



medi

# Osteoporosis

An informational brochure for patients and their relatives.



medi. I feel better.



# Osteoporosis

## What is osteoporosis?

Osteoporosis, or “bone loss”, is a widespread disease.

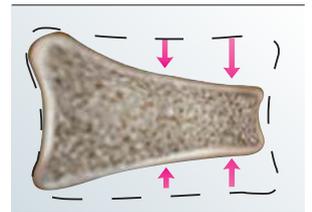
According to the US Surgeon General an estimated 10 million Americans over age 50 have osteoporosis, the most common bone disease, while another 34 million are at risk. Each year, an estimated 1.5 million people suffer an osteoporotic-related fracture, an event that often leads to a downward spiral in physical and mental health. In fact, one out of every two women over 50 will have an osteoporosis-related fracture in their lifetime, with risk of fracture increasing with age.

While women are most often affected, osteoporosis is becoming ever more common in men. Our bones consist of living tissue, which is continuously broken down and built up in the course of our lives. Osteoporosis is the medical term for a metabolic disease in which more bone mass is broken down than built up.

The bones become fragile and lose substance and strength – which remains unnoticed for a long time. These bones may break under slight stress and/or after a simple fall (osteoporotic vertebral body fracture).



Healthy vertebral body



Wedged vertebral body

---

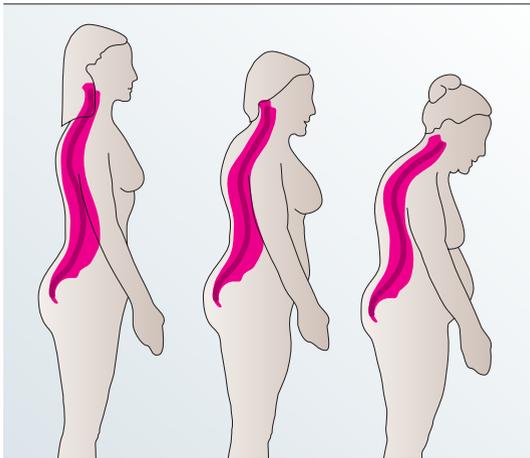
## What are the consequences of osteoporosis?

---

The disease-induced loss of bone substance causes the vertebral column to collapse into itself.

The dorsal is curved more strongly backwards, while the lumbar spine curves more strongly forward. This may lead to a so-called “dowager’s hump”. If vertebrae collapse or become deformed, this can lead to distortion of the spine and to a shortening of the trunk, so that the upper arms appear too long in proportion.

This often leads to intense pain and restricted mobility. This causes additional loss of muscle mass and bone substance.



A humpback (dowager’s hump) is a visible sign of osteoporosis.

---

## How can osteoporosis be treated?

---

Effective therapy is based on several approaches that have to be compiled individually for each patient.

A comprehensive treatment program of pharmaceutical therapy, nutritional guidance, exercise, and physical therapy is ideal. Combined with the scientifically proven Spinomed patients now have more treatment options than ever before.



Spinomed



# The principle of biofeedback

**Spinomed – the original orthoses for the treatment of osteoporosis**

Spinomed orthoses offer you more protection in everyday living – quickly, permanently and without side effects.

**How do Spinomed orthoses work?  
The principle of biofeedback**

**All original Spinomed orthoses work on the same principle of action**

Together with the back splint, the elastic stretch materials in the orthoses exert tension forces on the pelvic and shoulder areas. Every time you droop into a poor posture, the Spinomed orthosis exerts gentle pressure via the straps to remind you of the correct posture.

As a reflex response to this, you tense your trunk muscles to straighten your upper body again. This process is called biofeedback.



without  
Spinomed



Mode of action of  
biofeedback

## Spinomed®

### Easy to slip into

Can be put on or taken off like a rucksack.

Then simply close the Velcro closure over the abdomen.

92% of users in a study\* were not prepared to part with this orthosis after the test had ended.



### Product benefits

- Simple to apply and comfortable to wear due to ergonomically, pre-formed shoulder straps
- Simple to handle with the open slip-in version and clear strap positioning. The straps can be adjusted for fit
- The soft material makes it comfortable to wear
- Low overall weight
- Special adjustment to the respective body shape:

The aluminium splint is individually adjusted to the wearer's spine by the orthopaedic technician



### Product benefits



Simple strap positioning



Lightweight and streamlined design



Easy to use closure system



Ventilated posterior brace pocket to patient comfort.



# Mode of action

---

## Spinomed orthoses strengthen the musculature.

---

Activation of the trunk musculature can lead to a training effect and strengthen your back muscles. Strong muscles act to reduce pain and give you more mobility in everyday living.

