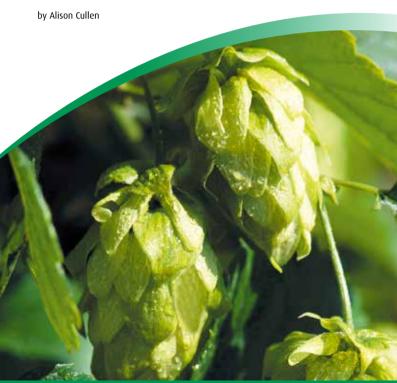
Sleeping Poorly?

Advice to promote healthy sleep



How to Use Herbal Remedies Safely

This guidebook is not intended to replace medical advice. You should consult a healthcare professional if you have any condition which is of concern. For safe, effective results when taking herbal remedies, follow the guidelines below.

If the product you have has an in-pack leaflet then you should follow the instructions and advice on the leaflet and product packaging.

If the product does not come with an in-pack leaflet then you should follow the instructions and advice on the product packaging. The following general advice also applies to products with no in-pack leaflet.

- If there is any doubt as to the nature of the problem please consult your doctor for a diagnosis.
- Do not use when pregnant or breastfeeding unless under the supervision of a healthcare professional.
- Do not use for children under 2 years of age unless under the supervision of a healthcare professional.
- Do not exceed stated doses.
- Do not use alongside medication with the same action eg. a tranquillizing herb alongside tranquillizing medication.
- Do not take more than 3 herbal remedies concurrently.
- Stop taking herbal remedies 14 days before surgery.



Get Some Sleep

Overweight? Forgetful? High blood pressure? High cholesterol? Low immune function?

Try sleeping on it, because sleep can be part of the solution to all of these issues.

We are so familiar with sleep, fighting it off when we're younger and then struggling to make do with less of it as adults. Only recently has science started to prove how much it does for us and just how badly not having enough of it affects us.

The role of sleep

Humans have evolved to sleep during the hours of darkness, using that time to restore themselves physically and mentally. Tissues are repaired, organs rest or clear out toxins, and the brain filters and files the events of the day for reference. This enables us to wake feeling rested and ready to fling ourselves into another day.

Humans never adjust to working during the night and sleeping during the day, even if they do it for years. There are health problems attendant on shift working that we can't overcome. Students regularly pulling all-nighters socialising or studying might also take note!



- Shift work is associated with a 9% increased risk of developing diabetes¹
- Brain function is negatively affected by shift work ²
- Shift work adversely affects digestion ³

If we miss out on sufficient sleep a multitude of problems show up.

- Poor concentration
- · Memory lapses
- Irritability and fatigue
- Painful muscles and joints
- Dull skin and lacklustre eyes

Longer term the problems can expand to include poor immune function, weight imbalance, worsening cholesterol and blood sugar levels, higher blood pressure, and a general feeling of being less competent. Your body will be dealing with more toxins, facing more repair work, being overwhelmed by more information – everything starts functioning less efficiently.

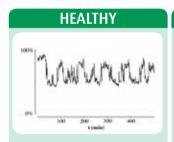
You need sufficient time in Stages 4 and 5 of your sleep cycle in order to regenerate sufficiently to be fully functional the next day. In Stage 4 your body is doing repairs and restoration work. Body tissues are mending, organs are offloading, and growth or regeneration work is taking place. This is one of the reasons why teenagers need such a lot of sleep – they are growing physically, and at the same time developing their sexual organs: it's tough work! So long as they can get sufficient good quality sleep, however, they can do the physical side of development without too much trouble. Emotionally they benefit from plenty of sleep too, as Stage 5 allows them to sort out their experiences efficiently.

Is your sleep junk?

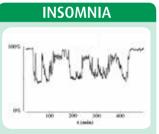
'Junk sleep' is a term coined by The Sleep Council, a British organisation that investigates sleep and aims to help people improve their chances of a solid bit of kip. Junk sleep is sleep that is neither long enough nor of good enough quality to restore the brain to the level needed to perform well the next day.

