

Sleep apnoea

**A HANDBOOK FOR PEOPLE
WITH SLEEP APNOEA**



**3rd revised
edition**

The Organisation for Respiratory Health in Finland promotes respiratory health and good life for people suffering from respiratory diseases.



Hengitysliitto

If snoring is causing you problems, you suspect you have sleep apnoea or family members or friends express their concern for pauses in your breathing at night, you should make an appointment with a doctor at your local health clinic or occupational health care services. This handbook features an overview of sleep apnoea and its diagnosis, treatment and self-care.

Some 300,000 people in Finland suffer from sleep apnoea, which means it can be called an endemic disease.

Sleep apnoea is most common in people between 40 to 65, but it is found in people of all ages, even children. Both men and women can suffer from the condition, but female sex hormones provide partial protection against it. Sleep apnoea becomes more common in women after menopause.

CONTENTS:

1. What is sleep apnoea?	3
2. Causes of sleep apnoea	4
3. Symptoms of sleep apnoea	5
4. Diagnosis	6
5. Untreated sleep apnoea	7
6. Sleep apnoea of professional drivers and in other occupations that require constant vigilance	7
7. Obtaining a driving licence and monitoring your ability to drive	8
8. Treatment of sleep apnoea	9
11. Follow-up treatment	10
10. CPAP machine	10
11. Sleep apnoea oral appliance	11
12. Surgical treatment	11
13. CPAP machine and mask	12
14. Managing the side effects of CPAP therapy	13
15. Successful self-care	15
Active self-care increases success	17



1. What is sleep apnoea?

Sleep apnoea, or obstructive sleep apnoea syndrome (OSA), is a condition characterised by pauses in breathing (apnoeas) that appear regularly while sleeping. They are due to the relaxation of muscle tissue in the pharynx during sleep, which causes the pharyngeal tissue to collapse, and results in the partial or complete obstruction of the upper respiratory tract.

One episode of apnoea can last from a few seconds to up to over one minute. The episodes often end with a snorting sound and the sleeping person waking up briefly. In the morning, the person often does not remember waking up during the night.

The repeatedly occurring apnoeas interfere with deep sleep, deteriorate the quality of sleep and can even cause oxy-

gen deprivation. The resulting symptoms include morning headaches, fatigue, tendency to nod off and interrupted snoring.

It is natural for short pauses in breathing to happen at night while sleeping. It is their number, length and effects that determine whether the person is suffering from a medical condition. The number of diagnosed sleep apnoea cases is at a record high, thanks to increased awareness and more efficient diagnostic methods.

The various forms of sleep apnoea include obstructive sleep apnoea (OSA), in which upper airways are obstructed during sleep, mixed sleep apnoea and central sleep apnoea. Another related condition is hyperventilation, which refers to reduced pulmonary ventilation.

FORMS OF SLEEP APNOEA	WHAT HAPPENS WHILE YOU SLEEP?
Obstructive	When the upper respiratory track is obstructed during sleep, the flow of air to the lungs is blocked or obstructed. There are recurrent pauses in breathing (apnoea) or partial blocking of the airways (hypopnea) that last at least ten seconds at a time. When the breathing difficulties affect the quality of sleep and cause daytime fatigue and other symptoms, the condition is referred to as obstructive sleep apnoea (OSA).
Central	A rare respiratory regulation disorder that blocks the flow of air and breathing. Only approximately 5% to 10% of the people with apnoea suffer from this form.
Mixed	Both types of apnoeas – obstructive and central apnoeas – occurring during sleep.
Hypoventilation	Carbon dioxide builds up in the body and there is often oxygen deprivation during sleep. This is due to changes in respiratory control and the activity of the respiratory muscles during sleep. This occurs particularly in conjunction with conditions that restrict the mobility of the thoracic wall and in severe cases of COPD.

2. Causes of sleep apnoea

Excess weight is the most significant factor causing sleep apnoea. Approximately 50% to 70% people with sleep apnoea are overweight. In overweight people, the fat tissue surrounding the upper respiratory tract can obstruct the upper respiratory tract when the person is lying on their back. Abdominal fat presses the upper respiratory tract and lungs.

When a normal-weight person suffers from sleep apnoea, the underlying reasons often include structural abnormalities in the face and neck. Often, the lower jaw is small and the person has a convex facial profile, which also means that they are

more prone to have a crossbite. Other risk factors for sleep apnoea include a structurally narrow pharynx, long-term sinus congestion and large tonsils. Hypothyroidism can also predispose a person to sleep apnoea.

