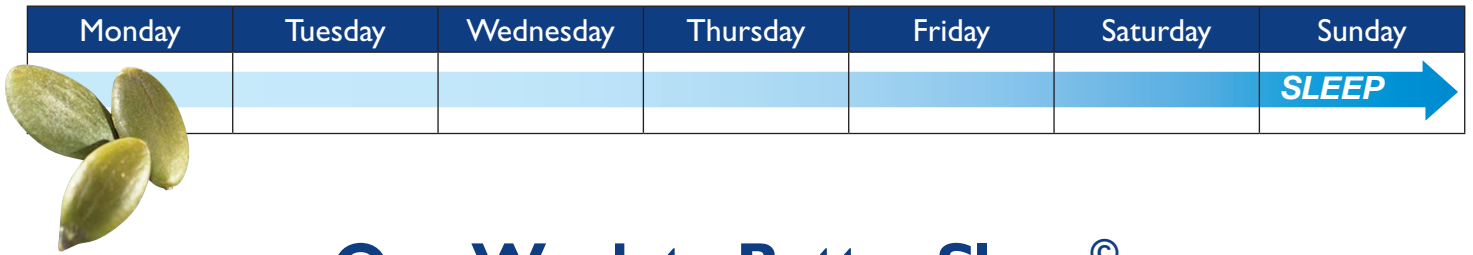


One Week to Better Sleep[®]

A Practical Guide to Overcoming Insomnia

Dr. Craig J. Hudson
and
Susan Hudson

©2011 Craig & Susan Hudson



One Week to Better Sleep[®]

About this Program

One Week to Better Sleep is a quick resource guide to assist you in working toward naturally improved and sustained sleep patterns. It combines the most recent and rigorous science with years of clinical experience and aims to provide a holistic approach to dealing with insomnia. Complex factors contributing to insomnia are teased apart to reveal ways in which subtle changes to behaviour, environment and diet have been proven to have a huge impact on improved sleep and restfulness. Try it for a week, regain control of your sleep problem and incorporate the lessons learned into your daily routine for a refreshed and revitalized way of living.

About the Authors

Dr. Hudson is a practicing psychiatrist with an extensive background in brain research. He is a graduate of the University of Waterloo and the University of Toronto. Throughout his career, Dr. Hudson has maintained a balance between research and clinical work. His current research focuses on natural health solutions to common psychiatric disorders, particularly natural source tryptophan and essential fatty acids. Dr. Hudson is not anti-medication but likes to include natural health solutions in the treatment of his patients when clinically indicated. He has published extensively in a variety of medical journals including Archives of General Psychiatry, British Journal of Psychiatry, Canadian Journal of Physiology and Pharmacology and Nutritional Neuroscience.

Susan Hudson, a trained social worker, helped establish Biosential in 1999 with Dr. Hudson to promote research and practical solutions to common neurological conditions such as sleep disturbance. The original program found in their book, *Feel Great Day & Night* published in 2007 and developed with the most advanced psychological and clinical sleep data available, has helped countless people take control of their sleep problems and achieve better quality and duration of sleep.

"In following Dr. Hudson's advice I am happy to return to a pattern of being able to function normally throughout the day as the result of a restful night of natural sleep. Thank you for your good advice."

Lawrence C., Ontario, Canada

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						SLEEP →



One Week to Better Sleep Program[©]

If you are reading this then it is likely that you are not the type to want to take medication to treat your sleep problem. Or, maybe you've tried that and found that the drawbacks of tolerance and dependence outweigh the benefits. You can train your brain to sleep better. While it may not happen overnight, if you stick with a few simple rules and practices, the results will be more beneficial and longer lasting than any alternative.

Treat it like a little experiment. Give yourself one week to make some changes and record some data. Reserve judgement until you have completed the recommendations fully and evaluate the results. It is really very simple. The expectation is that sleep will improve measurably after one week of minor changes to environment, behaviour and diet.

What you will Need

1. BED Checklist

– **BED** [Behaviour/Environment/Diet] **Checklist**[®] – see page 5

2. Sleep Diary

– **Sleep Diary** – see page 6

3. Sleep Efficiency

– **Sleep Efficiency** calculation – see page 7

How it Works

Read the **BED Checklist**[®] provided and make preparations for the first night. This involves adjusting the sleep environment, altering some dietary habits and gaining an understanding of basic sleep rules also known as 'sleep hygiene'. You don't have to change everything right away. Start with what's manageable and work the rest of the week on improving your sleep environment, and altering some of your behaviour and diet.

Print out one copy of the **Sleep Diary** and keep by the bedside with a pen/pencil to make recordings first thing in the morning. Note: do not attempt to make recordings in the middle of the night. Use your best guess upon getting out of bed.

Calculate your **Sleep Efficiency** each morning. Your goal is to be in bed only when you are asleep with just a few minutes extra on either side. If you wake and can't get to sleep, get out of bed and sit in a chair in the dark (not in front of a TV, computer or even a book). Get back into bed only when you are sleepy again. Repeat this as many times as necessary. One of the most important changes you can make to improve your sleep is to associate your bed with sleep and to disassociate it with lying awake. Improved **Sleep Efficiency** does just that. It may seem a little counter-intuitive to get out of bed but clinical sleep studies have demonstrated over and over again that good **Sleep Efficiency** is one of the most powerful determinants of improved sleep.

Goals

Work each day to put into practice the changes in the **BED Checklist**. Try to make your **BED** score increase as you move through the week.

