

Health and well-being guide



OUR HEALTH
OUR BEURER

Well-being for the
whole family



Dear Reader,

Beurer has been providing high-quality health and well-being products for generations. Our range offers a comprehensive selection of products, including flexible heating products, personal and kitchen scales, blood pressure and blood glucose monitors, clinical thermometers, nebulisers, foot baths, beauty products, air humidifiers, baby care products and heart rate monitors.

This guide provides you with information that is important for leading a healthy life. You will discover more about health management with the Beurer HealthManager, as well as more about soothing heat, your blood pressure and preventive measures, how nebulisers work and how to use them, and finally diabetes and prevention. The guide also contains a whole host of exercise and beauty tips.

Your Beurer team



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Beurer health management

The HealthManager from Beurer - the core of Beurer Connect. Hold on to all your measurements, from your blood pressure to your weight, activity and sleep, through to your personal blood glucose measurements.



The innovative HealthManager is available for download free of charge as software or as an app. You can use the HealthManager with all products that are marked with the HealthManager logo.



Data accessible via web and app. Access it on the move – any time and anywhere.

Health management from Beurer

Modern health management. All Beurer Connect products are remarkable because they not only save and display measurements on the device itself; users can also transfer all the data to a PC or gain an overview on the move with a smartphone or mobile device.

Tested data security and data protection

The Beurer Cloud “HealthManager” is certified by the TÜV Rheinland i-sec GmbH certification body, in accordance with the “Data protection and data security for online applications” requirements specification.

Optimum monitoring of measurements via the app, PC software or online

The free HealthManager PC software, app and online tool are available for all products labelled with the HealthManager logo. **The type of product determines the transfer method: NFC** (near field communication), **Bluetooth® Smart technology** direct to your smartphone or the conventional method using **USB** to your PC. If you wish, you can save the data locally or synchronise your data with any of your systems using the web version – compatible with PC, iOS or Android.



*Tested online application Beurer HealthManager Cloud



The free HealthManager app allows you to manage data with a whole host of products. Switch easily between weight, blood pressure, blood glucose, activity and sleep.

Managing mobile health data is real fun

You can easily synchronise your data within the HealthManager system whenever and wherever you wish – **ONE complete system for monitoring your health.**

HealthManager app



The free **HealthManager app** allows you to manage data with a whole host of products and measurements. Switch easily between **weight, blood pressure, blood glucose, activity and sleep**. Your last measurements for each area are displayed in a clear overview. Progress graphs and tables with measured values give you a quick and convenient overview of your measurements.



List of compatible smartphones



HealthManager PC software

The free **HealthManager PC software** enables you to analyse your body values even more closely. Additional views and settings allow for individual evaluations. Using different export functions, it is also easy to make data available to other people.



HealthManager Web

With the free **HealthManager web** version, your data will always be to hand. Your health data is exchanged between the HealthManager app and HealthManager PC software via the online HealthManager Web portal at **connect.beurer.com**.



HealthManager from Beurer

- TÜV-certified data security for your personal health data with tested online application Beurer HealthManager Cloud. Free for all HealthManager products and easy to use; quick and convenient, available wherever you are and at any time, and ready for HealthVault.



Data Privacy/
Data Security *

www.tuv.com
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*Tested online application Beurer HealthManager Cloud



Beurer Connect – the connected product range

- Health management by Beurer goes a step further! All Beurer Connect series products offer the great benefit that measurements are not only saved and displayed on the device itself but can also be transferred to a smartphone, tablet or PC.



Flexible heating

Heat relaxes the muscles, promotes circulation and activates the blood supply to cells. Generations of physicians since the time of Hippocrates have been using heat-based treatments as a mild remedy for the cure of ailments. You are always on the safe side with a Beurer heating product.



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The benefit compared with a hot-water bottle: heating pads give you a long-lasting, constant and adjustable warmth. Hot-water bottles cool down quickly and the temperature cannot be adjusted; sometimes they are too hot and sometimes too cold.



The size and fit of the HD 50 cosy electric cape gives you a feeling of pleasant warmth on the shoulders, neck and back

Heat for your well-being

Heat helps to relax your body and make you feel good. It can promote circulation, re-energise the body and relieve pain. Heat was used in the ancient world to cure diseases.

How does heat work?

Heat boosts different healing processes and penetrates deep into the muscles or tissue. For example, in the case of muscle tension, applying heat reduces pain perception in the brain. Heat therefore relaxes muscles. The metabolism is stimulated by the application of heat, blood vessels expand and circulation is promoted. This enables tissue to be supplied with nutrients and toxins to be flushed out of the body.



When and how should heat be applied?

Persistent pain such as muscle tension, tissue damage or chronic bronchitis can be relieved through heat treatment. However, it is a good idea to seek medical advice first if you experience any complaints. This is because heat should only be applied if the joint is not inflamed or swollen. We advise against applying heat directly to the joint – it is far better to limit treatment to the surrounding muscles.

Snuggly warm and unbeatably cosy

Our Cosy products, from heating pads and electric overblankets to foot warmers, are made from a high-quality material that is super soft and fleecy. The teddy bear fabric underblanket is indispensable for those cuddly moments. The super fibre fleece heating products and covers are wonderfully soft, giving you a true sense of well-being.

Hygiene and cleanliness

Care and cleaning of labelled heating products in the washing machine is easy and hygienic thanks to the detachable power cord. Once you have disconnected the plug-in coupling and switch, the heating product can be cleaned at 30°.





Enhanced hygiene with PURE silver finish on the top of the electric underblanket – antibacterial, reduces odours, washable

Hygiene and freshness – PURE makes it possible

We have applied this new development in the textile industry to our underblankets: PURE.

A special silver finish on the top of the electric underblanket ensures a good night's sleep. The innovative hygiene feature* in the material takes quality and high standards to a whole new level.



Confidence guaranteed

Beurer possesses the sought-after **Öko-Tex certificate** for all electric overblankets, electric underblankets and washable heating pads with this label. The Öko-Tex certificate gives peace of mind when it comes to textile products.

Furthermore, our products feature the special **Beurer safety system (BSS)**. Its fundamental principles are highly-developed heat conductors coupled with accurate electronic temperature regulation offering maximum safety.

Additional protection is provided by means of automatic switch-off in the event of a malfunction.

Does electrosmog occur during use?

Electrical and magnetic fields are generally created by electrical indoor installations and by all electrically operated products. If using heating pads, foot warmers, electric underblankets and electric overblankets, values are well below the limits recommended by the World Health Organisation (WHO) and the prescribed German legal requirements:

- Electrical field strength: max. 5000 V/m
- Magnetic field strength: max. 80 A/m
- Magnetic flux density: max. 100 microtesla

For a cosy world of dreams by day and night i

Fall asleep warm and cosy. For a healthy sleeping environment, scientists recommend fresh air, keeping the bedroom cool (16-18°C) and a bed at the correct temperature (20-30°C). A pre-warmed bed shortens the time it takes to get to sleep and increases the sense of well-being.



*99% bacteria reduction in accordance with DIN EN ISO 20743



Which Beurer heating products are available?

If you're looking for a life full of warmth, rest assured that Beurer will fulfil your needs. Heating pads in all shapes and for a variety of applications, electric underblankets with different functions, electric overblankets for a cosy evening on the sofa and cuddly foot warmers offer guaranteed relaxation and well-being.

- Our **classic heating pads** are suitable for all heat applications.
- **Special heating pads** are especially suitable for targeted applications of heat, e.g. in the shoulder, neck and back areas, or for magnetic field applications.
- Our **classic electric underblankets** heat up beds easily and quickly to pleasant temperatures. We also have **electric underblankets in a fitted sheet design** to keep everything in place and ensure you have a relaxing night's sleep.

- Our **electric overblankets** bring cosy warmth to cold days and soothing relaxation.
- Our **foot warmers** guarantee warm feet and quality time for yourself.



Weight and diagnosis

One in three Germans are not happy with their weight. Being overweight or underweight can cause or speed up the onset of certain diseases. Excess weight and obesity are among the main risk factors for conditions such as metabolic syndrome or diabetes mellitus. Regular weight control and getting down to a normal, healthy ideal weight are required to counteract these diseases.



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What is important when measuring body values: the calculation of body fat may only be made when barefoot; the soles of the feet should be lightly dampened where appropriate. Results may be unsatisfactory or measurements incorrect if the soles of the feet are completely dry, as this results in insufficient conductivity.

Weight control

Weight has become a major issue in today's society. Changed living conditions and circumstances combined with less physical exercise and an excess of mostly high-calorie foods are leading to an increasing number of overweight people. However, being underweight is also a risk factor, particularly for elderly people. To maintain your ideal weight, it is therefore important to know your own body values and to monitor these regularly.

Measuring your weight correctly

To obtain measurements that can be compared, you should weigh yourself at the same time everyday if possible. This should be done ideally in the morning without clothing and on an empty stomach approx. 15 min. after getting up so that the water stored in the body can disperse.



Interpreting body weight – Body Mass Index (BMI)

Body mass index (BMI) is a common method for interpreting body weight. It analyses your weight in relation to your height. The calculated value should be in the range of 18.5-24.9 kg/m² for adults. If the value is above 30 kg/m², this is considered obese.

$$\text{BMI formula: } \frac{\text{Weight (kg)}}{\text{Height}^2 \text{ (in m)}}$$

Weight classification for adults based on BMI (according to WHO*, 2008)

Category	BMI (kg/m ²)	Description
Severe thinness	< 16.00	< 18.50 Underweight
Moderate thinness	16.00 - 16.99	
Mild thinness	17.00 - 18.49	
Normal weight	18.50 - 24.99	Normal weight
Pre-obese	25.00 - 29.99	> 25 overweight
Obese class I	30.00 - 34.99	≥ 30 Obese
Obese class II	35.00 - 39.99	
Obese class III	≥ 40.00	

For it is not only the BMI which serves as a guideline; waist circumference is also helpful here. Investigations have shown that the health risk is increased by excessive fat distribution to the abdomen. The guideline value here is waist circumference, taken from between the bottom rib bone and the top of the pelvis. Men are at higher risk at waist measurements of >94 cm, women at >80 cm.

This is how you measure your waist circumference:

You need to be standing with the upper body bare, then place a tape measure between the bottom rib bone and the top of the hip bone and take it all the way round your waist. Breathe out slightly and then take your waist circumference measurement.

*WHO = World Health Organisation



Detailed interpretation of body values?

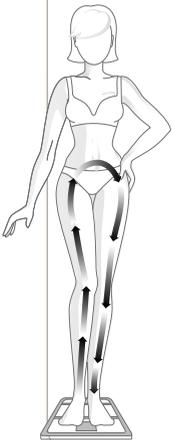
It is important not only to know your body weight, but also to know your personal body values such as body fat, body water and muscle percentage. This allows both progress and setbacks to be recognised early and counterbalanced by the right training or healthy eating regime. It is also a way of gaining useful information, for example, whether your body weight has increased through a build-up of body fat or more muscle tissue. As body values do not change immediately after a training session, monthly measurements of body values are sufficient. Taking measurements too frequently can quickly lead to a loss of motivation.

Diagnostic scales* not only calculate your weight, but also the percentage of water, muscle mass and body fat.

Measurement principle: Bioelectrical impedance analysis (measuring electrical resistance)

During measurement, a completely **unnoticeable and harmless electrical current** is sent through the body. Taking into account **age, sex, height** and various adjustable **activity levels**, the percentage of body fat, body water and muscle mass is calculated.

Basis: **Muscle tissue and water** conduct **electricity well** and therefore have a lower resistance. **Fatty tissue is a poor conductor** and creates a high level of resistance.



Body fat

A high percentage of body fat increases the risk of illness and cannot **be simply identified by sight**. Even people who appear slim can have a high body fat percentage.