Sleep apnoea is often conceived as a condition that only affects middle-aged men. In reality, the condition is found in both men and women, but female sex hormones provide partial protection against it.

After menopause, sleep apnoea is nearly as common among women as it is among men. Sleep apnoea most commonly affects people between 40 and 65 years of age, but children can suffer from it too.



3. Symptoms of sleep apnoea

Sleep apnoea causes a person's breathing to be interrupted during sleep. The apnoeas appear regularly and can last over one minute each.

People often come in for sleep apnoea studies after their partner or someone else sleeping in the same room comments on their loud snoring or expresses concern over the pauses in their breathing. Snoring alone does not always mean that a person has sleep apnoea, but snoring is a common symptom among people suffering from the condition. The snoring is loud and interrupted. Approximately 10 per cent of people who snore also suffer from breathing interruptions during sleep. On the other hand, not all people with sleep apnoea snore, nor do all snorers suffer from sleep apnoea. The details to why some snorers develop sleep apnoea, while others do not, are not yet

known. The onset of the disorder is probably explained by the combined effect of several factors and genes also contribute to this.

A person suffering from the condition can wake up to the feeling of being suffocated and can suffer from an increased need to urinate or excessive sweating. They may also experience insomnia.

Daytime fatigue, sometimes very severe, is a common sign of sleep apnoea. On the other hand, over half of the patients do not report any abnormal fatigue. The most common causes of fatigue include sleep deprivation, depression and stress. People with untreated sleep apnoea often feel sleepy when they wake up and are tired during the day. It is hard for them to stay awake when sitting still and they easily doze off when watching television, for example.

THE MOST COMMON SYMPTOMS OF SLEEP APNOEA INCLUDE:

- » Pauses in breathing during sleep
- » Loud, interrupted snoring
- » Dryness of mouth that appears while sleeping, scratchy throat
- » Constant daytime fatigue that can result in nodding off
- » Waking up to the feeling of being suffocated, palpitation, increased need to urinate or excessive sweating
- » Morning headaches that are relieved in approximately thirty minutes
- » Irritability and depression
- » Insomnia
- » Loss of libido
- » Lack of concentration and memory issues



4. Diagnosis

It is very important to diagnose sleep apnoea at an early stage. A sleep apnoea diagnosis is based on preliminary information, a clinical examination and the results of a sleep study.

The physician will take into account such factors as duration of sleep, habits, possible allergies and other conditions affecting you. Matters relating to your work duties and shift rotation will also be discussed during the initial appointment. If necessary, the physician at the healthcare clinic or your occupational physician will refer you to an otorhinolaryngologist or a dentist for additional exams. A dentist can examine the structure of your jaw and whether you have a crossbite.

Sleep apnoea is diagnosed with an overnight study in which respiratory movement, snoring and blood oxygen levels are monitored. The sleep study can be carried out as a sleep polysomnography including an electroencephalogram (EEG), or a more limited type of a study called a limited channel polysomnography.

The study indicates the number and length of breathing interruptions during sleep, the position in which they occur and whether the person moves in their sleep.

Sleep studies are usually carried out at home, as the results reflect normal sleep

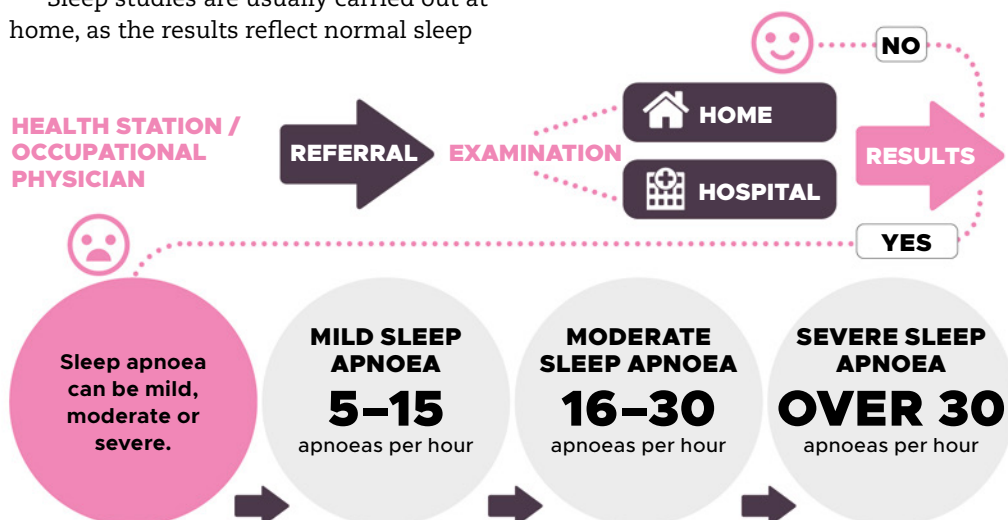
patterns more reliably than results obtained in hospital conditions. The research unit provides a sleep study device for the night to be returned to the unit in the morning. The medical staff will place the sensors and wires of the device on the skin or give instructions on how to do this at home. In the morning, the medical staff removes the device and prints out the data it has recorded during the night.