Stage 5 is also known as Rapid Eye Movement sleep, when you dream and your brain is typically as active as during wakefulness, with your blood flow and breathing speeding up from their Stage 4 levels of somnolence. Mental and emotional issues are dealt with during this time, allowing you to sort out the day's experiences and potentially come up with answers to problems.

When you don't sleep well you tend not to get sufficient (if any) Stages 4 and 5, and this leaves you feeling as if your time in bed just rumpled the sheets without benefiting you at all.



A healthy night's sleep pattern – note how much of the time is spent in the lower half of the peaks and troughs, where the restorative work is going on.



An unhealthy night spent bobbing around in the initial stages of sleep rather than sinking peacefully into Stages 4 and 5 for sufficient lengths of time.

Getting a good night's sleep therefore influences the quality of our waking life quite dramatically. What can we do to ensure that we get it?

(Don't) Light Up the Night



As we approach night time, more of the sleep hormone melatonin is secreted by the pineal gland, helping us to become sleepy. This period is usually around 16 hours after waking. **Melatonin is produced in response to fading light levels**. If your environment is full of bright artificial light, your melatonin may not be produced effectively. Your internal biological clock pays particular attention to light at the blue end of the spectrum, such as that produced by energy efficient light bulbs, smartphones, tablets and computers. Having plenty of electronic gadgetry in your bedroom is therefore a perfect way of disrupting your body clock. Removing short wave length blue light from your immediate surroundings as you wind down for bed will reduce the risk of resetting your circadian rhythm by postponing the release of melatonin.

Keep your gadgets for the morning and your bed free from technology.

Snack Your Way to Sleep

Eating food that is high in saturated fat and sugar and low in fibre is associated with sleep that is lighter, less restorative and more disrupted.⁴ In research, increasing fibre intake improved the amount of time spent in deep, slow wave sleep. Less of this slow wave sleep was experienced when eating more saturated fat. The more sugar participants ate, the

more arousals from sleep they underwent. Adjusting your diet could therefore count towards achieving some better quality sleep. As these adjustments are associated with other health benefits such as weight loss (which then reduces the chances of snoring), it's a winning strategy.

Other aspects of your diet to consider are more organisational: don't eat a heavy meal late at night, but keep your evening meal light and early for a better sleep later on.

Plan your meals for a healthy sleep.

Sleep (Not Too) Sweetly

There are more benefits to sleeping well if you tend to like your sweet foods, and may be leaning towards the pre-diabetic spectrum.

A small study showed that lean people with normal glucose tolerance habitually getting less than six hours sleep per night, had increased insulin secretion and a higher index of insulin resistance, a combination that put them at higher risk of developing diabetes. Lean people with normal glucose tolerance who habitually slept more than six hours per night did not show the same insulin profile.⁵

If you are at risk of developing diabetes, then missing out on sleep may increase the likelihood.



Snooze, don't Booze

A nightcap can be perceived as helping to get you to sleep initially, but as it wears off it has a stimulating effect, often around 3am. It can then prove difficult to get back to sleep. Allow a four to six hour window between alcoholic drinks and bedtime for better sleep.

Whilst you're at it, check over your caffeine intake. It's best not to have any after midday if you are having trouble sleeping, and some people find that they have to cut it out completely to improve their sleeping patterns. Replacing black tea with green during the day can be helpful, as green tea can be quite calming. Remember that caffeine is also found in fizzy drinks, energy drinks, and chocolate.

Adjust your drinking habits to pin down more sleep.

Plan for Success

One of the best techniques for better sleep is a good wind down routine, for adults just as for young children. Stop watching television or playing electronic games or using your laptop at least an hour before your bedtime. Have a warming bath and read or listen to a relaxation CD. Plan out tomorrow's agenda so that you don't have to think about it anymore tonight. Have your room cool rather than hot, as it's easier to stay asleep if you don't overheat.

Wind down to recharge efficiently.