Standard values for women:

Age	Excellent (in %)	Good (in %)	Average (in %)	Poor (in %)
10-14	<16	16-21	21.1-26	>26.1
15-19	<17	17-22	22.1-27	>27.1
20-29	<18	18-23	23.1-28	>28.1
30-39	<19	19-24	24.1-29	>29.1
40-49	<20	20-25	25.1-30	>30.1
50-59	<21	21-26	26.1-31	>31.1
60-69	<22	22-27	27.1-32	>32.1
70-100	<23	23-28	28.1-33	>33.1

Standard values for men:

Age	Excellent (in %)	Good (in %)	Average (in %)	Poor (in %)
10-14	<11	11-16	16.1-21	>21.1
15-19	<12	12-17	17.1-22	>22.1
20-29	<13	13-18	18.1-23	>23.1
30-39	<14	14-19	19.1-24	>24.1
40-49	<15	15-20	20.1-25	>25.1
50-59	<16	16-21	21.1-26	>26.1
60-69	<17	17-22	22.1-27	>27.1
70-100	<18	18-23	23.1-28	>28.1

Body water

The human body consists of up to 65% water. **Water** is an important factor in personal well-being. Too little can cause tiredness, poor concentration and even serious damage to your health.

Standard values: Women 45 - 60%
Men 50 - 65%

*Please note that the values calculated by the diagnostic scale only represent an approximation of the actual medical analytical values for the body. Only a specialist doctor can precisely establish the body fat, body water, muscle percentage and bone structure using medical methods (e.g. computer tomography).

People with a very high body fat percentage generally have a lower body water content, because fatty tissue contains very little water.

Both body fat percentage and body water content need to be taken into account when dieting. Rapid weight loss at the start of a diet is largely due to loss of body water while the body's fat reserves remain untouched. This is why both values should always be monitored. Body water calculations performed using a diagnostic scale are inappropriate for drawing medical conclusions, for example, in the case of age-related water retention. Consult your doctor where necessary. A high body water content is generally desirable.

Muscle percentage

The **muscles** are the driving force of your body. Well-developed muscles **support the bones** and **relieve the spine**. Even gentle physical activity can make a positive contribution towards maintaining your muscle mass. **Exercise** is also very important in targeted **weight loss**, because more exercise requires **more energy** and therefore **burns fat**. The extra energy required is drawn from the metabolic cycle and gradually breaks down body fat. Muscle mass is therefore known as the “enemy” of body fat.

Bone mass

The **bone mass** of our body is very individual; there are no general standard values. Like the rest of our body, our bones are subject to natural growth, shrinking and ageing processes. Bone mass increases rapidly during childhood and reaches its peak between the ages of 30 and 40 for both men and women. As we age, our bone mass then begins to reduce. You can combat this reduction to an extent with the help of a **healthy diet** (e.g. minerals like calcium) and **regular physical exercise**.

IMPORTANT: Please do not confuse bone mass with bone density. Bone density can only be determined by means of a medical examination (e.g. computer tomography, ultrasound). It is therefore not possible to draw conclusions on bone changes (e.g. osteoporosis) using scales.





Whether you are just right, too fat or too thin can easily be checked using a diagnostic scale.

How much energy does the body need?

If you maintain your weight, you will have a good balance of energy. The amount of energy taken in is the same as that consumed. In order to lose weight, we need a negative energy balance. The energy taken in must be reduced and energy consumption increased. This can be achieved by making changes to eating habits, reducing food intake and taking more exercise.

Basic Metabolic Rate (BMR)

BMR is the basic level of metabolism that the body requires when it is resting in order to sustain its normal bodily functions such as breathing, heartbeat, circulation or digestion. BMR varies depending on age, sex, height and weight.

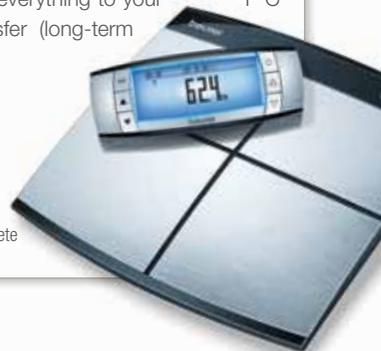
Body percentages such as muscle mass also influence BMR. Fatty tissue, for example, needs considerably less energy than muscles. This means that the greater the muscle mass, the higher the basal metabolic rate.

Active Metabolic Rate (AMR)

AMR is in effect the calories that we consume on a daily basis depending on our height, sex, age, weight and entered activity level whilst maintaining current weight. AMR can be raised through increased exercise and physical activity. Another useful instrument to help us maintain or reduce our weight.

Weight control

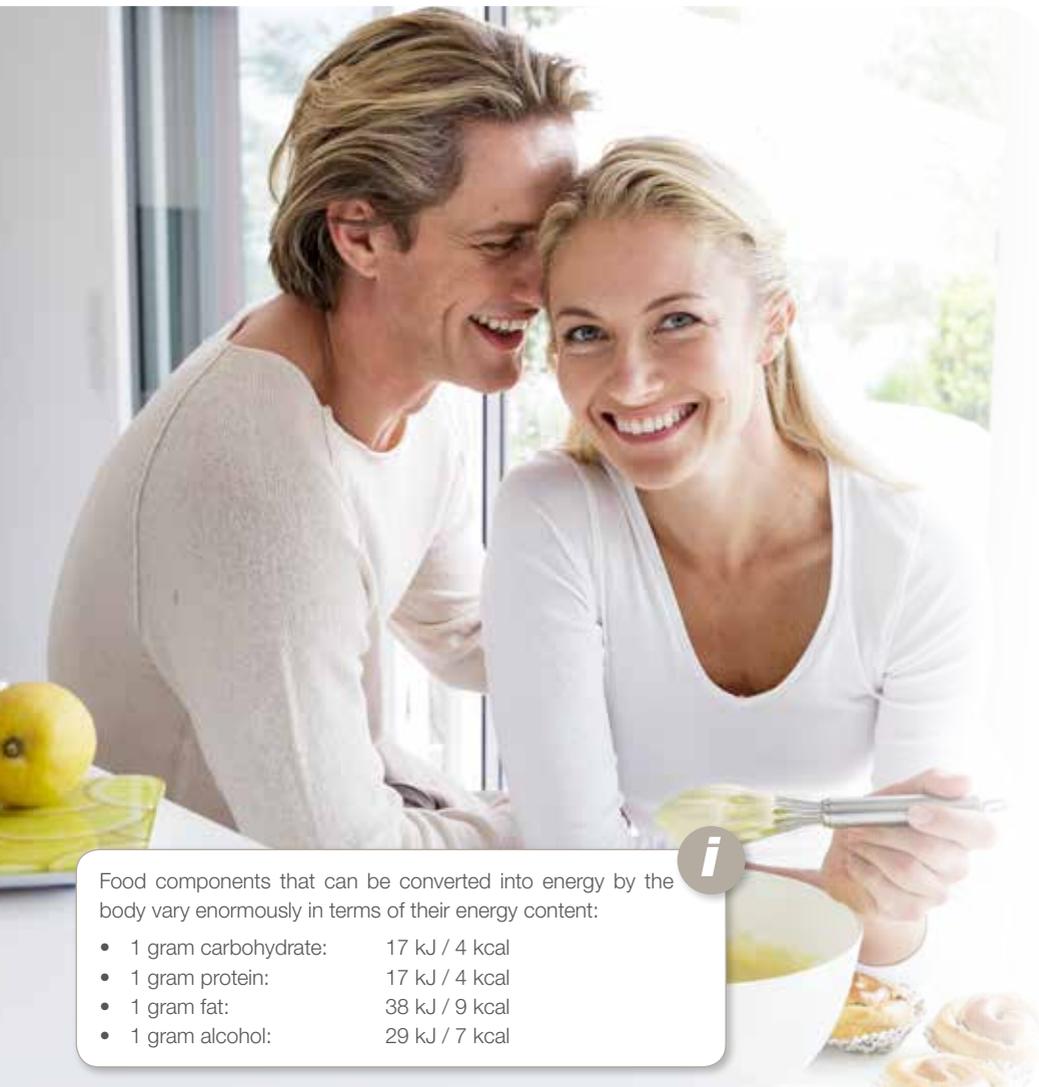
The diagnostic scale is ideal for regular weight control. As well as the weight measurement, results for body fat percentage, muscle mass and body water content are also displayed. The scale also provides an interpretation of your personal values and a trend display showing how the values have developed, and you can save everything to your P C via USB transfer (long-term monitoring).



BF 100 Body Complete diagnostic scale

A balanced diet

Eating a healthy, balanced diet enables you to manage your weight in the long term, increases your **sense of well-being** and improves your **health**. **Beurer kitchen scales** can help you to achieve this.



Food components that can be converted into energy by the body vary enormously in terms of their energy content:

- 1 gram carbohydrate: 17 kJ / 4 kcal
- 1 gram protein: 17 kJ / 4 kcal
- 1 gram fat: 38 kJ / 9 kcal
- 1 gram alcohol: 29 kJ / 7 kcal



Cooking and baking made easy

Whether you're cooking a particularly elaborate dish or baking a delicious cake – using the correct quantity of ingredients is vital. So kitchen scales are ideal as a practical helper in the kitchen – and not only for weighing a specific quantity, but also for working out different nutritional values.

Kilocalories / kilojoules

The energy content from food that can be used by the body can be indicated in kilocalories (kcal) or kilojoules (kJ). To cover the daily amount of energy we need, every day we should take in around 55% of our energy supply through carbohydrates and around 10-15% through protein. The proportion of fat in food should not exceed 30%.

Carbohydrates

Carbohydrates are the most effective energy source for the body. They provide energy for muscle contractions and for all other bodily functions. There are two types of carbohydrate: simple – e.g. glucose in confectionery or fructose in fruit, or complex – starch in potatoes, pasta and rice.

Protein

Protein is one of the most important basic nutrients. It has extensive functions; amongst other things, protein is essential for growth and the development of all body tissue.

Fat

Fat is an important energy source for humans and carries flavour and aromatic substances. The body can only absorb the liposoluble vitamins A, D, E and K with the help of fat. The human body cannot make polyunsaturated fatty acids. If consumed in moderation, fat is therefore not unhealthy in any way; it is absolutely essential.

All the important nutritional values at a glance i

A balanced diet is the key to health and well-being and this starts with a good awareness of foods.

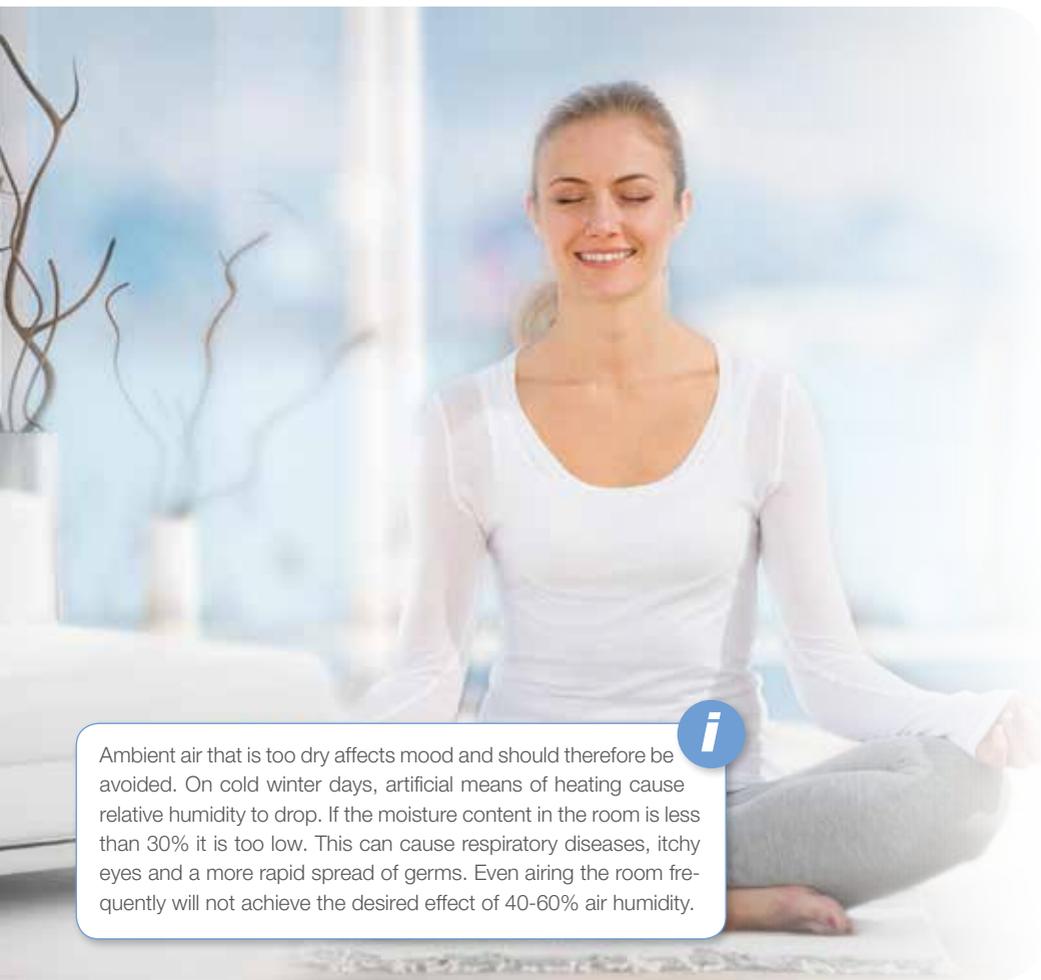
The DS 61 kitchen scale features stored nutritional and energy values for 950 different foodstuffs. So when weighing, kcal, kJ, fat content, bread units, protein, carbohydrate and cholesterol values are calculated directly. Entire mealtimes can be analysed by totalling up and saving the calculated nutritional values. In addition, you have the option of storing values for your own foodstuffs with a further 50 memory spaces.



