

## **SLEEP TIGHT**

PSP delegate Ea Suzanne Akasha



Sleep improves when you:

- Stop smoking
- Cut down on alcohol
- Cut back on coffee and coca-cola
- Establish a bed time ritual
- Learn mental and or bodily relaxation techniques
- Get exercise
- Get exposure to day light

### **Did you sleep well?**

Many delegates will answer this question with a resounding NO, as delegates often don't sleep long and well enough. An average person will spend 25 to 30 years sleeping and 6 to 7 years having REM dreams. Invest in all those years to benefit in your waking hours!

### **Gained some weight, feeling irritable and showing poor judgement?**

Hmmm - maybe you sleep too little... In the western world one in four experiences sleeping problems and the number is steadily increasing. A bad night gives a bad day since lack of sleep and poor quality of sleep makes you irritable, leads to poor judgement, makes it hard to concentrate, stimulates appetite and lowers pain threshold. Lack of sleep also makes the body more prone to infections as the immune system is weakened.

In a crisis or a disaster almost everyone will experience insomnia and other sleep disturbances. This is a normal reaction to an unusual situation. A few nights of not enough sleep do not do any permanent harm, but if insomnia, flash backs, early awakenings persist for a longer period of time something should be done. Lack of sleep not only makes you look bad, it gives you bad judgment, increases appetite and increases the level of stress hormones in the body. This can lead to a vicious circle where the high level stress hormones makes it even more difficult to rest and sleep. Eventually this can lead to burn out and depressive states.

### **Are you 'underslept'?**

Before electricity people slept more. On average a normal person slept 1 ½ hours longer every night. Today some boast that they fall asleep the moment their head touches the pillow, where in fact they shouldn't be proud at all. They sleep too little, as it will take a normal and well functioning person 10 to 20 minutes to fall asleep. If you've been working around the clock for

some days without much sleep and you can relax, your body will compensate by getting sleep whenever possible and there will be more deep restorative sleep than usual.

### **Lie down to sleep**

There are two distinctly different states: awake and asleep. To go from the state of being awake to the state of zzzzz, a bridge is needed. The organism needs to wind down. This is why establishing a bed time ritual with quiet activities the last hour before bed is recommended. And in order to fall asleep the body needs to lie down, the muscles need to relax – and so does the mind. If you sleep sitting in a chair as in an airplane, you may get enough sleep in terms of hours but will not feel you are sufficiently rested, as you haven't been able to lie down. Whenever we sleep sitting we do not access the deep stages of sleep that are restorative for body and mind.

Sleep is beneficial and both body and mind need sleep in order to function well. When we lie down to sleep the body and brains rests in some stages and in REM sleep, the stage known as dream sleep, the brain is more active, than when awake. The deepest phase of sleep activates the immune system, rebuilds cells, tissue, nervous system as well as memory and the psyche. The metabolism slows down and growth- and sex hormones (these are not only related to sexuality but are vital to health and wellbeing) are released so you may wake up feeling refreshed.

During sleep the body produces testosterone, the principle hormone in sexual desire for both men and women, and the general deterioration in sleep quality may explain, why the main sexological complaint on in the Western world is lack of desire. A stressed and under slept man will often experience erectile problems as a consequence. So, there you go - off to bed, gentlemen.

Lack of sleep is the most common cause of recurrent infections such as colds. Chronic stressed people do not experience the deep sleep phases and this is a main cause of burn out and stress related depressions. Lessons learned? You can live through a very and quite long stressful time if only you get good quality sleep.

### **DAY AND NIGHT RYTHM**

An inner biological clock, regulated by exposure to daylight, sets the cycle of being awake and asleep. Therefore exposure to daylight or darkness will help a person either staying awake or dozing off. Generally speaking the sleep-wake cycle gets more pronounced (making it easier to sleep at night and to remain alert at night) if you get exposure to daylight and get exercise. If you travel through time zones, getting day light at the destination helps the body to adjust to the new time zone. Whenever flying, it furthers sleep to wear an eye mask on the plane, as darkness will increase drowsiness and sleepiness. If having worked around the clock in an emergency, the day and night rhythm needs to be reset and reinforced by going to bed and getting up at the same time every day.

### **STAGES OF SLEEP**

Let's look at the stages of sleep. After you lie down body and mind prepares for sleep. This falling asleep phase will take 10 to 20 minutes. Hopefully you may learn to lie in bed pleasantly awaiting sleep. Often worries that you cannot sleep will keep you awake in this stage. Worry about not being able to sleep is a sure way to get insomniac.

Learn to substitute awfulizing thoughts with soothing ones. Instead of thinking:

- Oh my – I cannot fall asleep
- I won't be able to function tomorrow if I don't sleep right now.