Speed up with sleep

Being fatigued can impair the speed and accuracy of psychomotor performance just as much as high blood alcohol levels. Research has shown that measures of performance speed were always impaired by both lack of sleep and high blood alcohol.⁶



Don't be Alarmed

Consider sleep architecture when setting your alarm clock. Our sleep cycles last around 90 minutes. Aim to wake up in between these cycles rather than in the middle of one, by setting your alarm for multiples of 90, e.g. if you usually go to sleep at 10 pm, set your alarm for 6.30 am rather than 6 am or 7 am. Waking at the end of a sleep cycle instead of being dragged out of the middle of one is a far pleasanter experience, and sets you up for a better morning.

Do the maths for a marvellous morning

Sleep Smart

Students revising for exams should consider sleep as an integral part of their revision programme, as cutting back on sleep during exams may reduce performance by up to 40%.

Herbal Help

Whilst many people don't respond well to sleep medication, or wish to avoid it, there is a long history of using herbal remedies to help with sleep problems.

One of the issues with sleep is that not going through the proper 'sleep cycle', involving all the sleep stages in the right amount, can leave you feeling just as bad as if you didn't sleep at all. This can be some people's experience with medication, which tends to knock you out rather than ease you into a fully 'staged' and restorative cycle. Herbal remedies are often able to restore the correct 'cycling' that ensures you wake refreshed, even if you are not sleeping for hours longer.

A trial of a fresh extract of Valerian and Hops demonstrates exactly this point, as much better sleep cycles were seen in the herbal group in comparison to the placebo group.⁷

In this trial, carried out in a sleep laboratory, patients spent one night acclimatising and having their sleep (or lack of sleep...) pattern monitored. They were all experiencing difficulty initiating or maintaining sleep, despite being otherwise healthy, and the problem wasn't being caused by obvious issues such as back problems or depression.

On the second night they were divided into two randomly assigned groups, one of which was given a combination of Valerian and Hops fresh extracts and the other a placebo that tasted the same. The second night's sleep was then monitored and compared to the initial night.

Patients who took the herbal combination had far better sleep cycles than those on the placebo, with more time spent at a deeper level of sleep.

It's therefore worth considering the power of herbs if you need something to help rebalance your sleep pattern. Valerian and Hops are not known to be habit forming, and don't leave you feeling groggy in the morning. They are not associated with withdrawal effects and are not contraindicated with anything except sleeping medication (as it doesn't make sense to take herbal remedies on top of drugs for the same indication). One aspect of using these herbs that many people find encouraging is that they work very quickly, often bringing improvements with the first time of use, as in the trial above.

Let's consider some specific situations

Is this you?

After a long day fighting through endless tasks at work, you return to endless stacks of family duties at home. You stay up until everyone else is in bed so that you can finally have some hush, and potter about on your own without anyone making demands on you. Your bedtime is therefore pretty late!

What's the problem?

It is best to sleep through the hours between 11pm and 2-3am if possible. Pushing your bedtime back will reduce the effectiveness of your sleep, even if you stay in bed to make up on hours in the morning. You may 'manage' on this sleep quota, but it will gradually catch up with you – you'll feel physically drained; emotionally less stable; and mentally less focused, with an increased tendency to experience aches and pains.

Try this

Start nudging everyone else's bedtimes back so that you are free sooner. Fence off half an hour earlier on in the evening for your 'time out'. Shut yourself in the bathroom or allocate tasks to everyone else whilst you retire to the bedroom to recharge. Make a pact with yourself that you'll be asleep by 11pm for a week. When you realise how much better you feel, you'll be motivated to keep to the new schedule.

Painless Sleep

Disturbances of sleep cause or affect acute and chronic pain.8

Scientists aren't yet sure whether the increased sensitivity to pain is due to the deprivation of specific sleep stages or whether it results from a generalised disruption of sleep continuity.



Is this you?

You retire to bed early, you fall asleep as soon as your head hits the pillow, but your chances of staying that way are zero because your child (and/or pet cat/dog) wakes you up several times a night.