DS 61 nutritional analysis scale

A healthy indoor environment

Just take a deep breath. Most of us spend up to 90% of our lives indoors. Healthy, humidified air makes breathing easier, reduces the concentration of dust, strengthens our immune system, improves our ability to concentrate and protects our eyes and skin from drying out.



i Ambient air that is too dry affects mood and should therefore be avoided. On cold winter days, artificial means of heating cause relative humidity to drop. If the moisture content in the room is less than 30% it is too low. This can cause respiratory diseases, itchy eyes and a more rapid spread of germs. Even airing the room frequently will not achieve the desired effect of 40-60% air humidity.



Healthy ambient air

We breathe in and out around 20,000 times a day to supply our bodies with oxygen. We spend a lot of time in enclosed areas where the air is at its poorest, air humidity is too low, the temperature is not ideal and the air may be contaminated with pollen, domestic dust or odours.

Healthy air:

- Reduces exposure to dust, particularly for those prone to allergies
- Strengthens the immune system against coughs and colds
- Protects skin and eyes from drying out

A weather station is essential in every household.

A weather station monitors air humidity constantly so that the appropriate counteraction can be taken if the measured values are too high.

HM 16 thermo hygrometer



Why do we need active air humidification?

The optimum humidity indoors is around 40-60%. Air humidity can often fall a long way below these recommended values, particularly during the heating period. This is because the cold winter air can absorb less moisture than warm air. If cold air from outside finds its way into rooms in the winter it is quickly warmed. However, since the air always “tries” to achieve a very high level of humidity, it is a good idea to have the air humidifier running from the start of the heating period. This is to prevent the air from drawing the moisture it needs from other sources such as plants, furniture, or even the human skin and mucous membranes.

Example:

- Air temperature = 10°C and humidity = 50 %
- Heating the air from 10°C to 23°C lowers the humidity to 20%.

How to improve the indoor environment: air humidifiers or air washers?

An air humidifier increases humidity in the room. If the air is also to be cleaned from domestic dust, pollen and odours, an air washer can help here. You can use the following questions to decide what equipment you need:

- Would you like more moisture in the air? (Air humidifier and air washer)
- Would you like to humidify the air and have less domestic dust, pollen, animal hair and odours in the air? (Air washer)
- Do you have an irritated throat or itchy eyes in winter? (Air humidifier and air washer)

- Do you suffer from allergies or hay fever?
(Air washer)

Air humidifiers

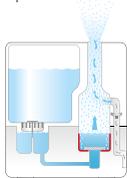
Ambient air that is too dry affects well-being and should therefore be avoided. On cold winter days, artificial means of heating cause relative humidity to drop. An air humidifier enables you to add extra moisture to ambient air. There are two types of air humidifier technology: evaporation and ultrasonic atomisation.

There are two types of air humidifier technology:

01. Air vaporiser

The air humidifier uses water vapour to provide air humidification. Clean steam is hygienic and free from odours and bacteria.

How it works: Water is heated to more than 100°C and the fan air flow transports the hot vapour out into the room.



01. Air vaporiser



02. Ultrasonic nebuliser

02. Ultrasonic nebuliser

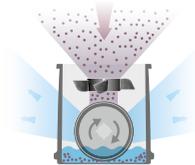
The air humidifier uses ultrasound to ensure micro-fine atomisation.

How it works: High-frequency oscillations release tiny drops from the surface of the water. The fan air flow transports the humidified air out into the room.

Air washers

Air cleaning and air humidification in one. The air washer combines two technologies and purifies the air: it humidifies air that is too dry and at the same time cleans it of domestic dust, pollen, animal hair and odours. Just like rain does in nature, the air is “washed clean”.

How it works: Air comes into contact with rotating humidification discs and absorbs water molecules. Air particles like domestic dust, pollen and animal hair adhere to the discs and are rinsed in a water bath.



The air washer enables the air to gather the required humidity on the large surfaces of the moist humidification discs. Air humidification is carried out by the principle of auto-regulating cold evaporation. No additional control units are required.



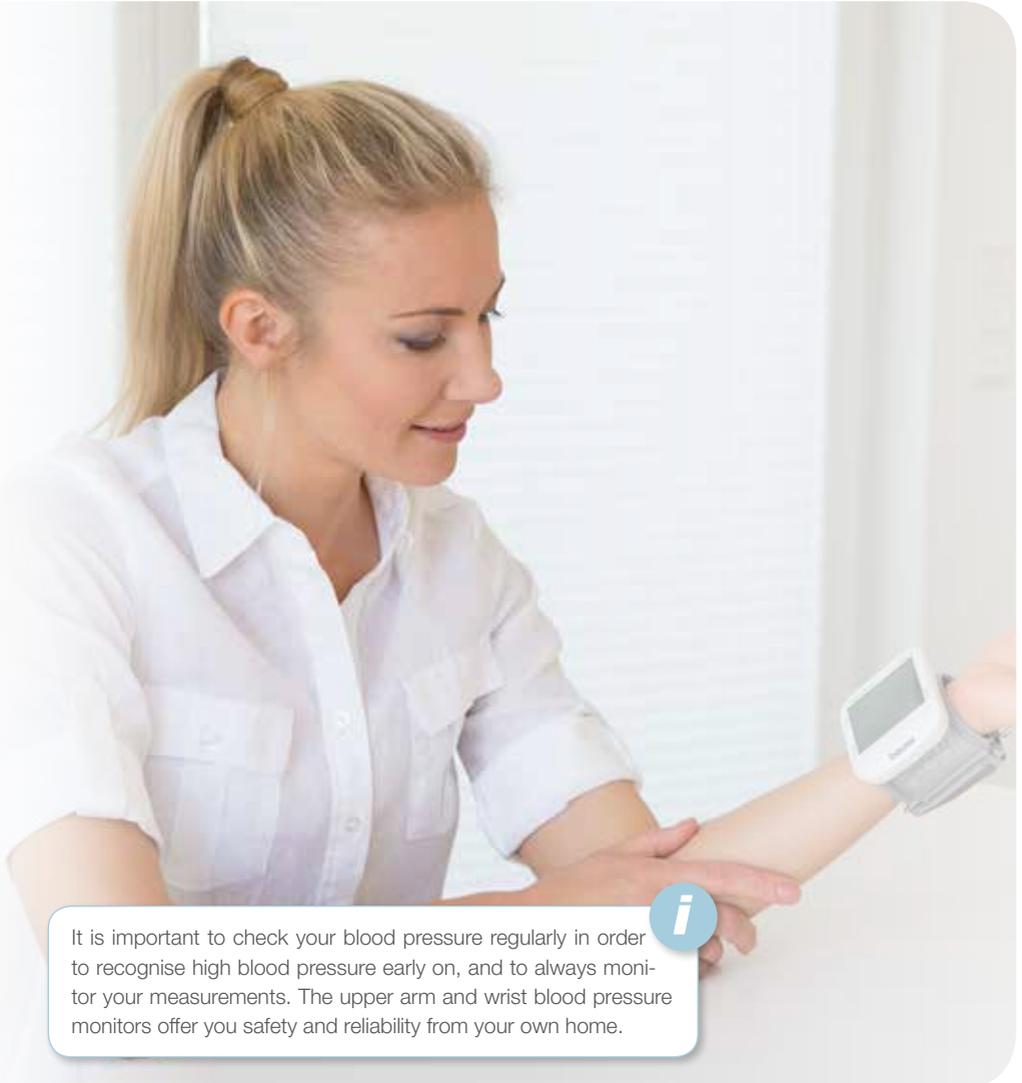
LB 44 air humidifier
Micro-fine ultrasonic atomisation

Live a healthy life with healthy air
LW 110 air washer



Blood pressure at a glance

Many people are affected by high blood pressure. There are no signs that give an early warning of hypertension and so doctors often only detect high blood pressure by chance. However, early and regular monitoring is important.



It is important to check your blood pressure regularly in order to recognise high blood pressure early on, and to always monitor your measurements. The upper arm and wrist blood pressure monitors offer you safety and reliability from your own home.

What is blood pressure?

Blood pressure is the pressure exerted by the blood upon the walls of the arteries, measured in mmHg (millimetres of mercury).

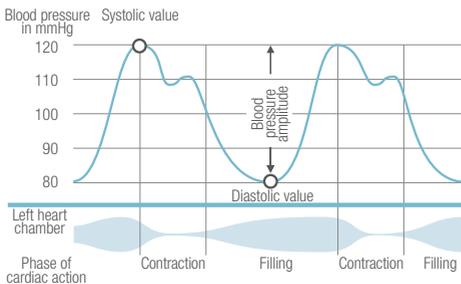
The level of blood pressure is dependent on factors such as:

- the strength of your heartbeat
- volume of blood
- the diameter of blood vessels
- the elasticity of blood vessels

Systolic and diastolic values

The higher “systolic” value indicates the pressure in the vascular system when the heart muscle contracts and the blood is pumped into the body with full force.

The lower “diastolic” value represents the pressure at the moment the heart relaxes.



High blood pressure and its prevention

High blood pressure, also known as arterial hypertension, is amongst the most prominent health risks of our times. Persons over the age of 40 are particularly at risk of increased blood pressure if they live an unhealthy lifestyle. As we get older, the frequency of occurrence increases dramatically. Approx-

mately one in every two people over 50 is affected by high blood pressure.

Causes of high blood pressure

The main reasons for increased blood pressure levels are being overweight, eating unhealthily or the wrong types of food and lack of exercise. Significant lifestyle changes are necessary to reduce blood pressure. These include weight loss, changes to eating habits, reducing alcohol consumption and more physical exercise.

Dangerous consequences of high blood pressure

Heart failure. The higher your blood pressure, the more difficult it is for your heart to pump against the increased resistance. As the years go by its output diminishes considerably, leading to heart failure.

Hardening and narrowing of blood vessels. Blood vessels are also affected. Arterial blood vessels harden and become narrower over time, due to the increased pressure. The blood vessels in the brain, heart, kidneys and eyes are particularly badly affected.

This starts a fatal process: The narrowing of the vessels diminishes circulation and the ability of the organs to function properly. The heart then has to generate even higher pressure to remain effective and blood pressure continues to rise.



This cycle needs to be broken before the damage becomes irreparable. Even slight hypertension can shorten life expectancy.

Regular monitoring is important

Many people feel well for years despite their high blood pressure. In most cases, high blood pressure is detected by chance. The one reliable way of recognising high blood pressure early is to measure blood pressure on a regular basis. In order to monitor blood pressure on a daily basis, it is a good idea to measure it yourself at home using your own blood pressure monitor.