The classification of the severity of sleep apnoea depends on the number of breathing interruptions during the night. Everyone experiences pauses in breathing while asleep, but the amount does not exceed five pauses in an hour. The symptoms must also be considered in the diagnostics.

WHEN DIAGNOSING SLEEP APNOEA, THE FOLLOWING FACTORS ARE EXAMINED:

- » Body mass index
- » Blood pressure
- » Nasal congestion
- » Size of tongue and tonsils
- » Soft palate length
- » Face and jaw structure.

Other conditions that can cause similar symptoms are also excluded.



5. Untreated sleep apnoea

It is important that sleep apnoea is diagnosed and treated appropriately because severe, untreated sleep apnoea is a risk factor related to many other conditions. If serious sleep apnoea is left untreated, the risk of death by cardiovascular disease, stroke or pulmonary hypertension is increased three- to six-fold.

Even mild cases of sleep apnoea cause a raised risk of hypertension. People with sleep apnoea are at risk of developing type 2 diabetes and vice versa: diabetes can predispose you to sleep apnoea.

The risk of depression and other mental illnesses is increased for people with untreated sleep apnoea. Disorders in cognitive function and memory are also common.

Sleep apnoea also increases the risk of occupational accidents and untreated sleep apnoea is a safety risk in traffic. Driving when you are tired always entails a risk of a traffic accident, and for people with untreated sleep apnoea this risk is up to seven-fold. The risk exists even if

the symptoms do not include daytime fatigue that is typical to sleep deprivation.

If professional drivers detect alarming signs in their health, for example constant fatigue or nodding off in situations when concentration momentarily slips (such as waiting at the traffic light, straight road, little traffic), they must seek medical attention. When sleep apnoea is treated, the daytime fatigue disappears and the risk of a traffic accident decreases.



6. Sleep apnoea of professional drivers and in other occupations where constant vigilance is required

It is particularly important to treat sleep apnoea of professional drivers and people in other professions requiring constant vigilance. You should seek treatment immediately if your health status deteriorates or vigilance is reduced as, in the best case scenario, this can prevent the progression of the condition. Sleep apnoea is one of the most significant risk factors of motor vehicle accidents.

Treated sleep apnoea that is under control does not prevent working as a professional driver, i.e. persons with sleep apnoea can continue in their profession once they are treated and no longer suffer from the symptoms. No-one should neglect seeking medical help because of the

fear of the diagnosis and losing their driving licence. It is still possible to continue working as a professional driver even if you suffer from severe sleep apnoea, if the condition is stable and the patient's vigilance is not affected.

According to the guidelines issued by the Ministry of Social Affairs and Health, a professional driver cannot meet the health requirements of a professional driving licence if they suffer from permanently reduced vigilance due to a confirmed case of sleep apnoea with a poor response to treatment. Vigilance can be reduced both by sleep apnoea and other breathing disorders during sleep (EU Commission Directive 2014/85/EU).

7. Obtaining a driving licence and monitoring your ability to drive

When an individual's ability to drive is assessed, the level of fatigue during waking hours is of importance. In connection to the amendments to the Finnish Driving Licence Act that entered into force on 1 July 2018, the guidelines for driving health were updated. The following provisions apply to individuals with sleep apnoea:

If an applicant suffers from sleep apnoea, a separate medical certificate of their

ability to drive is required. The doctor will assess whether sleep apnoea affects the individual's ability to drive, and the doctor can refer the applicant to a practical driving ability test. The test is not a driving test. During the test, the applicant drives in normal traffic under the supervision of a driving instructor. The physician is allowed to be present at the test.