Substitute these thoughts with more realistic ones:

- Well. Sleep will come eventually. I just lie here and practice relaxation.
- I can function well even though I won't sleep as much as usual.

Remember you cannot exert willpower to go to sleep. You just let it happen to you and invite sleep by being relaxed... In this transition stage it is normal to may experience dreamlike images and your limbs may jerk.

### **.....haven't slept a wink?**

You're drifting into the first phase of sleep – stage 1 of light sleep where the muscles begin to relax. This stage is where you nod off if you're sitting upright – the muscles of the neck relax, the head drops and you wake with a startle. Breathing and brain waves slow down. This phase doesn't last very long, and you often drift in and out of sleep a number of times in stage 1. During this stage and the next you may easily believe you haven't slept at all. That's the reason many believe they haven't slept a wink, but research shows that in reality they sleep the double amount of their own estimate. This stage lasts just a few minutes.

Stage 2 takes up 45 – 50 % of sleeping time. Muscles relax even more and an observer will see clear signs of sleep. You are less easy to wake.

Stage 3 is a stage of deep sleep and after a few minutes there is a transition to

Stage 4 where there is profound muscle relaxation, and change to even slower brain waves. You are hard to wake and if you wake a sense of being groggy will last long, so you know you have been sleeping. This deepest stage is the most important stage – this is of central importance for all of our vital functions. Stage 3 and 4 make up about 25 % of sleep.

### **Sleep cycles**

Together these four stages create a cycle of approximately 90 minutes in adults, and 60 minutes in children. However the first cycle of each night has more deep sleep, about 30 to 40 minutes, and this is the restorative sleep period. Not only do brain wave get slow, there is reduced activity in an important area of the brain that has to do with social behaviour and emotions. That is probably why everybody becomes obnoxious without sound and deep sleep.

After stage 4 there is a short ascent, you often wake up without realizing or remembering it, and then a strange thing happens: REM sleep – it's dreamtime. The eyes move, the breathing is irregular and the body is immobilized and cannot move except for the eyes that display Rapid Eye Movement, thus the name of the stage. The brain is more active now than when awake. REM sleep takes up 25 % of sleep about 2 ½ hours every day (sorry night!). In fact there is dream activity during all stages of sleep, but the distinct and bizarre dreams, we all remember in the morning, as we wake up from a REM state, are REM dreams. Most people will wake up during REM sleep once or twice in their lifetime without being able to move. It will take a minute before you can move and it's quite scary but not dangerous at all.

## **AGE AND SLEEP**

With age there will be less deep so the amount of light sleep increases over time. By the age of 80 most people will only spend 5 % of their sleeping hours in deep sleep. As they sleep lighter, they wake more easily believing they haven't slept at all. The body will produce less sleep inducing substances such as melatonin and that is why elder may need to draw the curtains or to use an eye mask to sleep well. Other reasons sleep changes with age is that many elder do not exercise, or they consume alcohol, smoke, drink too much coffee, are obese or live with a chronic disease. So if you were an excellent sleeper when younger, you may need to adapt to a new pattern when you are over 50 years of age.

## **SLEEP THIEVES**

The major sleep thieves apart from high arousal, as in stress related states, are nicotine, caffeine, alcohol, snoring and medication.

- Nicotine. All research shows that smokers generally have a harder time falling and staying asleep. Nicotine your sleep as it gives lighter sleep with many awakenings and the body wakes several times during the night craving nicotine.
- Caffeine. Caffeine impairs sleep as it reduces the amount of deep sleep. Large amounts of coffee, coke or tea will keep anybody awake as it increases adrenalin. A person high on caffeine is often sleep deprived! With age the time it takes to process a cup of coffee will double, so tolerance of caffeine intake will lower as you grow older.
- Alcohol. Alcohol makes a person drowsy making it easier to fall asleep. However alcohol generally gives poor quality of sleep plus early wakenings. It increases the tendency to snore as the muscle tissue in the palate relaxes due to the relaxing effect of the alcohol. A scaring fact about alcohol is, that long time abuse prevents deep sleep stages, and the capacity to get deep sleep may be impaired for ever.
- Sleeping medicine are generally to be avoided expect for a few days in the midst of a crises. Be sure to get medication that has few side effects and are as short-acting as possible. Benzodiazepines are mostly long-acting, thus they accumulate in the body, making the user more dizzy during daytime and they generally give shallow sleep. Most antidepressants have a side effect of creating insomnia, as some brands do so more than others, consult a doctor to know what medication is best suited to the need.
- Snoring.....read on