When doing so, it is important to follow the instructions for use carefully. Monitoring also involves observing regular measuring times and resting conditions, keeping a record of measurements, entering them on your blood pressure pass or using the Beurer Health-Manager health monitoring system. It is important to consult your doctor regularly for advice.

Blood pressure values

According to the definition of the WHO (World Health Organisation), a systolic blood pressure above 140 mmHg, or a diastolic blood pressure above 90 mmHg, is classed as high blood pressure or hypertension. The optimal value for an adult is a resting value of 120 over 80 mmHg. Our blood pressure monitors feature a graphical representation of blood pressure measurements interpreted according to WHO* guidelines. This means immediate feedback on the classification of your blood pressure reading, which helps identify critical values straight away.

Upper arm or wrist blood pressure monitor?

As we age, our blood vessels may become narrower due to calcification, or harden due to arteriosclerosis. This affects the arteries in the wrist in particular, as they are further away from the heart, making a precise measurement more difficult. Older people and smokers should take their measurements on the



Good to know: Classification of blood pressure measurements according to the WHO**



Category	SYS	DIA	Action
Level 3: severe hypertension	≥ 180	≥ 110	 seek medical attention
Level 2: moderate hypertension	160-179	100-109	 seek medical attention
Level 1: mild hypertension	140-159	90-99	 regular monitoring by doctor
High normal	130-139	85-89	 regular monitoring by doctor
Normal	120-129	80-84	 self-monitoring
Optimal	< 120	< 80	 self-monitoring

*WHO = World Health Organisation

**Source: WHO World Health Organisation, 1999



Proven safety thanks to WHO* classification: have your values to hand any time and anywhere

upper arm. Wrist blood pressure monitors are not suitable for patients with diabetes, as their arteries may be calcified or porous.

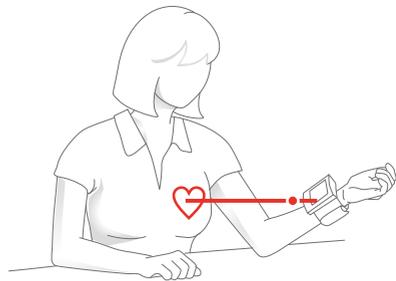
How do you measure blood pressure correctly?

Everyone is familiar with the process of having blood pressure taken at the doctor's. Many people with high blood pressure or diabetes mellitus are required to measure their blood pressure regularly. But how do you as the patient ensure measurements are accurate and what must you take into account? You should take measurements regularly, at the same time everyday. Rest for 5 minutes before taking a measurement. To avoid falsifying the measurement, it is important to remain still during the measurement and not to speak. Deviations of up to 10 mmHg are common when measuring on the right arm. As your left arm is nearer to your heart and the blood pressure is created by the heart, your blood pressure value on the left side

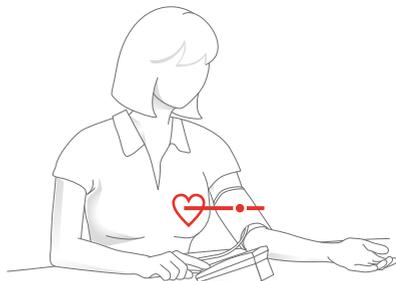
may be different to that on the right side. It is therefore recommended to always take measurements on the same arm. We recommend you consult a doctor if there are discrepancies in excess of 10 mmHg.



We recommend taking your blood pressure on your left arm. Rest for 5 minutes before taking a measurement. To avoid falsifying the measurement, it is important to remain still during the measurement and not to speak.



If you use a **wrist blood pressure monitor**, it is important to hold the blood pressure monitor at heart level. Support your elbow on the table.



For **upper arm measurements**, it is important to remember not to wear a thick pullover or similar items of clothing, which may cut off the blood circulation to the upper arm.

The resting indicator for maximum safety and reliability

Blood pressure measurements must be taken when you are physically and mentally rested. A common error is measuring blood pressure when the circulatory system has not been sufficiently rested, meaning the measurement results could be an incorrect indicator of blood pressure at rest.

To guarantee accuracy when measuring blood pressure, Beurer has developed the world's first patented resting indicator. A symbol informs you after the measurement whether or not you were sufficiently rested mentally and physically during the measurement. If the measurements were not carried out when the circulatory system was sufficiently at rest, the results may differ from the "at rest" values. The measurement should be repeated after a rest and relaxation period of at least 5 minutes.

Resting indicator display:



Circulatory system is sufficiently at rest during measurement



Circulatory system is not sufficiently at rest



Generally speaking, you should always measure your blood pressure when you are at rest. Physical activity such as going up stairs increases blood pressure.



Health monitoring system

Optimal blood pressure control using an app and software. The labelled blood pressure monitors can be integrated into the HealthManager system using the transfer options, enabling you to access your blood pressure values at any time, from anywhere. The progress graphs and tables with measured values can be used to view and monitor your blood pressure values with ease. And if you want even more detail, simply synchronise your data with the HealthManager online tool and use the many additional views, filters and settings available to you on the computer. **You can find more detailed information on pages 5-7.**



*Patent EP 1 673 009

Measuring blood glucose

With around 382 million diabetics worldwide, this disorder is one of the most common, widespread complaints in the world (according to a survey by the International Diabetes Federation, IDF). In Germany alone, more than 6 million people are affected and each day, almost 1,000 people are diagnosed with the disorder. Over 90% of diabetics are affected by type 2 diabetes, which is why the disorder is considered the disease of affluence. In Germany, approximately 400,000 people are affected by the autoimmune disorder known as type 1 diabetes, 30,000 of whom are children and adolescents.



i

The development and causes of type 1 and type 2 diabetes mellitus are very different. While the causes of the autoimmune disorder type 1 diabetes mellitus remain largely unexplored, there are very specific reasons for type 2: environmental and behavioural factors as well as hereditary dispositions are mainly responsible.



You should prepare all the equipment you need before starting to take measurements.

What is diabetes?

Diabetes mellitus – also referred to as sugar diabetes – is one of the most common chronic diseases. Current figures indicate that approximately 6 million people are affected by the condition in Germany, and it's a rising trend.

We need energy for the body to function. This is absorbed from food, broken down into its constituent parts, transported to all the cells of the body and converted into energy. Glucose – the smallest sugar component – is particularly important here; it reaches the body cells via the bloodstream.

Once glucose reaches the body cells, it requires insulin, which is produced in the pan-

creas. Insulin has a key function in that it enables the body cells to take up glucose, which can then be used in the cells.

What actually happens in the body?

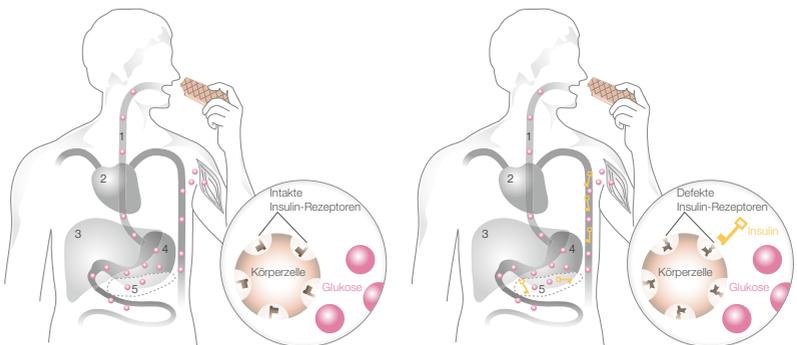
In people with diabetes, this insulin cycle does not function properly, as either too little or no insulin is produced, or certain cells are insulin resistant. The result of this is that the glucose continues to circulate in the bloodstream and the blood glucose content rises above normal levels. It is called diabetes when the fasting glucose exceeds 110 mg/dL (capillary whole blood, clinical guidelines of the German Diabetes Association (Praxisleitlinien der Deutschen Diabetes Gesellschaft)). Measuring the blood sugar level is simple to do nowadays using a blood glucose monitor that takes capillary whole blood from the fingertip.

Forms of diabetes

There are various forms of diabetes: type 1 diabetes, which is mainly diagnosed at a younger age (< 40 years old) and type 2 diabetes, which was previously known as adult-onset diabetes, but today makes up about 90-95% of all diabetes patients.

Left: type 1 diabetes
Right: type 2 diabetes

1. Oesophagus
2. Heart
3. Liver
4. Stomach
5. Pancreas



Type 1 diabetes

In type 1 diabetes, the body no longer produces its own insulin and insulin therapy is absolutely essential. Experts suggest it could be either virus-linked or due to hereditary or environmental factors.

Type 2 diabetes

In type 2 diabetes, either insufficient insulin is produced or insulin release is impaired. Being overweight, unhealthy and excessive eating and lack of exercise are all key factors in the development of type 2 diabetes. Over time, the body cells become resistant to insulin and can take up less and less glucose.

Treatment for type 2 diabetes

Initially you can try to lower blood glucose by making significant and targeted lifestyle changes. The main focus is on:

- Changing to a healthy diet, counting carbohydrates
- An adapted exercise therapy
- Reduction to a normal, healthy body weight

If this does not succeed in reducing blood glucose, additional medical treatment (tablets or insulin) is required. Ask to speak to our diabetes advisor for further information.

Blood glucose value

Blood glucose is the concentration of glucose in the blood. Blood glucose values are usually measured as part of self-monitoring by taking capillary blood* from the fingertip. The blood glucose value is given either in milligrams per decilitre (mg/dL) or in millimoles per litre (mmol/L).

*Capillary blood is blood that is taken from the capillaries (capillary vessels) in the body

Measuring blood glucose

To measure blood glucose values, products that are accurate, precise and easy to use are required. If you are looking for reliability, a high level of convenience and optimum diabetes management, our blood glucose monitors offer every patient an ideal solution.



Diabetes management

Regularly monitoring the blood glucose level is a part of everyday life for all diabetics and they must therefore carry their equipment around with them at all times. Monitoring blood glucose levels is even easier with the 3-in-1 GL 50 blood glucose monitor. Furthermore, this monitor is a genuine world innovation, as the GL 50 also has an integrated lancing device and USB stick with pre-installed software as well as the measurement function. The practical measurement marking gives the device an additional edge in terms of ease of use, as it provides a marking for measured values before food, after food and in general.



Fever

Fever is a natural part of the body's defence against infections, but may require treatment if the body temperature becomes too high or rises too quickly. In general, the aim of measurement is to record the body's core temperature. Various measurement sites are therefore possible. Measurement results may vary by over 1°C depending on the measurement site, and the duration of measurement also differs significantly.



Body temperature is lower in the morning and increases throughout the day towards evening. Physical and, to a lesser extent, mental activities also increase body temperature.

What is fever?

Fever is the body's defence mechanism against infection. The normal range for body temperature is between 36.3°C and 37.8°C (rectal measurement with a contact thermometer).

Which factors influence body temperature?

- Body temperature falls with age (small children have a higher, more variable body temperature).
- The outside temperature and clothing worn are also influencing factors.
- Physical activity: after physical activity the body temperature is higher than before. In the mornings, body temperature is lower and rises slightly over the course of the day.

Where should I take a measurement?

In general, the aim of measurement is to record the body's core temperature. It is possible to take measurements in the following areas: forehead, ear, rectum, armpit and mouth. Measurements may vary by up to 1°C depending on the measurement area.

- The most exact results can be obtained from **rectal measurement**, for example, using a digital pen-type thermometer. Unfortunately this method is also the most unpleasant. Other measurement areas that are suitable for standard pen-type thermometers are axillary (under the arm) and oral (under the tongue). Measurements taken in the armpit are very inaccurate and therefore not recommended. A disadvantage of standard pen-type thermometers is that the measurement time takes several

minutes. You can shorten this time in the same measurement areas by using an express thermometer. If using a contact thermometer, it is important to only read the measurement after the acoustic signal.

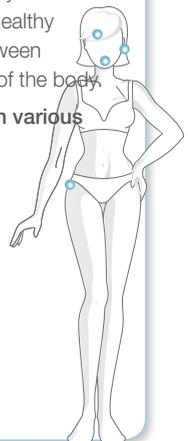
- The body's core temperature can also be measured with an **ear thermometer** at the eardrum. To do this, the ear canal must be straightened by pulling the ear slightly up, otherwise the results will be inaccurate. This pulling of the ear is often an unpleasant experience for children, or if there is inflammation of the middle ear.
- **The most comfortable form of measurement is on the forehead.** Core body temperature is measured here too using an artery that comes directly from the temperature centre and runs permanently through the forehead. This type of measurement is particularly suitable for children. Measurements can be influenced by factors such as formation of sweat on the forehead, cleanliness of the sensor tip or room temperature.