NO DRIVING LICENCE

The new legislation continues to reject a driving licence from persons who suffer from severe propensity to fall asleep due to sleep apnoea. This applies to driving licence types A, B and T, i.e. motorcycle, passenger vehicle, van, tractor, moped. Even stricter health requirements apply to professional drivers and generally anyone with a Class 2 driving licence (taxi drivers, bus and combination vehicle drivers). Even a less severe problem with vigilance can mean that you cannot obtain such licence.

TEMPORARY DRIVING BAN

A temporary driving ban will be imposed, at the physician's discretion, as soon as the medical examinations begin. The desired treatment outcome must be achieved within six months. If this is not the case, the physician must report the driving ban to the police. For type A, B and T driving licences, the treatment outcome must be assessed at least every three years, and for professional taxi drivers and in categories C and T, at least every year.



Learn more about sleep apnoea and driving licenses

The Finnish Transport and Communications Agency Traficom

<https://ajokortti-info.fi/ajotaidon-yllapito/ajoterveys>

www.terveyskyla.fi/keuhkotalo/tietoa-keuhkosairauksista/uniapnea/ajoterveys

8. Treatment of sleep apnoea

The objective of sleep apnoea treatment is to alleviate the symptoms resulting from the condition, to preserve the individual's ability to work, improve their quality of life, prevent and alleviate related conditions and to prevent premature deaths. The treatment plans are tailored to each patient and based on the severity of the condition and the patient's need for treatment. Treatment of sleep apnoea is based on the elimination or reduction of factors that cause or complicate the condition. People suffering from sleep apnoea have a key role in the success of their own treatment.

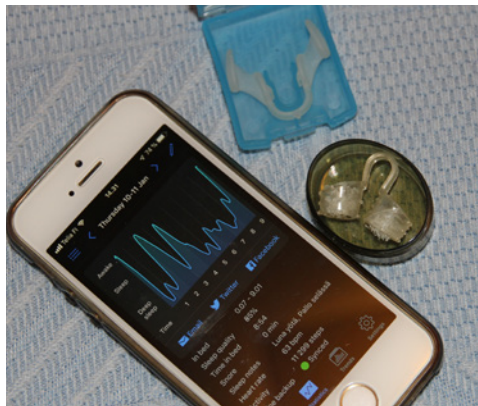
They can improve their own well-being to a significant degree. If excess weight is the main cause of the sleep apnoea, losing weight will help to alleviate the symptoms significantly and can even completely eliminate them. In the case of mild sleep apnoea, adopt-

ing new habits (weight management, increasing exercise, quitting smoking) and treating sinus congestion can work as treatment. There are devices that can help to prevent congestion of the airways.

Episodes of apnoea most commonly appear when sleeping on your back, since the pharynx is at its narrowest in this position. If pauses in breathing only occur in this position, avoiding this sleeping position could be a solution to the problem. Positional therapy can be practiced by attaching a small ball to the back of the patient's nightwear, which will prevent them from sleeping on their back. There is also a commercial alternative available: a sleep apnoea belt.

Sleep apnoea oral appliances and surgical treatment can benefit some sleep apnoea patients. A specialist doctor and the treating unit will assess whether the patient will benefit from them.

Today, there is a wide array of sleep tracking applications available in the various app stores – many of them free of charge – that can help you to monitor your sleep patterns.



It is recommended to try sleeping with a tennis ball attached to your back. This will prevent you from sleeping on your back.



For more information on the treatment of sleep apnoea and the assistive devices used in its treatment is available in the Current Care Guidelines (in Finnish) www.kaypahoito.fi.

9. Follow-up treatment

Follow-up treatment of sleep apnoea can be implemented as remote monitoring or with appointments in a primary or specialised healthcare unit. Follow-up treatment is usually carried out by a nurse specialised in sleep disorders. A doctor or a rehabilitation therapist can also be involved if necessary. The follow-up appointments are scheduled by the physician.

The follow-up treatment of patients with mild sleep apnoea takes place in a primary healthcare unit. In moderate and severe cases of sleep apnoea, the primary treatment method is continuous positive

airway pressure (CPAP) therapy. In these cases, the monitoring and assessment of the therapeutic outcome must take place in a specialised healthcare unit, at least in the initial stages.

Occupational and functional capacity, the need to be absent from work, returning to work and the need for medical and professional rehabilitation are assessed in detail and more extensively only after the desired outcome of the sleep apnoea treatment has been achieved and can be assessed. The main responsibility for this lies with the occupational healthcare services.

