

Snoring

Factsheet



STMedical® – a therapy device for snoring

Snoring is a relatively common phenomenon which affects on average one in five adults. In addition to a genetic predisposition, snoring can also be linked to smoking, alcohol and obesity. For a long time snoring has been regarded as a social nuisance without any health consequences. As research into sleep progressed, evidence demonstrated a close relationship between snoring and obstructive sleep apnea - a disorder with significant physical and psychosocial consequences. The diaphragm descends during inhalation, creating a vacuum that passively fills the lungs with air. The tension of the mouth and throat muscles keeps the upper airways open. The most common type of snoring occurs due to loss of muscle tone of the mouth and relaxation of the throat muscles of the soft palate leading to a narrowing of the upper airways, resulting in the acoustically perceptible flutter noises. This narrowing is also exacerbated by a relapse of the tongue.

Snoring – a serious phenomenon
Numerous scientific studies have shown a link between regular snor-

ing and elevated blood pressure. It is also linked to an increased risk of heart attack and stroke. Other symptoms include snoring-related fatigue and therefore accidents in the workplace and in traffic, as well as memory and concentration problems, erectile dysfunction, depression and irritability. Moreover regular snoring carries an increased risk of a so-called obstructive sleep apnea. The complete occlusion of the airways leads to recurrent nocturnal respiratory stops. This condition can dramatically lower performance and limit quality of life.

How to fight airway constriction

The current therapeutic approaches are primarily based on preventing the collapse of the upper airways and enlarging the throat (jaw clip, surgical procedures, CPAP sleep mask). In addition any risk factors contributing to snoring are eliminated wherever possible (eg reduction of alcohol consumption, weight loss in obese patients, giving up smoking). An additional approach represents the targeted therapy of the pharyngeal muscles. An under- or malfunction of the stabilizing and opening throat muscles contributes

Facts

- Significant reduction of snoring time per hour of sleep
- Increased volume of the throat widening mouth floor muscles
- Increase of the efficiency of the respiratory muscles
- Improved quality of sleep and life



to the collapse of the upper airways. It is therefore obvious that by strengthening the neck and throat muscles a lower tendency to collapse can be achieved.

>

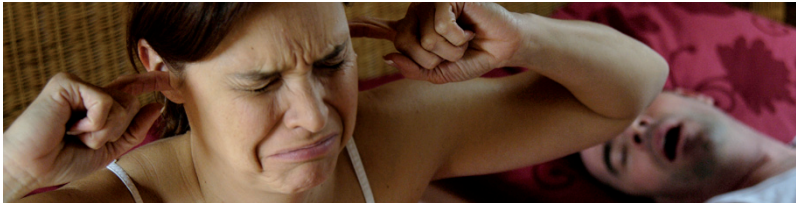


Headquarters / Switzerland

idiag AG
Müllistrasse 18
CH-8320 Fehraltorf

Tel. +41 (0)44 908 58 58
Fax +41 (0)44 908 58 59

www.idiag.ch
info@idiag.ch



Scientific evidence for STMedical® Respiratory Therapy

Specific and independently executed therapy of 5 times per week for 4 weeks with the STMedical® resulted in a statistically significant reduction of snore time per hour of sleep with regular snorers. This was proven in a scientific doctoral work for the first time ever. In addition an increase in the mouth floor muscles was apparent as well as an improved performance of the upper body muscles required for breathing [1]. In several other studies (in COPD patients [2-3], in patients with CF [4-5] or in paraplegics [6-8]) the STMedical® respiratory therapy was proven safe and effective.

How the Respiratory Therapy works

The STMedical® can be integrated easily and effectively into therapy protocols. Forced inspiration and expiration specifically target diaphragm, abdominal, intercostal, chest, neck, throat and back muscles. Endurance and strength deficits of the respiratory muscles are addressed effectively. Optimally, demonstration and training with the STMedical® device should be done by an appropriately qualified therapeutic professional. After a short initial period the user friendly

operation of the STMedical® allows independent use anywhere and anytime - whether in a treatment centre or at home. An important success factor for the therapy is regular application.

Scientific Papers

1. Dr. E. Furrer-Boschung, Lindenhofspital (CH), Dissertation, 1999.
2. Scherer, T.A., et al., Am J Respir Crit Care Med, 2000. 162: p. 1709-14.
3. Boutellier, U., ETH and University of Zurich, Switzerland, 2007.
4. Sartori, R., et al., J Cyst Fibros, 2008. 7: p. 313-9.
5. Kamin, W., Eur Respir J, 2006. 28, Suppl. 50: p. 7169.
6. Mueller, G., et al., Clin J Sport Med, 2008. 18: p. 85-8.
7. Mueller, G., et al., J Rehabil Med, 2006. 38: p. 381-6.
8. Verges, S., et al., Int J Sports Med, 2009. 30: p. 526-32.

Please contact us for further information on the device or on respiratory muscle therapy.



Headquarters / Switzerland

idrag AG
Mülistrasse 18
CH-8320 Fehraltorf

Tel. +41 (0)44 908 58 58
Fax +41 (0)44 908 58 59

www.idrag.ch
info@idrag.ch