The temperature measurement varies depending on the part of the body where the measurement is taken. In a healthy person, the variance can be between 0.2°C and 1°C in different parts of the body.

Normal temperature range with various thermometers

- Forehead temperature
35.8°C - 37.6°C
- Ear temperature
36.0°C - 37.8°C
- Oral temperature
36.0°C - 37.4°C
- Rectal temperature
36.3°C - 37.8°C



Nebulisation

Approximately 235 million people around the world suffer from asthma, a chronic disease of the airways. The effects of asthma include symptoms such as coughing or a feeling of tightness in the airways. Various nebulisation therapies help to alleviate respiratory symptoms and can even act as an essential therapy measure.



Nebulisers should generally only be used for the treatment of respiratory diseases after consultation with your doctor. He or she will advise you about the selection, dosage and use of the nebulisation therapy medications that are suitable for you.

Breathe deeply

When sitting down, humans inhale and exhale almost 10,000 litres of ambient air in a single day. Infectious germs, hazardous substances, allergens and carcinogenic substances may be amongst this vast amount of air. All these substances affect the mucous membranes, which cover the inside of the respiratory system.

Respiratory diseases

Respiratory diseases are amongst the most common human illnesses. They range from brief coughs and colds to severe, chronic respiratory illnesses. Various nebulisation therapies help to alleviate respiratory symptoms and can even act as an essential therapy measure.

Approximately 5% of all adults and up to 10% of all children suffer from attacks that obstruct the airways in the respiratory system, known as bronchial asthma.

Classic nebulisation

One well-known and extremely effective remedy for colds is nebulisation. In this therapy, well-known active substances such as ointments containing essential oils are dissolved in hot water. The active substances dis-

solved in the steam are taken up by the infected mucous membranes with long-lasting effect. The rising steam is inhaled through the mouth and nose and thus acts directly upon the infected airways.

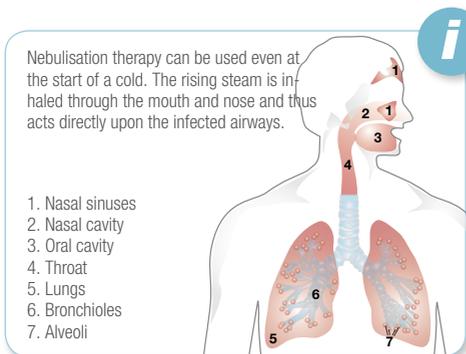
Benefits of nebulisation therapy

Nebulisation denotes a targeted inhalation of steam, vapours or artificial aerosols with the benefit that the active ingredient reaches the site of action directly. In comparison to the use of a classic steam bath, modern nebulisers generate a consistently high quantity of extremely small particles of the active substances during operation, which penetrate deep into the airways. In steam baths, on the other hand, the particles generated are significantly larger and thus cannot penetrate as deeply into the airways. Steam baths also cool off quickly, which has a detrimental effect on the emission of active substances.

Nebulisation treatment

The following effects can be achieved by nebulisation therapy, regardless of the nebulised substance:

- The particles of active substance act directly at the site of the illness
- The moisture content of the infected mucous membrane is improved
- The self-cleaning of the airways is assisted
- The ability of the mucous membrane to fight off infection is increased
- Swelling, inflammation and cramping of the bronchial mucosa are relieved and prevented
- Bronchial secretions loosen and become more liquid, thus easing their release.



Nebulisation technologies at a glance

Choosing the right nebuliser depends on the various needs of the user. Important parameters when deciding are the size of individual particles and the nebulisation rate (measured in ml/min). To reach the alveoli, the diameter of the particles must not be greater than 6 micrometres (μm). The average size of particles in all Beurer nebulisers is below 6 micrometres. Short inhalation times are achieved by a high nebulisation rate, which depends amongst other things on the various technologies.

Compressed air technology

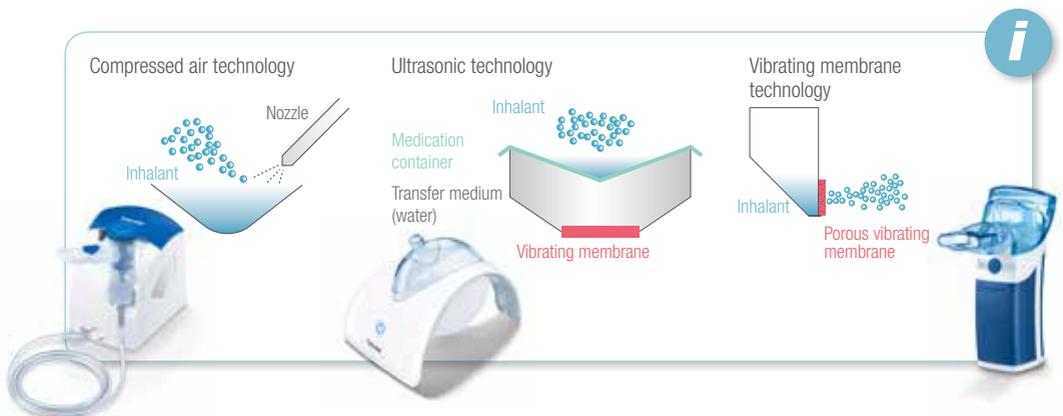
In compressed-air nebulisers, a compressor creates compressed air (approximately 0.8 bar). This compressed air is applied to the inhalant to be atomised via the air hose and nozzles in the atomiser. The air stream separates particles from the inhalant and is mixed with additional air in the atomiser. The inhalant is fed to the patient via a mask or mouthpiece. Despite the operating noise and the weight, this nebulisation technique is the most widespread.

Ultrasonic technology

An ultrasound source creates high-frequency water oscillations and in this process, the inhalant in the medication container also begins to oscillate. These oscillations separate individual particles from the inhalant. These are mixed with air via the air channel. A ventilator then ensures that this mixture of inhalant and air is fed to the patient via a mask or mouthpiece.

Vibrating membrane technology

Sophisticated vibrating membrane technology is used to nebulise medicines. This vibrating membrane is partially porous and becomes permeable to the smallest medicine particles when it vibrates. The inhalant is fed to the patient via the mouthpiece. This technique is very quiet, does not require much electricity and is very suitable for taking on journeys.



Electrostimulation

Self-therapy is gaining ever greater significance as an alternative to traditional GP visits. The development of modern devices for pain relief and muscle stimulation is fast becoming the focus of preventative measures for home use.



Electrostimulation devices use four different current settings. The **impulse form** describes the time function of the electrical impulse. Beurer devices use biphasic pulse currents, whereby the electrical impulse alternates its direction. The **impulse frequency** indicates the number of individual impulses each second. Slow-reacting fibres react to lower impulse frequencies up to 15 Hz, whereas fast-reacting fibres only respond from approximately 35 Hz onwards. The **impulse width** indicates the duration of an individual impulse in microseconds and also determines the penetration of the electricity. Setting the **impulse intensity level** depends on the individual sensitivity of each user.



Treat yourself to something special with TENS/EMS devices: pain therapy, muscle strengthening and massage

Principle of electrostimulation

The principle of electrostimulation devices is based on the imitation of impulses in our bodies that are transferred to nerve and muscle fibres using electrodes via our skin. The electrodes can be applied to many parts of the body. The electrical impulses are virtually painless. You may sometimes merely notice a slight tingling or vibrating sensation.

For optimal results, the device should be applied regularly, and supported with physical activity and a suitable diet and healthy lifestyle.

Choosing the right product

There are different products that can be used for pain therapy, muscle build-up or for soothing massages and relaxation. In addition to the Digital TENS/EMS devices for comprehensive use, Beurer is also introducing EMS pads or TENS pads for certain applications, as well as a back belt with TENS function. The product range also includes two abdomi-

nal toning belts to accompany training of the central abdominal muscles.

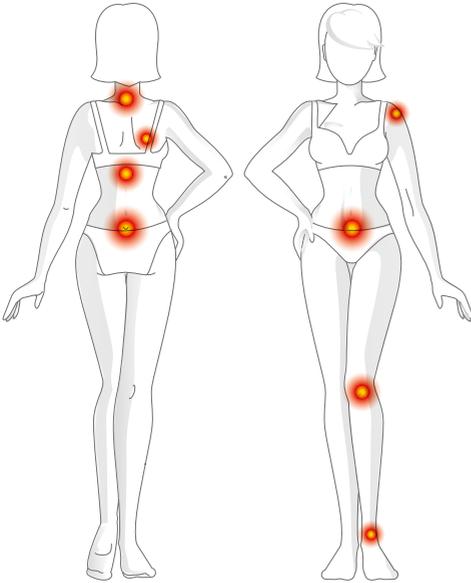
What is TENS?

TENS is the abbreviation for **transcutaneous electrical nerve stimulation**. TENS is a procedure used to stimulate the nerves by passing electrical impulses over the skin (transcutaneous). The electrical impulses that are sent into the tissue suppress the transmission of pain to the brain and increase the secretion of endorphins in the body, which reduce the sensation of pain in the central nervous system. The method is scientifically substantiated and approved as a form of medical treatment. Any symptoms that could be relieved using TENS must be checked by your GP. Your doctor will also give you instructions on how to carry out a TENS self-treatment regime.

Digital electrostimulation device EM 41 i

Three basic functions that can be combined in a single device. You can choose between electrical stimulation of nerve tracts for pain relief, electrical stimulation of muscle tissue for muscle stimulation or a relaxing massage. Using electrodes, the electrical impulses are transferred to nerve and muscle fibres via the skin. The electrodes can be applied to many parts of the body.





Used to treat different types of pain, e.g. pain in the back and lower back, headaches, neuralgia

Pain relief using TENS

Cramps, pain resulting from injury and acute or chronic pain are all natural warning signs from the body that call for immediate relief. Transcutaneous electrical nerve stimulation (TENS) is a method of treating pain that is very easy to use.



Areas of application for TENS

TENS is clinically tested and approved to treat the following complaints:

- Back pain, particularly in the lumbar and cervical spine area
- Sore joints (e.g. knee, hip and shoulder joints)
- Neuralgia (nerve pain)
- Menstrual cramps in women
- Pain resulting from injury to the musculo-skeletal system
- Pain caused by circulatory disorders
- Chronic pain with various causes

Benefits of TENS therapy

- Non-pharmacological method of pain relief
- Pain-relieving effect
- Suitable for self-treatment
- Easy to use at any time

It is fundamental to the intended success of electrostimulation applications that electrodes are positioned sensibly. The greater the distance between electrodes, the larger the stimulated tissue volume. This applies to the area and depth of the tissue volume. At the same time, however, the stimulation intensity of the tissue falls the further the electrodes are apart. As a result, greater distances between electrodes mean a larger tissue volume is stimulated, but less intensively.



Knee



Back



What is EMS?

Electrical muscle stimulation (EMS) is a widespread and generally recognised method and has been used in sports medicine and rehabilitation for years. EMS is a technique whereby muscle groups are stimulated by electrical impulses via the skin. Application of the technique causes the muscle fibres to contract and relax in a way that mimics natural muscle activation through nerve pulses. If this occurs frequently and intensively enough, the muscle becomes thicker and stronger. However, the stimulation produced is less specific than with active muscle training and the use of an EMS device cannot therefore fully replace actual active participation in sport, only support it.



Muscle stimulation using EMS

In sports and fitness, EMS is used to complement conventional muscle training, to increase the performance of muscle groups and to adjust physical proportions to achieve the desired aesthetic results.

EMS application areas

There are two different types of EMS application: one is for targeted strengthening of the muscles (activating application), and the other is to achieve a relaxing, restful effect (relaxing application).