### **He is snoring**

Among the young, more men than women snore. Among the elder, more than half of both men and women snore. Snores can be very loud, in fact louder than the decibel allowed for machinery in the European Union as snore can be more than 90 decibel. Snoring is causes by the soft palate falling backwards and by the uvula – the funny thing hanging down from the palate - vibrating during your sleep. Alcohol and overweight will make the tissue in vibrate more. Snorers wake both others and themselves from the noise, and this causes interrupted sleep. Most snorers sleep on the back. Learn to sleep lying on the side if you are prone to snoring. Tie a big pillow to the back with a long scarf, so whenever you turn on to the back during the night, you will automatically be tilted on to the side. If your partner snores and you lie awake and become

more and more upset, you can use this relaxation trick: With every loud snore you imagine that you become more and more relaxed. Change the irritation into something more useful. Relax more and more for each and every snore.

## **GIV SLEEP A CHANCE**

What can you do to improve a disturbed sleep pattern? First you need to diagnose what kind of sleeping problems you are experiencing. If you drink litres of coca cola or coffee in the evening no technique can help counteract these strong stimulants!

## **Different techniques for different needs and for different people**

Sleep inducing techniques can be divided into five main categories:

- Mental relaxation techniques
- Mental and bodily techniques
- Bodily relaxation techniques
- Worry techniques
- Techniques dealing with intrusive thoughts, flash backs and night mares.

All meditative and relaxation techniques have the advantage of halving the time it takes to fall asleep. This fact has been shown again and again in research. Benefit from these research results by learning at least one technique. Learning relaxation takes time and requires practice, but can be learnt and become an almost immediate response the so called *Relaxation Response*.



Relaxation and meditation have some of the same benefits as sleep, so to some extent they practices give a restorative rest. In a relaxed state there is reduces brain activity, slower brain waves though not quite as much as during sleep. The autonomous nervous system is activated and this nervous system furthers psychic relaxation and release. The body temperature drops (making it easier to fall asleep), muscles relax, the heart rate slows and blood pressure falls.

Use the techniques them to fall asleep in the evening and if you wake up in the middle of the night. Find out which works the best and practice. Practice makes perfect.

Here are some samples of each technique

## **MENTAL RELAXATION TECHNIQUES**

Mental relaxation techniques work because they quiet the mind. The task you do mentally will be monotonous in order to make you sleepy. They also have the benefit of blocking intrusive thoughts or worries from the sleep inducing task you are engaged in. Counting sheep is an old example of this type of technique.

### **Drawing numbers on a black board**

The visually minded can imagine they are writing very big numbers on a black or white board. Write the numbers from 1 to 100 with enormous numbers. Erase every number in reverse fashion of how you wrote the number. Then go on and write and erase the next number.

### **Subtraction and addition**

The more audibly minded can use any counting technique. Try this one: Begin thinking of the number 1000. From this number you will go on subtracting a number as 3 or 7 from this number and go on subtracting 3 or 7 from each new number. If you lose track start all over again. Once you reach zero work your way up again by adding 3 or 7 to each number.

## **MENTAL AND BODILY TECHNIQUES**

### **Morning get out of bed**

This technique has the advantage of focusing on the body, and the benefit is, that it will also bring relaxation to the body. When you want to go to sleep you mentally go over your morning routine in your mind - in slow motion. You will have to focus on body movements and sensations. Think of how you make every single move when waking and of how you make every single move to get out of bed. Go over the process of getting out of bed in as many details as you possibly can and do it as slowly and deliberately as possible.

## **BODILY RELAXATION TECHNIQUES**

Whenever you think the muscles in the head are activated. This fact makes it harder to fall asleep. Begin a muscle relaxation session by focusing on the head, as it will make it harder to think and worry and easier to fall asleep.



### **Yawn**

A good yawn is a sign of being tired. A yawn has a contagious effect and creates a bridge between an awake and a relaxed state. Just reading about yawning may make you want to yawn. When in a state of high tension or high arousal a yawn can be a way of lowering tension. Simply gear down by yawning and sighing. Open your mouth wide, let the jaw hang loose and let the tongue relax. Then move the jaw from side to side, open the mouth even further taking a big breath - and yawn. Letting the yawn be accompanied by a sigh, makes it even more sleep inducing. The yawning technique can be used to get some needed micro pauses during the day.

### **Breathing with the eyes**

Begin by using this simple exercise. It has the benefit of relaxing all the eye muscles that strain when working with a pc. Lie down in a comfortable position and gently close your eyes. Now simply imagine that you are breathing in and out through the eyes. Follow the breath with your attention and whenever the attention on the breath strays gently bring it back to the sensation of breathing in and out through the eyes. You can go on with other techniques such as relaxing the head or counting breaths.