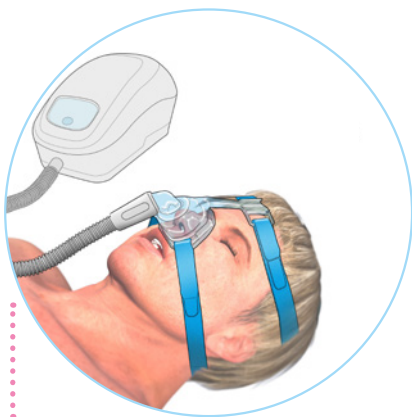
10. CPAP machine

The standard treatment of obstructive sleep apnoea is nasal continuous positive airway pressure (CPAP) therapy.

CPAP therapy includes breathing ambient air through a nasal mask in positive pressure, which means that the airflow from the CPAP machine keeps the airways open during sleep. This form of therapy is most commonly used in the treatment of moderate to severe cases of

obstructive sleep apnoea. Almost all people with sleep apnoea benefit from this form of therapy, and its positive effects can be detected early on, already after one or two nights.

The CPAP machine cannot cure the condition as such, but it eliminates the episodes of apnoea, which improves the quality of sleep and alleviates fatigue and other symptoms.



CPAP machine

The CPAP machine produces an airflow through a hose and a mask, and the pressure helps to keep the upper respiratory tract open. There are different types of masks.



Sleep apnoea oral appliance

The sleep apnoea oral appliance brings the lower jaw forward.

11. Sleep apnoea oral appliance

The sleep apnoea oral appliance is used during sleep: it is placed in the mouth at night and removed after waking up. The oral appliance brings the jaw forward during sleep and prevents the tongue from collapsing back. The appliance usually offers the best remedy for people with mild sleep apnoea symptoms who are at a normal weight and mostly experience pauses in breathing when sleeping on their back. This method of therapy is also applied in cases where, for

some reason, CPAP therapy cannot be used. A specialised dentist can assess the need for a sleep apnoea oral appliance. A referral is needed for this examination.

A sleep apnoea oral appliance cannot be used by individuals who suffer from severe cases of the periodontal diseases or who are significantly obese. This form of therapy can cause soreness in the temporomandibular joints and increase salivation and aggravate malocclusions.

12. Surgical treatment

Only few patients benefit from surgical treatment, and individuals are selected carefully for surgery. If the symptoms are not relieved with lifestyle changes or with the help of CPAP therapy or an oral appliance, surgical treatment could be an option. Surgical treatment could also be an option if there are major structural abnormalities in the nose or pharynx of the sleep apnoea patient.

Surgical treatment alternatives include operating on the upper respiratory tract (opening the nasal passages), treatment of the pharynx by radio frequency thermal ablation, jaw surgery (the upper and lower jaw can be brought forward) or weight loss surgery. Weight loss surgery usually does not completely eliminate the need for sleep apnoea treatment, but it can help to alleviate the symptoms.

The RFA (radio frequency ablation) method used in the treatment of snoring does not suffice in treating the symptoms of sleep apnoea.

Electrical stimulation therapy is an experimental treatment and can be applied to carefully selected individuals. In this form of therapy, a small device is placed under the collarbone to electronically stimulate the hypoglossal nerve during sleep, which stabilises and extends the airways and facilitates breathing. The stimulation stabilizes and extends the airways.

In addition to the device, an electrode is surgically placed on the hypoglossal nerve and a sensor that monitors breathing is inserted between the muscles in the flank. The patient can turn on the device for the night.

13. CPAP machine and mask

It can sometimes take a while for the patient and their loved ones to get used to the CPAP machine and the mask. However, patience will usually pay off. Regular use of the CPAP machine has shown to improve the quality of sleep and, consequently, alleviate the symptoms of sleep apnoea. It is also effective in treating the conditions relevant to sleep apnoea.

It is recommended that the CPAP machine is always used while sleeping, or at minimum for four hours each night. The treatment is only effective if the machine is used regularly. If you stop using the machine, the symptoms usually return after one or two nights.

A healthcare professional, usually a nurse specialised in sleep disorder, will instruct you on the use of the machine and the humidifier (if applicable), and with finding the right type of mask and taking care of the mask. In order to keep the machine working, it must be used and maintained properly.