The activating application involves:

- Muscle training to increase endurance and/or
- Muscle training to support the strengthening of specific muscles or muscle groups, and to achieve the desired changes to physical proportions

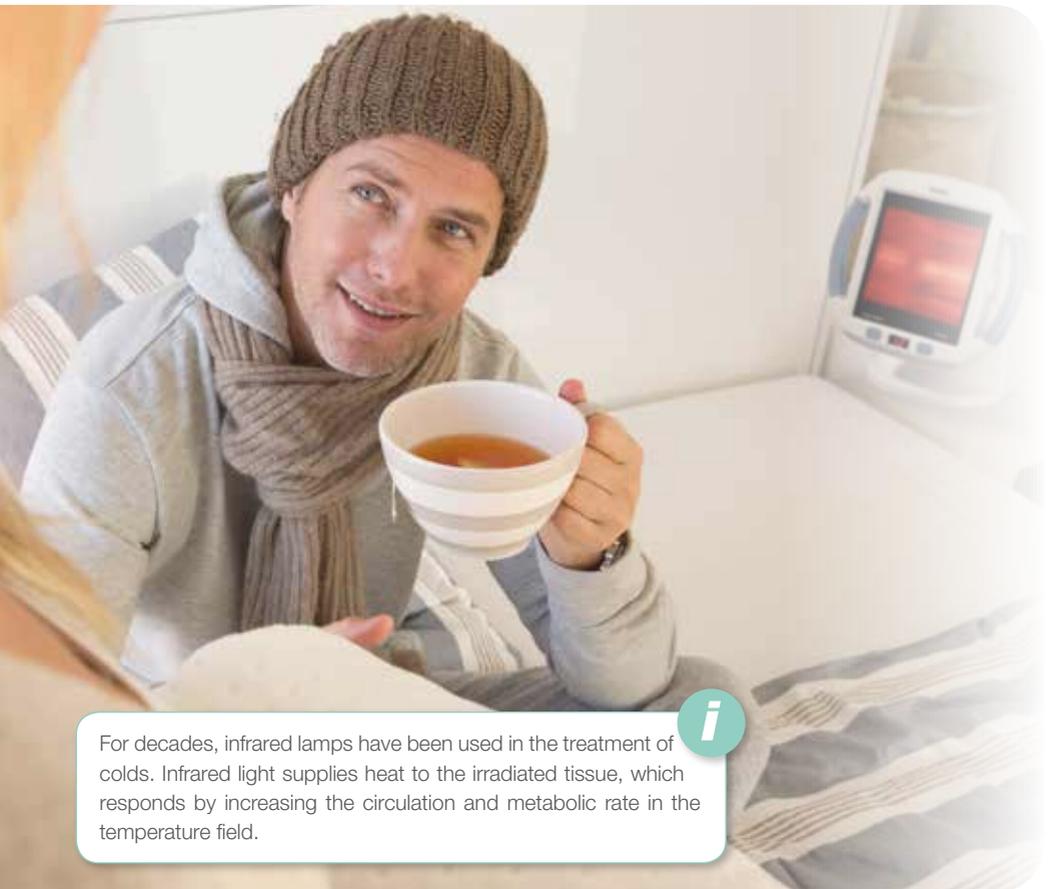
The relaxing application involves:

- Muscle relaxation for easing muscle tension
- Improving symptoms of muscular fatigue
- Acceleration of muscle regeneration after high muscle performance (e.g. after a marathon)



Heat treatments

Red light is a natural part of sunlight and has a warming effect on the body. This has a relaxing effect upon the body and increases your personal sense of well-being. Pleasant red light can be used in a targeted way to treat tension, blood vessel circulatory disorders, colds, joint pain and low body temperature. This loosens the tense muscle groups, expands blood vessels, relieves pain and increases body temperature. Warmth can also help treat ear, nose and throat disorders.



i For decades, infrared lamps have been used in the treatment of colds. Infrared light supplies heat to the irradiated tissue, which responds by increasing the circulation and metabolic rate in the temperature field.



Natural prevention and relief with infrared light therapy

Infrared light

Sunlight is made up of all the colours of the rainbow. Some colours are visible to the human eye, whilst others are not. A large part of the sun's energy is also made up of the infrared rays that are essential for life and good health.

Area of application of infrared rays

Beneficial red light can be used in the treatment and support of many different complaints.



How do infrared rays work?

The infrared heat rays penetrate only a few millimetres under the top layer of skin and produce a so-called "deep warming effect". This heat gives a very pleasant feeling of warmth.

The effect of infrared light on health

The irradiated skin becomes warm, blood supply increases and the metabolic rate in the temperature field also increases. The body's healing process is stimulated by the effects of the infrared light; healing processes are supported in a targeted manner. Infrared light is frequently used as a complementary therapy in the treatment of ear, nose and throat disorders, as well as for colds and muscle tension.



To warm up straight away

- Position yourself in front of the device so that you can relax and enjoy the treatment of the affected part of the body
- Align the device correctly by tilting the infrared lamp towards the part of the body requiring treatment
- The distance between the body part and the heat lamp is generally determined based on individual sensitivity to heat and the type of treatment being performed
- Do not use the device for longer than 15 minutes at a time

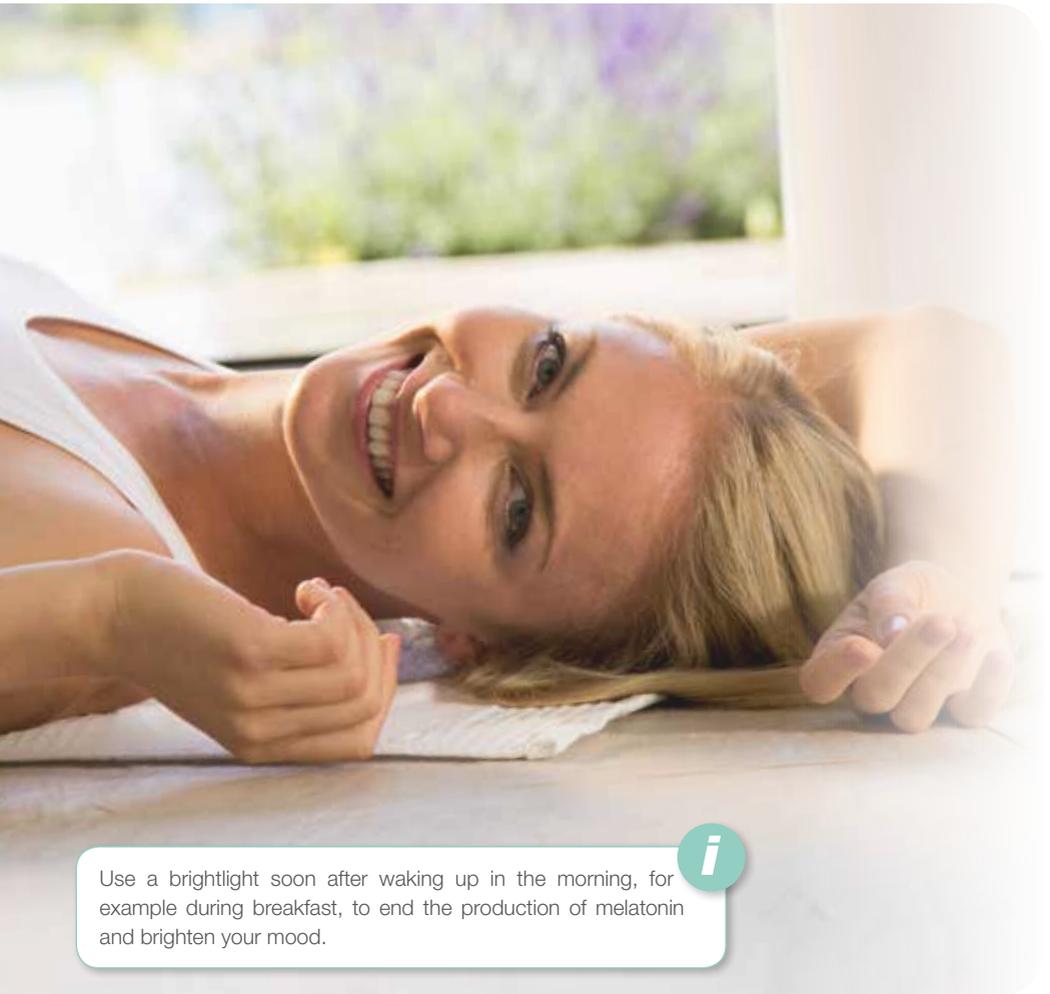
PRODUCT TIP

The IL 50 is equipped with a high-quality "CeramicInfrared" ceramic glass disc.



Light up your life

And the sun is coming out! This is a feeling we all love: the first rays of sunlight tickling our nose, raised spirits and no room for subdued thoughts. Harness the power of an extra helping of sunlight with our range of brightlights. With a larger illumination surface for home use, or small and flexible for the office.



Use a brightlight soon after waking up in the morning, for example during breakfast, to end the production of melatonin and brighten your mood.



A pick-me-up for the office: the TL 40 brightlight is very compact and therefore ideal for your desk

Simulation of sunlight

Brightlights are a suitable substitute for natural sunlight. They simulate daylight over 10,000 lux (15-20 cm distance). The light can influence the human body and be used as a treatment or as a preventative measure. Normal electric light is not sufficient to influence hormonal balance. Because in a well-lit office the illuminance level amounts to just 500 lux.

Lack of light and the consequences

When the hours of daylight are noticeably decreased in autumn and people increasingly stay inside during the winter months, the effects of lack of light may cumulate. This is often described as “winter depression”. The symptoms can present themselves in a number of ways.



The symptoms of a lack of light are varied:

- Low mood, imbalance
- Need for more sleep
- Loss of appetite, generally feeling unwell
- Lack of energy and listlessness
- Difficulty concentrating

Sunny times just where you want them

The brightlight can be used everyday. The light box effect lasts between 30 minutes and 2 hours. The usage time depends on the distance between the user and the device.



Daylight for your well-being

Sunlight indirectly controls the production of melatonin, which is only passed to the blood in darkness. This hormone shows your body that it's time to sleep. Therefore in months with less sunshine more melatonin is produced, making it difficult to get up in the mornings because your body functions are powered down. Use the brightlight immediately after waking up (i.e. as early as possible) to end the production of melatonin and to brighten your mood. Lack of light also prevents the production of the happy hormone serotonin, which is said to significantly influence our “well-being”.

Shiatsu and massage

Often a soothing massage is enough to prevent or effectively relieve tension in the neck or back area. The powerful Shiatsu massage, in particular, is often found to be very effective. Depending on the intensity and applied pressure, this type of massage can also work deep into the tissue and is ideal for relaxing aching muscles and general tension.



Massage has various uses – it is used in healthcare or to accompany fitness and training regimes. As well as increasing your general sense of well-being, it is also helps relieve muscle aches, tension, circulatory disorders and symptoms of fatigue. The additional heat intensifies the effect of massage by promoting circulation as well as warming the surface of the skin. This allows the deeper layers of tissue and muscle to be reached as well.

How does massage work?

A massage is often the ideal remedy for muscle tension, pains or general fatigue. The technique involves working into the top layers of the skin by applying pressure. The massage promotes blood supply to the skin and muscles and has a relaxing effect on them. It also helps loosen up stiff muscles. A massage can thus also help to relieve pain.



What is a Shiatsu massage?

Shiatsu fuses the terms SHI = finger and ATSU = pressure. This massage is a type of body massage that developed in Japan over 100 years ago, based on ideas taken from traditional Chinese medicine. The basic principle is that there is a system of energy channels (meridian system) within the human body. The objective of a Shiatsu massage is to boost the physical, emotional and mental well-being of the treated person. To this end, energy blockages in the energy channels must be removed and the self-regulating powers of the body must be stimulated. Shiatsu therapy achieves this through the application of pressure in flowing movements along the energy channels (meridians). Although Shiatsu literally translates as 'finger pressure', treatment is not just given with the fingers but also with the heels of the hand, elbows and knees. The therapist uses their whole body weight to create the necessary pressure.



Targeted application directly on the painful areas ensures a long-lasting sense of well-being, relaxation and loosening of the muscles

How do Shiatsu massage products work?

