*Development of a therapeutic shoe - for the best possible therapeutic benefit*

## Therapy shoes for pressure relief

### Forefoot relief shoe Merkur 201R1

- Outsole rises towards the front to relieve pressure on the forefoot
- Softly padded shaft
- Hook- and loop- straps prevent slipping in the shoe
- Cube cushion sole to prevent pressure peaks in the sole of the foot area
- Improved slip resistance due to integrated sole spots
- Antibacterial treatment



### Forefoot relief shoe (post-surgical shoe) Pluto S 216R1

- Outsole rises slightly towards the front to relieve pressure on the forefoot
- Cube cushion sole to avoid pressure peaks in the sole of the foot area
- Wide opening of the flap provides a volume of space to accommodate joined feet
- Improved slip resistance due to integrated sole spots
- Antibacterial treatment
- Forefoot strap prevents lateralisation of the forefoot





### Heel relief shoe Mars 203R1

- Padded mid-foot roll to relieve pressure on the heel
- Softly padded shaft
- Hook- and loop-fasteners hold the foot in a predefined position
- Cushioned sole to prevent pressure peaks in the forefoot area
- antibacterial treatment



### Long-term dressing shoe Luna 210R1

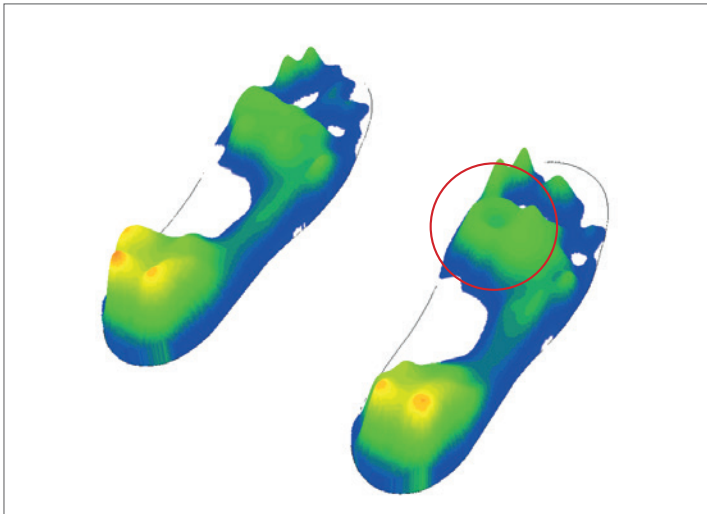
- Sandal-like construction with raised toe edge accommodates large-volume dressings
- Cube cushion sole relieves sensitive pressure points on the sole of the foot
- Additional relief for foot and toe joints due to stiffened outsole
- Secure hold due to higher shaft and reinforced heel area
- antibacterial treatment



## Cube cushion sole for selective pressure relief

Almost all forefoot relief and post-operative shoes are equipped with a cube cushion sole. Individual cubes can be removed for selective pressure relief in the case of plantar lesions and ulcerations. This redistributes the pressure: The affected area is relieved and can heal more effectively. The cube pad sole is particularly suitable for post-operative use and outpatient wound care.





The illustration shows the comparison of the maximum pressure peaks when wearing the Merkur therapeutic shoe by means of foot pressure measurement (pedobarography). In the right-hand illustration, cube pads were removed for selective relief of the plantar metatarsal head 1 - whereas on the left-hand side they were not removed.

With success: In the area of the metatarsal head 1, a clear pressure relief can be seen with the cubes removed!

## Further tips and recommendations for DFS, when no foot sore is present

### Foot hygiene and nail care

- Change your cotton socks every day (white or light-coloured socks will show an injury sooner).
- Wash your feet daily at a maximum temperature of 37°C (use a thermometer; the footbath should not last longer than 3-5 minutes).
- Dry your feet thoroughly, especially between the toes.
- Treat dry skin with creams containing fat and urea
- remove calluses with a damp pumice stone before the foot bath
- Avoid using razors, callus scrapers or creams and plasters containing salicylic acid.
- Do not cut your toenails too short, as they can grow in.
- In general, toenails should be filed down and not cut.
- Scissors, nail clippers or pointed nail files should not be used because of the risk of injury.
- People with a pronounced polyneuropathy often have a legal entitlement to medical foot care.

### Everyday shoes suitable for people with diabetes

- Shoes must have enough space, as the foot can lengthen by up to 14 mm during natural rolling, depending on the size of the foot.
- Never walk barefoot, do not wear open shoes that could, for example, pick up small stones or similar objects.
- Before putting on the shoes, feel the inside to make sure no object has fallen in that could cause an injury.
- It is best to buy shoes from a specialist shop and seek detailed advice on the differences between individual models - appearance and effect are often two different things
- wear in new shoes slowly, no more than half an hour to start with.
- Always check insoles and shoes for wear: Insole cushion intact, no noticeable inner seams, velcro hook- and loop-fasteners in order, firm tread sole with built-in rolling intact?

## Help Online

[www.iwgdfguidelines.org](http://www.iwgdfguidelines.org)

[www.idf.org](http://www.idf.org)

[www.ewma.org](http://www.ewma.org)



Publisher/Author

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300W101/E 2022-09

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