Individuals with sleep apnoea can be prescribed a CPAP machine by their physician. The machines are at the local health care unit where they can be borrowed, free of charge, as medical therapy devices. The CPAP mask is essential for the success of the treatment, so it must be selected individually for each patient.

The CPAP machine is lightweight, and it is easy to take with you when you travel. The machine is powered by electricity. The modern CPAP machines are very silent and small in size. If you want to acquire a travel-sized CPAP machine, you can buy one at your own cost.

An air hose connects the mask to the CPAP machine. You must try on the mask yourself to find one that fits. Nasal masks, oro-nasal masks and nostril masks are the most commonly used mask types.

A strap is used to adjust the mask on the face. For the treatment to work, it is important that the mask fits well on the user's face. Sometimes, several fittings

An example of a nose mask.



An example of an oro-nasal mask.



and tests might be required before a fitting mask is found. If a certain model does not fit the user or it leaks or feels too tight or uncomfortable, the mask must be replaced.

It is possible that CPAP therapy can cause the nasal and oral mucous membranes to become dry. If standard nasal treatment is not enough, a humidifier with warm water is paired with the CPAP machine. Instructions on how to use, maintain and clean the humidifier are provided when you start using it. You must take par-

ticular care that water does not leak from the humidifier into the CPAP machine. This is why the water tank must always be removed before moving the machine to a new place.

It is a good idea to place the CPAP machine at the same level with the sleeper, or little lower, especially when there is a humidifier in the CPAP machine. The machine should never be placed on the floor. This reduces condensation and makes it possible for the water to evaporate into the hose and the mask.

14. Managing the side effects of CPAP therapy

Nasal symptoms are common in patients with sleep apnoea, and sleep apnoea therapy can increase them even more. If air leaks from the mouth during CPAP treatment, this can aggravate the dryness and congestion of the nasal passages. This can be reduced by using a humidifier with warm water or a mask that covers both the nose and mouth.

Dryness of the mucous membranes can also be treated by using hydrating and therapeutic nasal sprays or nasal irrigation.

Some patients get a runny nose when they start CPAP therapy. These symptoms are usually reduced as the treatment continues. If the problem persists, it is a good idea to hydrate the mucous membranes,

An example of a nostril mask.



Example of a CPAP machine.



because a runny nose is a symptom caused by their drying.

CPAP treatment can also cause dryness of the mouth. This problem is often alleviated if the nasal mucous membranes are treated first: it will be possible to breathe through the nose again once it is no longer stuffy. As a result, the mucous membranes of the mouth and throat are not as dry. A humidifier and an oro-nasal mask can provide relief for this as well. The mucous membranes of the mouth can also be moistened using mouth

moisturiser gels available at the chemist's or simply with cooking oil.

After starting CPAP therapy, you may experience air building up in the stomach. These symptoms usually disappear once you get used to the machine. If necessary, you can treat flatulence temporarily with over-the-counter medication available at the pharmacies. Sometimes, changing the type of mask you use or adding humidification to CPAP therapy can help reduce the build-up of air.

CPAP MACHINE MAINTENANCE

The machine, humidifier and mask must be cleaned and checked regularly to increase their service life. Skin issues can ensue if proper maintenance of the mask is overlooked.

If necessary, the CPAP machine can be taken to the treating unit where it can be checked during the patient's follow-up appointment.

Must be done every day:

- » Disconnect the mask and air hose from the machine.
- » Wash the mask cushion in mild soap water.
- » Replace the water in the humidifier and rinse the container.

Must be done once a week:

- » Wash the mask and straps in mild soap water.
- » Wash the air hose and container of the humidifier with mild dish soap. The water chamber of the humidifier can also be washed in a dishwasher, on the top shelf. The air hose must be placed to dry as straight as possible.

Other maintenance tasks:

- » The filter must be checked monthly. It must be replaced at least every six months.
- » The mask is replaced every year, or more often if it is no longer airtight.
- » The hose is replaced when necessary.

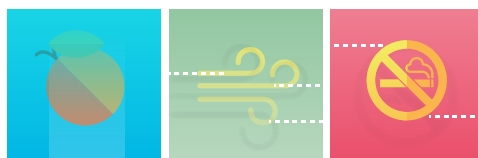


15. Successful self-care

Self-care of sleep apnoea is important, because people with the condition can greatly influence their own well-being. For people with excess weight, weight loss and maintenance are the cornerstones of self-care in the treatment of sleep apnoea. Even losing five to ten kilograms will help to alleviate the symptoms related to sleep apnoea. Being in the healthy weight range can help to reduce the number of pauses in breathing and the need for CPAP therapy.