Shiatsu massage products imitate the soothing and relaxing effects of a pressure massage. Depending upon the intensity and pressure, this type of massage can also act deep within the tissues and is ideally suited for relaxing the muscles and relieving any tension.

i

Light and heat at the press of a button

The pleasant feeling of pressure from the massage heads can relieve tension and promote circulation.

The selectable light and heat function heightens the relaxing and soothing effects of the massage.



Massage functions at a glance

The Shiatsu massage range from Beurer offers the right product for every treatment area with tailored functionality options. State-of-the-art technology, precision and sophisticated motion sequences create a natural and soothing massage. Depending on the product, different forms of massage can be used:

01. Shiatsu back massage

This Asian “finger pressure massage” ensures holistic relaxation through flowing, circular movements.

02. Shiatsu neck massage

This Asian “finger pressure massage” ensures holistic relaxation through flowing, circular movements in the neck area.

03. 3D Shiatsu massage

The three-dimensional, see-sawing movement along the spine helps to create a feeling of penetrating relaxation across the whole back.

04. Roll massage

The soft rolling massage along the spine combats muscular tension and offers soothing relaxation across the whole back.

05. Vibration massage

With soft waves, vibration massage loosens the muscles. For an all-round warm and comforting feeling of relaxation.

06. Spot massage

With this form of massage, you alone determine the precise application point of the massage by simply pressing a button. Soothing relaxation exactly where you need it.

07. Tapping massage

With powerful and rhythmic tapping movements, this massage penetrates the deeper layers of muscle to help create a feeling of deep relaxation.

08. Kneading massage

A targeted and intensive kneading movement helps this massage to combat tension and promote circulation in the muscle and skin layers.

09. Air pressure massage

Gentle to intense air pressure in the chambers provided helps to create a soothing pressure massage for targeted relaxation of the legs, calves and feet.

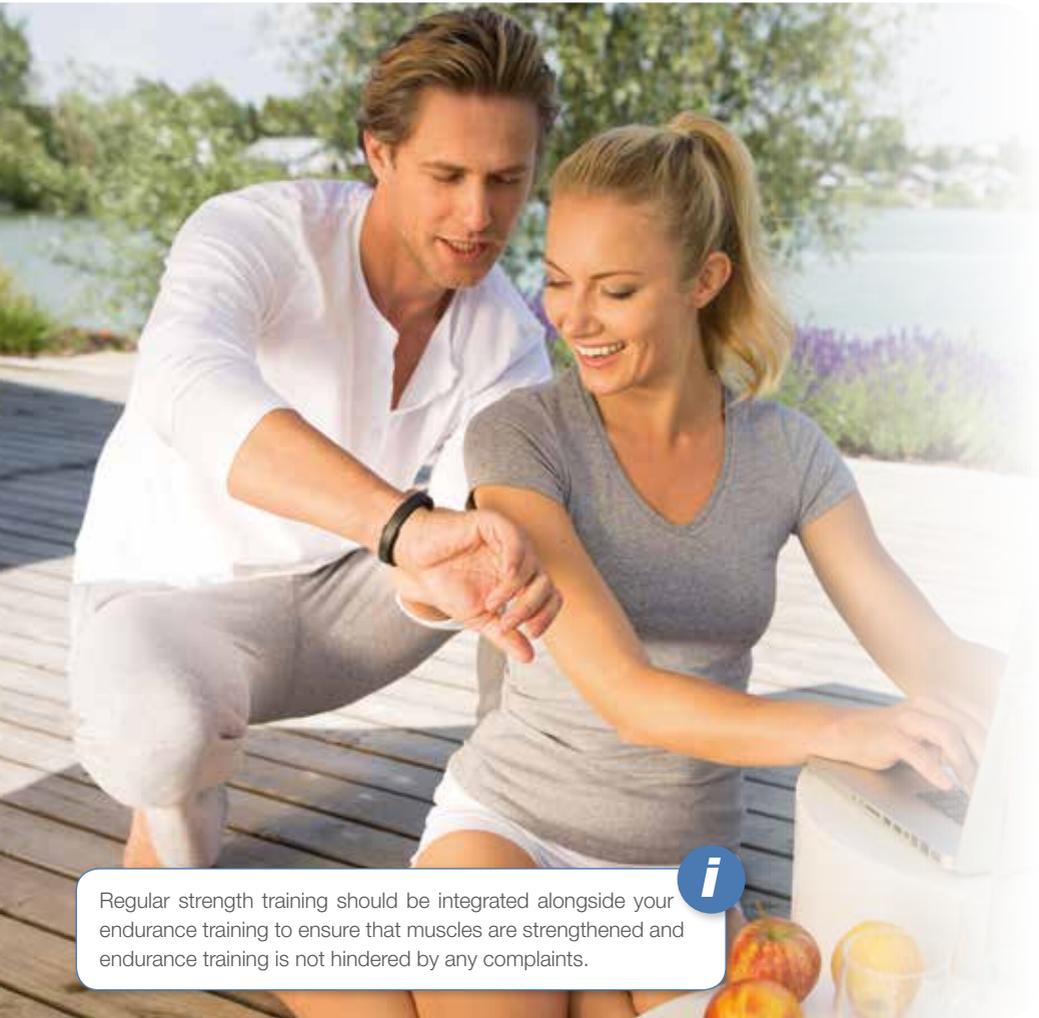
10. Swing massage

The dynamic swinging movements along the spine stimulate circulation and boost metabolism.



Daily monitoring of physical activity

Whether jogging, swimming, cycling or walking – exercise does your body good, promotes health and boosts personal well-being. Exercising on a daily basis will help you feel these benefits. Sporting objectives can also be achieved by playing sports in a controlled way, however. Nowadays there are suitable measuring devices to cater for all needs.



i Regular strength training should be integrated alongside your endurance training to ensure that muscles are strengthened and endurance training is not hindered by any complaints.



Regular activity is fun, improves mood, strengthens the immune system and reduces the risk of various diseases.

Look after your body

No one expects you to become a world class athlete. A little exercise every day helps you keep fit and protects your body. According to the World Health Organisation (WHO*), you should ideally take 7,000 – 10,000 steps or do 30 minutes of strenuous activity every day.

Regular exercise is good for you

Regular exercise is not only fun and boosts the immune system but it's also very important for your health and helps to prevent various illnesses. Over half of all adults and 20% of children in Germany are overweight and one of the main reasons is lack of exercise. The consequences of insufficient exercise are serious: it can cause problems to the musculoskeletal system and damage organs, the cardiovascular system, the immune system and metabolism. Illnesses that mostly develop gradually due to a lack of exercise are arthritis, intervertebral disc complaints, diabetes and even heart attacks.

Positive effects of physical activity:

- Reduced risk of heart attack
- Reduced risk of high blood pressure
- Reduced risk of osteoporosis and slower onset of the illness
- Longer periods of activity and mobility for older people

All your readings at a glance

If you would like to do more for your body and exercise alone is not enough, you can monitor your values and intensify your training using a heart rate monitor from our varied range. These can be used to achieve targeted improvements in fitness and well-being. Depending on the performance level, different measuring devices are available for beginners, sports enthusiasts and professional runners and are designed to provide optimum support for training regimes.

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For fitness and everyday use, day and night.

Designed as an attractive wrist band, the AS 80 activity sensor has two clever tracking functions that record your activities day and night. Set targets for your daily exercise, observe your sleeping patterns or check your calorie consumption. With the AS 80, you can improve your body awareness and your personal well-being.



You can synchronise all your data with the HealthManager app



Sufficient and regular exercise is essential for your health.

Pulse

Our heart is a muscle the size of a clenched fist, the main function of which is to maintain the flow of blood around the body. One of its functions is to pump blood to the lungs, where it is fuelled with oxygen, and the other is to pump the oxygenated blood to all the organs in the body to supply the cells. The heart beats on average 36 million times a year! A lower heart rate due to training places less pressure on the heart.

Heart rate vs. pulse rate

When we talk about “beats per minute” (= rate), we are distinguishing between the heart rate and the pulse rate. The heart rate is the number of heartbeats each minute and is measured by an ECG. The pulse rate is the number of blood pulses that occur in an artery each minute. The pulse rate is commonly measured at the wrist, neck or groin. Heart rate and pulse rate do not have to be the same (disruptions to the heart rhythm).

Why do I need a heart rate monitor?

In sporting activities, measuring the heart rate has two main functions: training management and protection from excessive strain. Physical exertion always has a direct impact on the heart, as the amount of oxygen required by the body rises with increased exertion and so the heart must beat more frequently. The strain felt during training is not a reliable indicator. Signs that you have reached your performance limit, such as tiredness or feeling unwell, often occur far too late and you could already be at risk. It is particularly important not to subject the heart to strain that exceeds the specific maximum values, as acute stress to the heart can cause disruptions to the heart rhythm.

Heart rate in numbers

The resting heart rate mainly depends on strain, individual metabolism and age. A newborn has a resting heart rate of approx. 110 – 130 beats per minute, while a 70 year old has a rate of around 50 – 70 beats per minute.

Adults normally have a resting heart rate of 50 to 100 beats per minute. A heart rate that is above or below this range should be checked by a doctor.

Professional athletes who perform in endurance sports have a resting heart rate of 40 to 55 beats per minute, as their heart muscles have been considerably strengthened through sports training. Every heartbeat pumps more blood around the circulatory system, so fewer heartbeats are required for the same amount of supply to the body. At the same time, the body can cope better with

Heart rate monitor with altitude measurement

Whether hiking, walking, biking, skiing or snowboarding - the altitude measurement function of the PM 90 heart rate monitor makes it perfect for all mountain activities. As well as current and maximum altitude readings, it also gives you an overview of the altitude metres completed and number of descents.



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Maximum value calculation for endurance training:

$$220 - \text{age} = \text{maximum heart rate}^*$$

A more exact result can be obtained from a stress test: one option is to warm up first, then sprint three times for 2 minutes with a 1-minute break between each sprint. Then measure your pulse: the result is your maximum heart rate. It is much simpler to use the fitness test on your Beurer heart rate monitor. You should, however, visit your GP for a check-up before doing the stress test.

Training range

a higher level of strain, as the circulatory system in a trained body can supply a considerably higher amount of blood and therefore oxygen than an untrained body.

With the help of a heart rate monitor, the training limits of your training target can easily be monitored and over-straining avoided. The heart rate alone is not sufficient to accurately determine the body's performance ability. A lactate test is a useful addition. You can get further assistance with this from your doctor. To determine your individual training range, you need to make the following calculations (see table) based on the focus of training, using your maximum heart rate as the starting point:

Percentage of max. heart rate	50 – 60%	60 – 70%	70 – 80%	80 – 90%	90 – 100%
Zone	Heart health zone	Fat burn zone	Aerobic zone = fitness zone	Endurance zone	Anaerobic training
Effect	Strengthens cardiovascular system	Here the body burns the largest proportion of calories from fat. The cardiovascular system is trained and fitness improved.	Improved breathing and circulation. Ideal for increasing basic endurance.	Improved speed performance and increased base speed.	Targeted strain of muscles, high risk of injury for sports enthusiasts, risk of damage to heart if previous history of illness.
Suitable for whom?	Ideal for beginners	For weight control and reduction	Sports enthusiasts	Ambitious sports enthusiasts, competitive athletes	Competitive athletes only
Training	Regenerative training	Fatburner training	Fitness training	Strength and endurance training	Development area training
Percentage of endurance training	15%	60 – 70%		15%	5%

*This provides a rough guideline – each circulatory system is different

Beauty and body care

Beauty and in particular well-being within our own bodies is becoming more and more important for people and has become a major point of interest in society. It is important to feel good about our bodies and look after them. An increasing number of men as well as women are now therefore resorting more to the use of cosmetics.



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The skin is a reflection of your soul. A smooth, even complexion not only looks clear and nourished, it also gives you the self-assurance necessary for a confident appearance. At one time, these results could only be achieved in a beauty salon; now thanks to the Beurer beauty range, you can recreate them easily in the comfort of your own home. We leave nothing to be desired.



Feeling good means feeling beautiful. The Beurer beauty range meets all your grooming and well-being requirements at home.

