

*Pulse oximeters: all your readings at a glance!*

## OXYGEN – FUEL FOR THE HUMAN BODY

The human body needs approx. 400 litres of oxygen (O<sub>2</sub>)<sup>3)</sup> each day. Oxygen keeps the cells in your body alive and functioning. Transporting this vast quantity through our bloodstream requires the use of a “carrier”. The oxygen becomes attached to the haemoglobin contained in the red blood cells and is thus carried through the body and supplied to the organs via the bloodstream.

**IN HEALTHY PEOPLE, OXYGEN SATURATION IS BETWEEN 94% AND 99%.**

<sup>3)</sup> Source: Rosemarie Baumann, Physiologie (Physiology)



Oxygen saturation (SpO<sub>2</sub>) = percentage of haemoglobin molecules that are carrying O<sub>2</sub> in the arterial blood.

Oxygen saturation (SpO<sub>2</sub>) is an important parameter for assessing respiratory function. Oxygen saturation in the blood can diminish as a result of illness and the effect of medication, and in serious cases it can cause hypoxia, otherwise known as a shortage of oxygen. A cutting-edge method – pulse oximetry – allows this value to be measured without having to take blood samples. The pulse oximeters from Beurer use two light sources with different wavelengths, which help to determine arterial oxygen saturation and pulse frequency.

## SELF-MONITORING AT HOME OR ON THE MOVE

Pulse oximeters are important companions for people with chronic or acute respiratory diseases, or patients with heart problems. As a rule, you should seek immediate medical advice in the event of any acute changes to the oxygen saturation, in particular if this concerns values below 93%. Early diagnoses with the pulse oximeter may buy valuable time. However, this type of measurement can be helpful for healthy people, as well.

**Pulse oximeter PO 60 Bluetooth®**  
For perfect control, using the “beurer HealthManager” app and software.



You can explore our other pulse oximeters on our homepage at [www.beurer.com](http://www.beurer.com)

## AREAS OF APPLICATION FOR PULSE OXIMETRY

- For at-risk patients with heart diseases, bronchial asthma and pulmonary diseases
- For first-aid and emergency medicine
- For respiratory function diagnostics
- For Alpine athletes, mountaineers, skiers and amateur pilots

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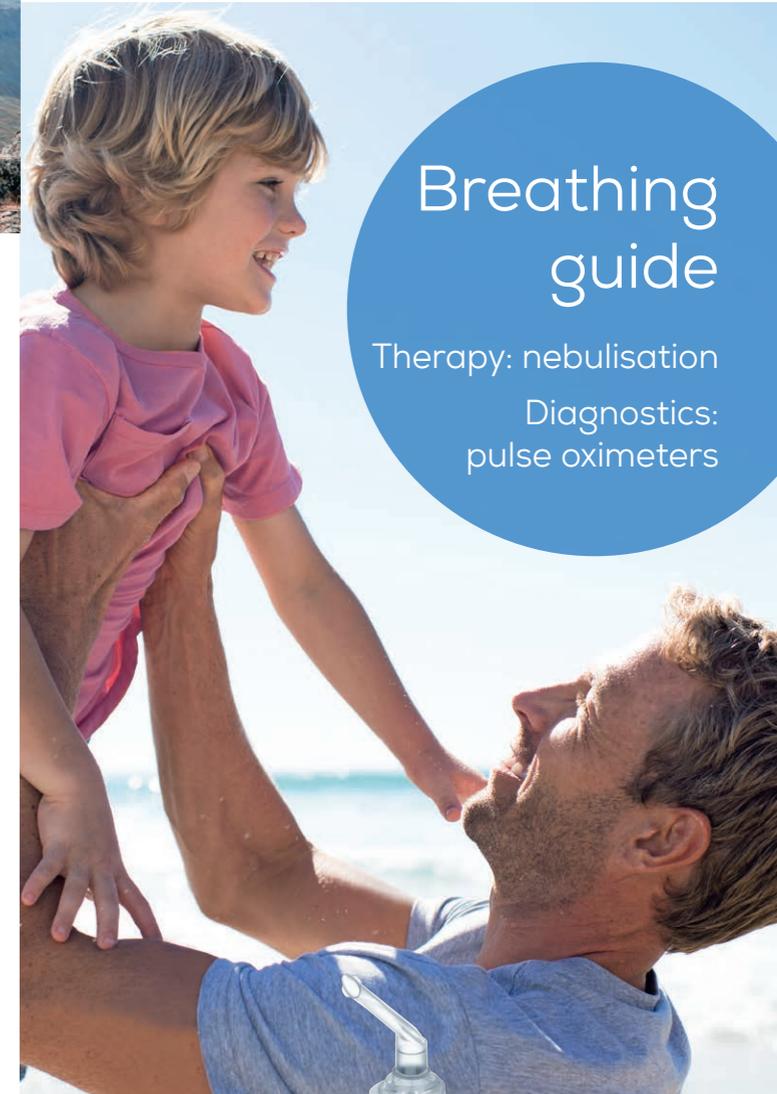
## STAY FIT AND HEALTHY THROUGHOUT THE DAY WITH BEURER

- **NEBULISERS** provide relief for your airways. As well as providing therapeutic support against colds and allergies, they can also be used as a preventative treatment. These days, there are all manner of technological solutions that are tailored to patients' individual needs and provide a hassle-free means of treating yourself at home or on the move.
- **PULSE OXIMETERS** are suitable not just for at-risk patients, but also athletes who wish to monitor their vital signs. Checking arterial oxygen saturation on a regular basis makes it possible to take appropriate measures against signs of deficiency at the right time.