### **Counting breaths**

Lie on the back or side so you feel supported by the mattress. Focus on the breathing, let the mouth be slightly open, and let go of tension in tongue and jaw. Count down on every out breath. Breathe in and on the first out breath count ten. On the next nine and go on down to zero. You will pretty certainly loose track of the counting, and that is just fine. Just return to ten and begin again. This technique is so easy and simple, that children can learn to use it.

### Relax the head

Learn this relaxation exercise where you focus on relaxing the entire head first to slow down any mind activity.

- Relax the muscles of the crown of the head by imagining that there is more space between each straw of hair on the top of your head, down the back and to the sides of the scalp.
- Let the forehead be high and relaxed so the eyebrows glide longer apart.
- Feel there's space between the skin of you forehead and the bones of your forehead.
- Let the eyes sink back into the caves. Relax the muscles around the eyes and behind the eyes.
- Let the cheeks relax – they are without any expression.
- There is space between the cheeks and the cheek bones.
- Relax your ears, their insides and relax the area around the ears.
- Relax the jaws by releasing the mouth. The lips are just touching, there's a distance between the rows of teeth and the tongue is lying in the mouth like a boat. The tip of the tongue touches the inside of your teeth.
- If there is a somewhat compact feeling inside the head imagine it dissolving like a tablet dissolving in water.
- Go back and repeat the head relaxation exercise or go on to relax the entire body beginning with the neck, shoulders .....and work your way down to the toes and fingertips.

## WORRY TECHNIQUES

For many the secret behind a good nights sleep is not having a good conscience, but the art of not caring about your conscience when you need sleep. As mentioned earlier, the deep sleep in the beginning of the night is necessary and therefore you must learn to put worries aside.

### Find a time to worry

If you have a lot on your plate and on your mind, you can set a time aside for worrying before going to bed. Decide you won't worry while in bed. Use the say NO technique – see later on – when worries come to you in bed. Prevent this by worrying immensely before bedtime. Take a piece of paper and divide into three columns. In the first column you write a list of all worries. Brainstorm on possible solutions to each worry and note these in the second column. In the third you write a timeframe for when the worry can be attended to or solved.



**Done**  
Mange skriver en -to-do-liste over morgendagens opgaver. Listen kan fremkalde mange tanker om alt det, man skal nå dagen efter, så det bliver svært at give slip tankemæssigt og muskulært. Er det tilfældet, skal man sørge for at skrive sin -to-do-liste, inden man går fra arbejde eller mindst et par timer før sengetid.  
• Når det er tid at lægge sig, skriver man i stedet en -done-liste over alt, man har fået fra hånden i løbet af dagen.  
• Lad en fornemmelse af tilfredshed brede sig i kroppen over alt, der er nået.

### Place your to do list in the drawer

Another useful technique is to write a list of worries or a to do list before going to bed. Put the list in a drawer outside the bedroom, and go and pick it up in the morning. The list will still be there, but you cannot solve problems by worrying about them at night. It is highly inefficient and it is much better to sleep as in sleep solutions will often come because we gain access to the intuitive wisdom during sleep.

## **TECHNIQUES DEALING WITH INTRUSIVE THOUGHTS, FLASH BACKS AND NIGHT MARES.**

You can only do one thing at a time techniques are very efficient as one cannot focus mentally on several things at once, though a stressed person will often experience he or she can!

### **Change the channel**

When a disturbing thought comes to the mind, simply imagine that you are a TV set. Change the channel and simply go to another channel of your choosing. Do this over and over until the intrusive thought stays away.

### **Grey and further away**

Another technique for dealing with flash backs and recurrent images from night mares, are to diminish their impact by:

Making the images appear in black and white or greyish colours in stead of in vivid colours

Placing the image farther away – and then even further away till the image disappears

### **Sleep well and lie well**

A tense body at day time will also be tense at night. People who work bent over a pc will have a tendency to be rounded in the upper body. Stretch before bedtime and/or be aware not to curl up but lie down in a neutral position. Make a bodily inventory lying down of how the limbs are organised. If possible sleep on the side to avoid problems in muscles, nerves and limbs and remember that sleeping on the back increases snoring.

Finally a word on how to position the body when lying in bed. Lie down on the side with the arms in at shoulder level. Relax your hands. Use a pillow that suits your body shape, so the neck is aligned with the spine. Let the pillow support the head and neck. Tuck the corners of the pillow out in front to the sides of your head in stead of being under the shoulders as this will give you bad posture and inhibit breathing.

### **And have fun!**

Having fun is an effective stress buster. So have some fun in the bed room as well as in every day life.

PS: Did you know that the saying sleep tight comes from the 16 th century where beds were made of a wooden frame with ropes, that needed tightening from time to time?



Photos by Lisbeth Holten from the book  
Sov Godt.