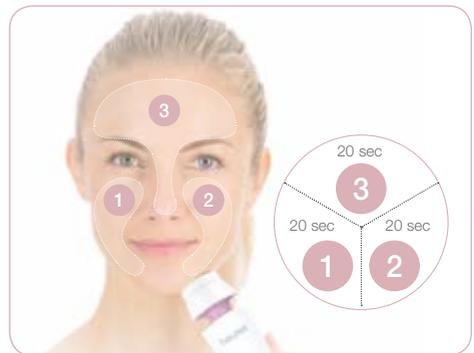
Beauty from head to toe

Being beautiful means feeling good – from head to toe! Whether you want silky smooth legs, beautiful nails or smoother, younger-looking facial skin. Now there is a perfect

product to meet every need. Beauty products not only give you a glowing appearance – they save you a time-consuming trip to the salon!

Facial care for smooth, supple skin in three easy steps

An effective facial cleansing routine is the most important basis for a smooth, even complexion. With this 3-step cleansing and care programme, your facial skin will be perfectly prepared for beauty treatments.



Professional salon-quality method



Step 1: Professional facial cleansing. The facial cleansing brush **FC 95 Pureo Deep Cleansing** is 6 times more thorough than cleaning by hand



Step 2: Further facial treatment and care. The **Pureo Derma Peel FC 100** enables professional facial exfoliation using micro-dermabrasion technology



Step 3: Professional facial care. The **ionic facial sauna FC 72** offers the perfect basis for beauty treatment



Electronic cleansing brush for daily care. The optimal application time is 20 seconds for each skin zone.

Step 1: Facial cleansing

Thorough cleansing of the face is necessary at the end of each day. Over the course of the day, a film of dirt composed of traces of makeup and dust has built up on the skin, blocking the pores. Using the facial brush, you can gently and thoroughly cleanse your facial skin and at the same time stimulate blood circulation to the face. Through daily application, your skin will become soft and smooth and the deep cleansing effect will remove impurities. An electrical facial brush is up to 6 times more thorough than cleaning by hand*.

*Dermatological study, 20 women, Institut proDERM Schenefeld/Hamburg, study no. 14.0217-23

Step 2: Facial treatment: microdermabrasion

The initial deep-pore cleansing of the skin using a facial brush prepares the skin for subsequent care and treatment. Microdermabrasion ensures exceptional, revitalising exfoliation. Attachments with a high-quality sapphire coating are used to gently remove excess skin cells and the state-of-the-art vacuum technology produces a vacuum massage. Skin texture is noticeably improved and blood circulation enhanced. The treatment also simulates cell renewal for a finer and smoother complexion.



Being beautiful means feeling good – from head to toe!

Step 3: Facial care – penetrating hydration

Simple creams are not always sufficient for intensive facial skin care regimes. Electrically-operated facial saunas ensure your skin gets the intensive care it needs. The invigorating steam stimulates blood circulation in the skin, pores open and the skin becomes supple and receptive to treatment.

Ionic steam penetrates into the skin for even deeper hydration and better results. In this process, water particles are split into ions (even smaller molecules) that are then able to penetrate deeper into the skin and reach layers of the skin that regular steam cannot

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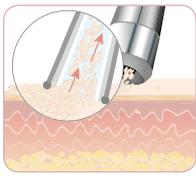
Pureo Derma Peel FC 100 – your secret to younger-looking skin



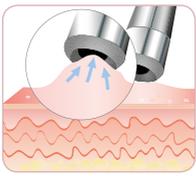
Microdermabrasion – technology with a double effect:

Renowned professional beauty salon technology for refined, younger-looking skin:

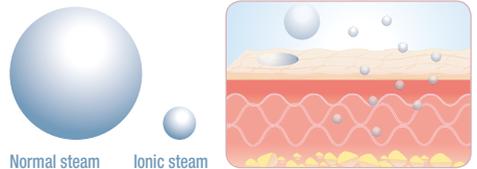
- 1. Revitalising exfoliation:** Gently removes excess skin cells
- 2. Activating vacuum massage:** Promotes circulation and stimulates cell renewal



Revitalising exfoliation



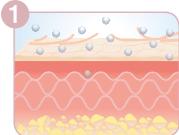
Activating vacuum massage



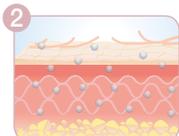
Size comparison: Normal steam molecules with a diameter of 8,000 nm lie on top of the skin like a wet film, whereas micro-fine ionic steam molecules with a diameter of 2,000 nm penetrate deep into the layers of skin

due to the size of its molecules. This creates the perfect starting point for further treatment and beauty care.

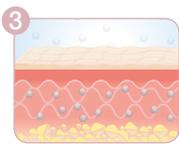
Penetrating hydration – technology in 3 phases:



Phase 1:
Micro-fine ionic steam gently opens the pores on the skin



Phase 2:
The ionic steam penetrates deep into the skin and hydrates it



Phase 3:
The pores close and the complexion is refined and smooth. The moisture is locked into the layers of the skin

Professional manicure and pedicure

Beautiful hands and feet are a must nowadays for a well-groomed appearance. With a manicure and pedicure device, you can give yourself professional nail and foot care from the comfort of your own home. Suitable attachments are available for each different application step to ensure you achieve the desired result. You can remove hard and rough skin and calluses quickly, easily and effectively.

Skin toning and circulation

We all dream of having lovely firm skin. Women in particular suffer from bothersome cellulite and would like to do something about it. Cellulite is a dimpling of the skin that mainly affects the thighs, upper arms and buttocks.

Cellulite primarily occurs in women, as the collagen fibres in the connective tissue of women's bodies are arranged in parallel. Cellulite is present when the fat cells expand and therefore bulge upwards, causing the typical dimpling on the surface of the skin. To prevent or reduce cellulite, there are numerous medical and cosmetic treatment methods available, although none of these are 100% effective. However, in combination with regular exercise and a balanced diet, circulation-enhancing massages can lead to an improvement in the appearance of the skin. Using an effective kneading massage technique, cellulite massagers promote circulation in the skin layers and strengthen connective tissue, thus ensuring noticeably firmer skin.



The CM 50 anti-cellulite device offers you the chance to enjoy a circulation-enhancing massage, particularly for cellulite, orange peel skin and loose connective tissue on the legs, upper arms and bottom



Easy to use in the comfort of your own home – thanks to the IPL 7000 compact device

Hair removal for silky smooth skin

Silky smooth skin contributes to a beautiful and attractive appearance. Depending on your personal preference, you can choose between hair removal using a lady shaver, an epilator or removal using warm wax. This removes even the shortest hairs.

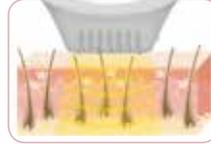
A new treatment method, the innovative “IPL” (intense pulsed light) light-based technology, is already being used in professional beauty salons and by doctors for successful long-lasting hair removal.

IPL technology - How can light remove hair?

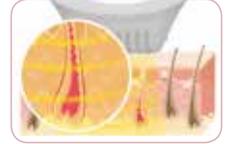
Light-based hair removal is founded on the principle of selective photothermolysis, which uses optical energy to prevent hair growth. This effect is achieved by absorption of the light energy and its conversion into heat.

Melanin is the pigment in the hair root that is responsible for absorbing the light and thereby generating the heat that deactivates the hair follicle deep under the skin and prevents

hair growth. The more melanin there is in the hair (i.e. the darker the hair is), the more light can be absorbed and the more effective the hair removal is.



Before application

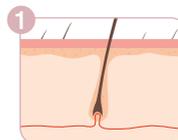


During a light pulse

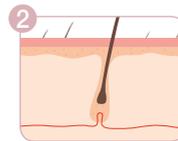
What effect does the hair growth cycle have on light-based hair removal?

Each hair on the body goes through three phases of the hair growth cycle: the anagen phase (growth phase), the catagen phase (transitional phase) and the telogen phase (resting phase). The length of a full hair growth cycle varies from person to person and depends on where the hair is on the body. As a rule, a cycle is normally 18 to 24 months.

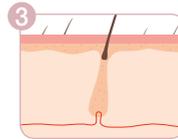
Three phases of the hair growth cycle: *i*



Phase 1:
Anagen – growth phase
(only hairs that are in the anagen growth phase respond to treatment with IPL)



Phase 2:
Catagen – transitional phase



Phase 3:
Telogen – resting phase

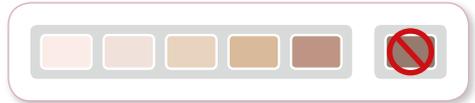


Only hairs that are in the anagen phase respond to treatment with the IPL technology. Therefore, it is important to note that multiple treatments are needed to treat all hairs. In some circumstances a complete hair growth cycle may be needed to achieve long-lasting hair removal.

IPL devices – safety from the very first application

The Beurer IPL devices feature a professional-level safety system with integrated UV protection and 2-in-1 skin type and skin contact sensor. Before each light pulse, the skin type sensor measures the skin pigmentation at the area being treated and, for your safety, will only work if there is a suitable skin pigmentation. Long-lasting hair removal with IPL is not suitable for naturally dark skin tones or particularly tanned skin. At the same time, the skin contact sensor protects your eyes by ensuring that light pulses are only emitted when the sensor is in full contact with your skin. The integrated UV filter also protects your skin from harmful rays.

The Beurer systems can be used on (naturally) dark blonde, brown and black hair and on light to medium skin tones. It is not effective on very light or grey hair and is unsuitable for very dark skin tones.



Versatile application – quick and convenient

The integrated safety system means that application at home is simple, quick and safe. Even sensitive parts of the body such as the face or bikini line can be treated with confidence at home – skin tolerance dermatologically confirmed*.



Face



Armpits and arms



Legs and bikini line



Chest and back

The must have for a well-groomed style – the IPL 10000+ hair removal device



*Dermatological study, 36 women, Institut proDERM Hamburg, study no.: 14.0148-11 (IPL 9000+, IPL 10000+)

*Dermatological study, 20 women, Institut proDERM Hamburg, study no.: 14.0309-11 (IPL 7000)

Safety day and night

Whether it's stomach ache, bad dreams or hunger, there are many reasons why your baby's sleep could be disturbed. Beurer has developed the right products to help parents relax and ensure the well-being of their little ones.



Our baby monitors also feature **ECO+mode**. This means the highest level of safety and quality. With Eco+ mode you can considerably reduce the radiation between the baby and parent units when the baby is quiet. This ensures the safety of your baby as there is no exposure to any unnecessary radiation.



Electronic babysitters of the highest quality

Keep an eye on your baby at all times

Parents do everything they can to ensure the well-being of their children. However, continually checking on them whilst they sleep is often not possible when going about your daily household tasks. Newborns do need their parents to be close at hand though, to give them the care and attention they require. Baby monitors provide the support you need to monitor your baby at all times and be ready to respond immediately if necessary. They also help inexperienced parents to continue with their everyday lives as relaxed as possible.

Which device is right for me?

There is a wide range of baby monitors to choose from, all with different functions depending on the needs of the user. Before you buy a baby monitor, you should be clear about what purpose the device should serve and which functions are needed. Classic baby monitors transmit noises made by the baby, while video baby monitors can even play back automatic video monitoring.

Analogue baby monitors can only transmit baby noises unencrypted. If you think that this form of baby monitoring is outdated, you're mistaken. The advantage of analogue devices is clearly the lower-radiation transmission and thus lower level of exposure to electrosmog. As an enhancement to analogue monitors, **digital baby monitors** can transmit in encrypted form. However, these have a higher radiation value when transmitting. ECO+mode devices are already available and undoubtedly have lower levels of radiation. Another type of monitor is the **video baby monitor**, which can also transmit images as well as acoustic signals.

Safety anytime, anywhere

With the latest generation of baby monitors, sounds and images can be transferred to your own end device. Whether via smartphone, tablet or PC, you can always see and hear what is going on at home.



Even if the app is only running in the background, you can rest assured that the Baby Care Monitor BY 88 Smart is always monitoring your child and will inform you in the event of an "alarm situation".

Beurer baby monitor for day and night

These baby monitors are very versatile – even if your child is too old – for example, for monitoring a room or for checking up on family members.





756.008 0115 Subject to errors and changes