What's the problem?

Constant interruptions programme you to expect them, so you start sleeping more lightly, with one ear open, preventing you from reaching the deeper, more restorative stages of sleep.

Try this

If it's a pet, firmly place it out of earshot of the bedroom at night. Animal Separation Essence will help it settle down to the new regime. If it's a child, Night Essence or Child Essence may help to soothe them into a better sleep pattern themselves, so that they stop interrupting yours. Avoid giving them chocolate, anything sugary, or fizzy drinks containing caffeine in the evening.

Hearty Sleep

Patients with resistant hypertension (high blood pressure that doesn't come down even when on as many as three different medications for it) have been found to sleep less than those with controlled hypertension and those with normal blood pressure.⁹

Is this you?

You have your main meal in the evening, often tucking into snacks later on as well, going to bed on a full stomach. You sleep erratically and often wake up feeling very hot or even sweating.

What's the problem?

Your digestive system struggles to work its way effectively through a large quantity of food whilst your body is also trying to implement rest and restoration processes. Neither gets the full treatment and you end up tired, windy, and with an unsettled stomach.

Try this

Firmly move your mealtime to allow at least 2 (preferably 3) hours between the end of eating and the start of sleeping. Ban snacks during the evening – if you are bored then occupy your hands with something creative such as colouring or suduko rather than sweeties. You'll sleep more deeply and effectively without a digestive load on your body. Night time sweating is less likely if your body is not trying to metabolise high energy foods (e.g. sugar) without being able to burn them through physical exercise. Use Digestisan tincture before your evening meal if you have digestive problems.

Slimming Sleep

Poor sleeping habits can drive people towards excessive snacking.¹⁰ Volunteers whose sleep was restricted were found to increase their snacking rate, especially after 7pm. Calorie intake also increased, as the sleep deprived volunteers were more likely to choose high carbohydrate foods.

What's more, after a night of only 4 hours sleep, calorie intake can rise by up to 22%.¹¹ Interactions between the nervous system and hormonal output appear to promote increased appetite, enhanced sensitivity to food stimuli, and, ultimately, a surplus in energy intake when you lose out on sleep.¹² All in all, snoozing instead of snacking would seem to be the order of the day (and night) if you want to slim down.

Is this you?

You need a glass of wine (or two), or an espresso, or a bar of chocolate (or two...) in the evening to reward you for getting through the stresses of the day. After all, alcohol helps you sleep, doesn't it?

What's the problem?

Sorry but that's a myth! You may fall asleep readily but your body will labour to obtain restorative sleep after using alcohol or recreational drugs. You'll therefore wake up tired and find it harder to get through the day, resulting in a greater urge for alcohol/treat of choice in the evening... You may also wake up with an aching lower back, due to your kidneys feeling dehydrated.

Try this

10 minutes of brisk exercise (e.g. walking round the block, using a mini stepper, jumping on a mini rebounder, skipping with a rope, dancing to your favourite tunes) may not be what you feel like when you get in, but will help you wind down and burn off the adrenalin from the day far more effectively than alcohol, caffeine or chocolate. Take a herbal remedy before bed instead, and be amazed at how easily you get to sleep and how much more refreshed you feel in the morning, having given your body the means to do its restorative work in the night.

Strengthening Sleep

Poor sleep quality and shorter sleep duration make people less resistant to colds, according to research done on healthy men and women. Those getting less than 7 hours sleep per night are more likely to develop a cold than those getting 8 hours or more.¹³

Is this you?

You're glued to your gadgets all evening and find it hard to put them down to get to bed. Once in bed you can't switch off.

What's the problem?

Whether it's games on an Xbox, friends on Facebook, or shopping on your phone, your adrenalin levels are raised by this activity and your body is primed for action rather than ready to fall into peaceful sleep. Also, the blue light emitted from electronic gadgets interferes with the sleep process – having your phone by your bed as an alarm clock may keep you from a good, refreshing sleep.