Some people with sleep apnoea can benefit from wearing compression stockings. During the day, fluids build up in the tissues in the lower limbs, and when you lie down for the night, the fluid can start to move toward the upper body and cause an obstruction of the upper respiratory tract. The socks are put on in the morning and taken off in the evening.

Exercise is also important for people with the condition. It helps in the treatment of the symptoms and management of the condition, even if weight loss fails.



WEIGHT MANAGEMENT

Regular meal times are important for successful weight loss and maintenance. Long gaps between meals mean you will become very hungry and start to crave sweet snacks.

It is recommended that you eat every 3–4 hours. Some of these meals can be snacks that consists of such products as whole grains or fat-free dairy products or vegetables and fruit.

It also helps to start eating smaller portions and adopting the healthy eating plate model in which at least half of the plate is filled with vegetables. You should eat vegetables, fruit and berries with every meal because they help to fill your stomach but are low in calories.

Low-fat dishes are a good alternative. You need fat even when you are on a diet, but it must be soft fats: steer clear of hard, i.e. saturated, fats.

ALCOHOL, MEDICATION AND NICOTINE PRODUCTS

Certain hypnotics and tranquilizers can result in the relaxation of the throat muscles and can impair breathing. You should avoid them as they can increase the number and length of apnoea episodes. However, never stop taking your medication without consulting your doctor first.

Alcohol may increase the pauses in breathing, so you should avoid alcohol consumption. Even one serving of alcohol before going to bed makes sleep apnoea worse.

Smoking increases swelling in the mucous membranes of the upper respiratory tract, so quitting can help to relieve the symptoms of sleep apnoea.



You can get help for quitting at the Stumppi helpline offered by The Organisation for Respiratory Health in Finland and on the website www.stumppi.fi. The website hosts an active discussion forum and information on the benefits of being smoke-free and tips to help with quitting (in Finnish).

EXERCISE

More exercise and physical activity means that more calories are burnt, which helps in losing weight and in weight management. The type of physical activity is not as relevant as its total amount.

To keep healthy, it is a good idea to be physically active for at least 30 minutes a week at a moderately strenuous level or, preferably, for 20 minutes each day (recommendation by the UKK Institute). As it is the total amount of physical activity that counts, the daily activity can be composed of shorter periods of exercise. A total of at least 2.5 hours of exercise that improves your endurance is recommended as the weekly level of activity.

The best method is to engage in basic and incidental exercise every day and to complement this with more strenuous endurance training once a week. Brisk walks suit most people, because their level can be adapted easily and this type of exercise can be done almost anywhere.

Sports in which the major muscle groups of the body are trained are good for endurance training. For example:

- » Nordic walking
- » Cross-country skiing
- » Cycling
- » Jogging
- » Swimming
- » Dancing

You can get your dose of exercise by engaging in incidental exercise such as gardening or walking to work. Strenuous exercise does consume more energy in a shorter time.

You should choose a form of exercise you like, because this will make it more likely that you will stick to it after the initial enthusiasm fades. Exercise is more rewarding when you do it with a friend or family member.

You achieve the best results if you succeed in maintaining the weight and make the new eating habits a part of your new lifestyle. Integrating regular exercise throughout the year into your life can help you stick to your goals.

Vaccinations

The annual seasonal flu vaccine is recommended for persons with sleep apnoea and people close to them. You can get the vaccine free of charge at your local health care centre if you suffer from sleep apnoea.

Travel and sleep apnoea

It is a good idea not to skip CPAP therapy even when you travel. The symptoms will return as soon as after one or two nights of sleep without the machine. If necessary, you can acquire a battery transformer charger and a travel CPAP machine.

Before travelling, acquire a certificate that indicates the purpose of use of the CPAP machine from the treating unit or the manufacturer of the device for the airport security check. The machine can be X-rayed safely. When flying, you must carry the CPAP machine in your hand baggage even if you do not plan to use it during the flight.



16. Active self-care increases success

According to a survey conducted by the Finnish Respiratory Association in 2020, sleep apnoea is primarily (94%) treated with a CPAP machine and people using the CPAP machine are satisfied with the treatment. For the majority of respondents, CPAP therapy had started

within six months of diagnosis. It is important to make the use of the machine a daily routine. Respondents felt that peer groups were important sources of support: almost half of the respondents were interested in online peer activities.