---

## Spinomed orthoses straighten your back.

---

The biofeedback leads to a continuous and natural straightening of your trunk. It has been proven that the curvature of the spine (kyphosis) becomes flatter and your back straightens up.

---

## Spinomed orthoses improve breathing.

---

When your back is straighter, your muscles improve and breathing becomes easier. This also protects your lungs better against infections. You can feel how well your body and mind perform.

---

## Positive side effect: muscle ache.

---

The desired effect of strengthening muscles causes mild to moderate stiffness of the muscles when the orthosis is worn for a longer period of time. As with other activities, the muscle ache decreases as the muscles grow stronger and ultimately disappears altogether after the orthosis has been worn for several hours every day. Therefore muscle ache is a positive sign of the effect of the orthosis!



# The osteoporosis screening test

## Which factors increase the likelihood of developing osteoporosis?

Osteoporosis can be caused by different factors that we can divide into those you can influence and those that you can't.

### Factors we can't influence:

- Genetic predisposition
- Age

### Factors we can influence:

- Stature: body mass index (BMI) under 20
- Calcium and/or vitamin D deficiency
- Smoking / regular alcohol consumption
- Little physical activity

Take our test to see for yourself whether you have an increased likelihood of developing osteoporosis.

### Your score

Up to 19 points, a low likelihood; up to 29, a moderate likelihood; and over 29 points, a high likelihood of developing osteoporosis.

## Cross where appropriate

### and add up your score:

I am over 50	<input type="checkbox"/>	1
I am over 65	<input type="checkbox"/>	2
I weigh less than 10kg under normal weight	<input type="checkbox"/>	2
My height has decreased by more than 4 cm	<input type="checkbox"/>	2
I do not play any sport	<input type="checkbox"/>	1
My job involves little movement	<input type="checkbox"/>	1
I am immobile (bed-ridden for a long period)	<input type="checkbox"/>	3
I smoke more than 10 cigarettes a day	<input type="checkbox"/>	1
I drink more than 2 alcoholic drinks a day	<input type="checkbox"/>	1
I drink more than 4 cups of coffee a day	<input type="checkbox"/>	1
I drink sweet soft drinks every day (cola etc.)	<input type="checkbox"/>	3
I consume little milk or milk products.	<input type="checkbox"/>	1
I eat a lot of fast food	<input type="checkbox"/>	1
I have immediate relatives with osteoporosis	<input type="checkbox"/>	1
I have immediate relatives with osteoporotic fractures	<input type="checkbox"/>	2
I had menstruation for less than 30 years	<input type="checkbox"/>	1
I had no menstruation for a long period of time	<input type="checkbox"/>	1
I had chemotherapy	<input type="checkbox"/>	4
I had cortisone treatment	<input type="checkbox"/>	3
I had a gastric resection	<input type="checkbox"/>	4
I have sex hormone deficiency	<input type="checkbox"/>	1
I have an overactive thyroid	<input type="checkbox"/>	1

# Tips on the subject of osteoporosis

- Do a lot of walking. The sun promotes vitamin D production, which is, in turn, important for building up bone mass.
- Stay physically active and do activities that you enjoy (cycling, swimming, Nordic walking, hiking, dancing, etc.)
- Plan for more movement during the day (climbing stairs, walking short distances, etc.)
- Remove things you may trip over at home.
- Drink milk and eat milk products (important for supplying vitamin D and calcium).
- Eat calcium-rich fruit regularly (blackberries, raspberries) and vegetables (fennel, broccoli, cabbage).
- Drink no more than 4 cups of coffee a day.
- Eat rhubarb and spinach or drink black tea occasionally.
- Relieve the pressure on your spine by avoiding excess weight.
- Sit and walk tall! Stand, walk and sit as straight as you can with your head up and your shoulders straight.
- The correct posture while sitting is important.
- Make sure your spinal column is straight, pull your shoulders back and vary your sitting position from time to time.

# About medi

medi is a world-wide leading company in the healthcare market and has been manufacturing medical devices since 1951.



## Phlebology

mediven compression garments for your venous health and for lymph therapy, but also for the important prevention of thrombosis.



## Orthopedics

medi supports and braces for the treatment of joint conditions and injuries, such as osteoarthritis, osteoporosis, cruciate ligament rupture.



## CEP

Your partner on the subject of sport compression. Compression sport socks and sportswear for better performance, endurance and more rapid regeneration!

Your Dealer

medi USA  
6481 Franz Warner Parkway  
Whitsett, NC 27377  
T 800-633-6334  
F 888-570-4554  
b2b.mediusa.com  
info@mediusa.com  
mediusa.com