Try this

Make a pact with yourself that you'll be in bed without any electronic company by a certain time each evening. Promise yourself a treat at the end of the week as compensation. Then see how much better you feel for the improved sleep you get during that week. Allow yourself half an hour between switching off the gadgets and getting into bed, to give your

mind time to move into sleep mode. Try a daylight alarm clock, which simulates light slowly leaving the room for about 20 minutes before sleep and filters it gradually back in before you wake up – a very low stress way to enter the day, as you wake up naturally. Use a herbal remedy before bed to give you a head start on better sleeping patterns.

Successful Sleep

Scientists have confirmed that the productive and creative work done by the brain during sleep is only available during REM sleep. Non-REM sleep and quiet thinking time just don't produce the same effects. They think that REM sleep allows the brain to form new connections without the interference of other thought pathways that occur when we are awake or in non-dreamstate sleep. New information is assimilated into existing experiences, creating rich deposits of associations for future use. Sleeping poorly often involves missing out on this stage of sleep and all the benefits it brings in problem solving for the next day.¹⁴

Is this you?

You are taking sleep medication, which puts you to sleep without any trouble but leaves you feeling unrefreshed and groggy the next morning, despite having slept.

What's the problem?

The dream stage of sleep – REM sleep – is very important for filtering the day's events and ensuring emotional stability. Sleep medication puts you into deep sleep and leaves you there, missing out on the REM stage. The ongoing effect can be mood swings and emotional sensitivity.

Try this

Talk to your doctor about changing over to a natural sleep remedy, whilst looking at the reasons for your initial turn to the medication. Working on those issues whilst taking a natural remedy may help you to move away from the medication and get dream sleep back into your night.

Today's busy society has made sleep a luxury, when actually it's a vital part of maintaining health and sanity. The health consequences of living against the clock are clear, so have no qualms about prioritising the place of sleep in your life.

A good laugh and a long sleep are the best cures in the doctor's book

Irish Proverb

References

- 1 Zuxun Lu, et al., Occup Environ Med, doi: 10.1136/oemed2014102150, published online 24 July 2014
- 2 JC Marquié, et al., Occup Environ Med, doi: 10.1136/oemed 2013101993, published online 3 November 2014
- 3 Robin M. Voigt, et al., PLOS ONE, doi: 10.1371/journal.pone.0097500, published online 21 May 2014
- 4 Stonge MP, Roberts A, Shechter A, Choudhury AR. J Clin Sleep Med 2016; 12 (1): 19–24
- 5 Darukhanavala A et al. Diabetes Care 2011; 34: 225964
- 6 Maruff P et al. Journal of Sleep Research 2005; 14 (1): 2127
- 7 Dimpfel W, Suter A. Eur J Med Res. 2008; 13(5): 2004
- 8 Lautenbacher S et al. Sleep Med Rev 2006; 10 (5): 35769
- 9 Friedman 0 et al. American Journal of Hypertension 2010; 23 (2): 174–179
- 10 Nedeltcheva AV et al. Am J of Clin Nut 2009; 89: 126133
- 11 Bronel L et al. Am J Clin Nutr 2010 doi10.3945/ajcn.2009.28523
- 12 Schmid SM et al. The Lancet Diabetes and Endocrinology 2014 doi:10.1016/S22138587(14)700129
- 13 Cohen S et al. Archives of Int Med 2009; 169 (1): 6267
- 14 Cai DJ et al. Proc Natl Acad Sci USA 2009; 106(25): 10130–10134

"Sleep: The Remedy We Cannot Do Without"

Alfred Vogel

Want to lose some weight, feel more competent, tackle your cholesterol levels, lower your blood pressure, and strengthen your immune system? Research is increasingly uncovering the reasons why Alfred Vogel's comment on sleep was so accurate.

All these areas of health, and many others, are affected by sleep. Improving our sleep is therefore one of the simplest ways of boosting our overall wellbeing, as well as tackling specific health issues.