You can explore our other nebulisers and pulse oximeters on our homepage at [www.beurer.com](http://www.beurer.com)



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## Breathing guide

Therapy: nebulisation  
Diagnostics: pulse oximeters

756.146\_1019 Subject to errors and changes.



Nebulisation  
for clear airways

TAKE A DEEP  
BREATH – FOR  
A HEALTHY  
LIFESTYLE

We breathe in and out approx. 20,000 times each day.<sup>1)</sup> This enables oxygen – which is vital for our survival – to enter the human body. However, the air that we breathe in can also contain viruses and bacteria, allergens and toxins, which can affect the mucous membranes of the respiratory system and cause problems.

THERE ARE 235 MILLION  
PEOPLE ACROSS THE WORLD  
WHO SUFFER FROM ASTHMA.<sup>2)</sup>

Respiratory diseases are amongst the most common human illnesses. They range from brief colds to chronic

illnesses such as asthma, bronchitis or chronic obstructive pulmonary disease (COPD). In addition to medication-based treatment, nebulisation can help to relieve discomfort in the upper and lower airways and can even be used as an essential means for survival.

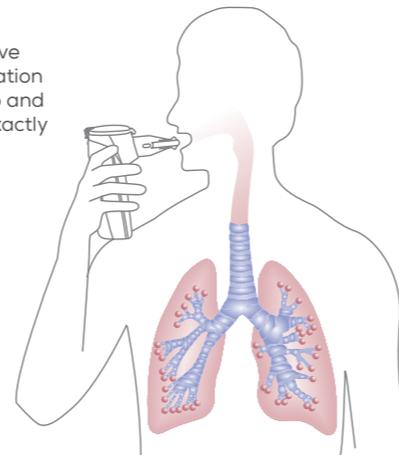
## NEBULISATION FOR THE RELIEF OF RESPIRATORY TRACT PROBLEMS

The specific aim of nebulisation is enabling patients to inhale steam, gases and artificial aerosols. It is recommended that you use a nebuliser for this type of treatment. Compared with a classic steam bath, when you use a modern nebuliser, it produces a constant, high supply of tiny particles, consisting of the active substances. These penetrate especially deeply into the airways, which makes their effect very efficient. Steam baths also cool down quite quickly, which is a disadvantage for the release of the active substances.

## BENEFITS OF NEBULISATION THERAPY

- The particles of the active substance act directly at the site of the illness
- It increases the moisture content of the mucous membranes and strengthens the immune system
- It supports the self-cleaning function of the airways
- It alleviates swelling and inflammation of the bronchial mucosa
- Bronchial secretions become more liquid, thus easing their release
- The side effects are usually lower than those of tablets and syrups
- Many patients find the nebulisation to be pleasant

By breathing in the active substance with nebulisation therapy, it is directed to and able to take effect at exactly the right location.



## AREAS OF APPLICATION

- For treating the upper and lower airways, colds, asthma and respiratory diseases
- Relief and help with allergies and hay fever
- As a preventive measure against colds and lung diseases



All of our nebulisers are supplied with a children's mask in the accessory set.

## 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 the individual particles and the nebulisation rate. To reach the alveoli, the diameter of the particles must be smaller than 6 micrometres. The average size of the individual particles in Beurer nebulisers is below this value, to ensure that a high proportion of the particles can be inhaled. A short inhalation time is achieved through a high nebulisation rate, although this also depends on the medication and the respective technology.

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



IH 60 Nebuliser



The attachable jolly giraffe will help distract your child in a playful way

Nebuliser  
IH 26 Kids

### Compressed-air technology

The compressed air, generated by the compressor, passes into the atomiser via an air hose. Inside the atomiser, the mixture of air and inhalant is atomised into tiny particles through a nozzle. The patient breathes in the active ingredients using a mouthpiece or a mask. **ADVANTAGE:** high nebulisation rate – short inhalation time.



IH 55 Nebuliser



### Vibrating membrane technology

The atomisation of the medication is achieved through the oscillation of a membrane that has very fine pores. This generates particles – also called the aerosol – which the patient can then breathe in using a mask or mouthpiece. **ADVANTAGE:** ultra silent, compact, ideal for treating children or when travelling.



IH 40 Nebuliser



### Ultrasound technology

Ultrasound technology causes the inhalant to oscillate in the water – used as the transmission medium – which enables release of the particles. The active substances are then channelled towards the patient by means of a mask or a mouthpiece. **ADVANTAGE:** ultra silent.

You can explore our other nebulisers on our homepage at [www.beurer.com](http://www.beurer.com)

1) Source: Dr med. Kai-Michael Beeh, Die atemberaubende Welt der Lunge (The Breath-taking World of our Lungs)

2) Source: WHO (World Health Organization)