Peer support from the Organisation for Respiratory Health in Finland

One of the key activities of the Organisation for Respiratory Health in Finland and its local organisations around Finland is to offer peer support.

Peer support offers individuals suffering from a certain condition the chance to share their experiences. Together, they can reflect on how their lives, resources and conditions differ from each other and what they have in common. Even more serious topics can be brought up. At its best, peer support is a source of empowerment for both the person receiving support as well as the one offering it.

The illness also affects family members and other loved ones. Many people feel that it is a relief to discuss the condition with other people in the same situations, as you do not have to add to the concerns of family and friends.



Go the website of the Organisation for Respiratory Health in Finland at www.hengityслиitto.fi, and find out which local association is active in your region. Come and join the activities!



REMEMBER!



Other handbooks published by
the Organisation for Respiratory
Health in Finland. For people
affected by sleep apnoea, we
recommend the handbook
“Breathe and be out of breath”

The contents of this
handbook were designed by
Mervi Puolanne and Hanna
Salminen.

Tarja Saaresranta, Professor
of Pulmonary Diseases and
Allergology, has carried out
the expert review.

The handbook was designed
in cooperation with Resmed
Finland Oy and Philips Oy.

Photos: Iina Puolanne,
ResMed Finland Oy,
Philips Oy. Shutterstock.
Illustrations: Mikko Sallinen.
Layout: Vitale Ay.

JOIN YOUR LOCAL ASSOCIATION

The Organisation for Respiratory Health in Finland and its local associations promote respiratory health and good life for people suffering from respiratory diseases.

☐ **Become a member**

☐ **I want to become a secondary member of the local organisation of, I am a member of the local organisation.**
(paying the member fee of both associations)

You can also fill
out a form online at
[www.hengityслиitto.fi/
liity-jaseneksi](http://www.hengityслиitto.fi/liity-jaseneksi).

SURNAME AND GIVEN NAMES (underline the name by which you wish to be referred)	ADDRESS >
DATE OF BIRTH >	POSTCODE AND CITY/TOWN >
PROFESSION >	PLACE OF DOMICILE >
TELEPHONE >	EMAIL >
FIRST LANGUAGE >	

☐ You can send me information about events and activities by
text message and e-mail

I am interested in respiratory diseases (please indicate which):

☐ I am a guardian of the child who is under 15 ☐ I am under 15 years old
☐ I do not have a respiratory disease

There is a member of a local respiratory association in our family:

☐ No ☐ Yes NAME >

Your membership fee is depends on your local respiratory organisation. We will send your membership application to the respiratory association of your home municipality. The privacy statement of the membership register is available at: www.hengityслиitto.fi/liity-jaseneksi.

☐ I hereby accept that the information above will be saved in the register of members of which the local association is the data controller and Hengityслиitto ry (The Organisation for Respiratory Health in Finland) is the data processor.

DATE >	SIGNATURE >	GUARDIAN'S SIGNATURE IF YOU > ARE UNDER 15
--------	-------------	--

The website and YouTube channel of The Organisation for Respiratory Health in Finland feature a lot of up-to-date information on respiratory health and respiratory diseases, including asthma. Stay updated on our activities and latest news by following us at:

www.hengitysliitto.fi

@Hengitysliitto




 Hengitysliitto



 Hengitysliitto

LOCAL ASSOCIATIONS FOR RESPIRATORY HEALTH OFFER MANY BENEFITS FOR THEIR MEMBERS:

- » You can download the mobile membership card from your app store. It helps you keep track of the news, activities and events of your local respiratory association and The Organisation for Respiratory Health in Finland, as well as find peer activities and edit your personal information.
- » Local respiratory associations regularly organise peer groups and sports activities, events, lectures and other types of recreational activities.
- » Come and join the activities as a volunteer peer instructor, sports instructor, expert by experience or an elected representative in the organisation. The Organisation for Respiratory Health in Finland offers training for its volunteers.
- » The member magazine, *Hengitys*, comes out four times a year.
- » You can check the member benefits of your local respiratory organisation and national organisation on their respective websites.

 Fill in the form, cut it out and fold it as along the reverse line to form a letter. Fasten the edges with tape. The postage is paid by The Organisation for Respiratory Health in Finland, so you can drop the letter in a mailbox without a stamp.

Postage paid by
The Organisation
for Respiratory
Health.

Hengitysliitto ry

5005132

00003 Vastauslähetyt