Keep track each morning of your sleep patterns from the night before in your **Sleep Diary**. Remember to use your best estimation, but do so when it is fresh in your mind.

Calculate your **Sleep Efficiency** aiming to only be in bed while asleep and out of bed when awake.

BED Checklist Explained

The BED Checklist is a measure of your ability to construct your wake time in such a way that healthy sleep is available when you need it. It does not presume that you can fall asleep wherever and whenever you dictate. Good habits need to be developed and reinforced to ensure that many different aspects of your life are conducive to falling and staying asleep.

The BED Checklist breaks this down into three parts: **Behaviour – Environment - Diet.**

Changing your Behaviour:

- **Maintain a Regular Sleep-Wake Time.** Go to bed at the same time and wake up at the same time. Try not to lie in or stay up too late. Conversely, if you had a bad night last night, don't get into bed at 8 pm thinking you will catch up. It doesn't work that way.
- **Do Not Nap during the Day.** Yes you are tired but napping during the day to 'catch up' only serves to steal deeper sleep you will need for the night. Resist the temptation.
- **Do Not Exercise before Bed.** Exercise is really important for healthy living and healthy sleeping. Just don't do it in the evening before bed. It will energize you and activate when you need to be reducing stimulation.
- **Plan a Relaxation Period Before Bed.** Give yourself at least 20 minutes of down time before bed. De-activate your mind, listen to soft music, curl up on a couch, flip through a magazine. It is very important to create a division between the stress of your day and your sleep time. Television or reading may provide this for some people but if you have insomnia, these may even be too stimulating.
- **Do Not Go to Bed Until Tired.** Your relaxation time should trigger sleepiness. Wait until you feel sleepy before heading off to bed. It does more harm, as you will see, to be spending a lot of time awake in bed.
- **Do Not Watch the Clock.** Make sure your alarm is working and then turn the clock to the wall or cover it with something. Looking at the clock and counting your awakenings makes you more vigilant and anxious. The extra light coming from a digital display will also affect melatonin production.
- **Use the Bed for Sleep Alone.** With the obvious exception of sex, refrain from any other activity in bed. The bedroom area should be an oasis of sleep and you must come to associate the bed as a place for sleep, not activity and wakefulness.
- **If You Wake in the Middle of the Night Get Out of Bed.** Tossing and turning leads to associating your bed with being awake and frustrated. Changing your behaviour can help train your brain for sleepiness if you come to associate the bed with sleeping. Associate wakefulness with a chair that you place by your bed and sit in it when you are awake.
- **Get back into Bed When You Feel Sleepy Again.** Don't fall asleep in that chair! As soon as you start to feel sleepy again, climb back into bed. It is most important that you reinforce to your brain that when you are lying in your bed, you are ready for sleep.

Changing your Environment:

- **Block the Light out of the Bedroom.** Natural sleep results from the brain producing natural melatonin. This process is hampered by the presence of light. You need as much melatonin as you are able to produce so keeping the room as dark as possible will help you sleep. Buy black-out blinds, curtains or wear a good sleep mask.
- **Block any Noise.** Similarly, if you are distracted by noises in your environment, wear earplugs to reduce extra stimulation.
- **Keep a Regular Temperature.** Your body temperature will fluctuate at night. Keep your room a cool 21°C so that you are not disturbed by these changes.
- **Remove any Physical Distractions.** A television, computer or other devices draw your attention away from the bedroom task which is sleep. These devices pull your concentration to worries and focuses that are better left to daytime when you may attend to them properly. Physically and mentally, you must make a division between your day and night activity.

BED Checklist Explained

Changing your Diet:

- **Do Not Use Alcohol as a Sleep Aid.** Many people believe that alcohol helps with sleep. While it does cause some people to feel sleepy, it actually serves to cause more night time wakefulness. Alcohol fractures sleep and interrupts the normal flow of sleep stages. Highly counter-productive.
- **Watch Caffeine Intake.** If you are serious about your sleep problem, do not indulge in caffeinated beverages or foods after noon. That goes for tea, coffee, colas, energy drinks and chocolate. There are hidden sources of caffeine as well. Some clear sodas contain caffeine so read the label. Think twice about a bedtime snack of mocha flavoured ice cream...guess what?
- **Avoid Protein 3 hours Before Bed.** Natural melatonin production, necessary for healthy sleep, results from sufficient intake of high tryptophan foods such as milk, dairy, turkey, meats, nuts, eggs, legumes, pumpkin and sesame seeds. These are better consumed earlier in the day so that the available tryptophan in your system is not overpowered by the other amino acids.
- **Increase Carbohydrates Before Bed.** Uptake of available tryptophan in your system is greatly enhanced by the presence of certain carbohydrates. Carbs naturally act to shunt the tryptophan you took in earlier in the day to the right place in your brain responsible for turning it into natural melatonin. Examples of High Glycemic Carbohydrates are; white or grain bread, cereals, crackers, rice, couscous, pasta, biscuits (avoid chocolate), potatoes, carrots.

Menu Suggestions:

Breakfast

bacon & egg
steak & eggs
smoked salmon & cream
cheese on 5-grain bagel
cheese omelet
yoghurt and oatmeal

Lunch

baked beans
Quiche
tuna on whole grain bread
cottage cheese with fruit
lentil soup with ham sandwich
chicken Caesar salad

Dinner

baked potato (without butter)
and vegetables
pasta with primavera sauce (no cheese)
grilled vegetable sandwich
vegetarian thin crust pizza
vegetable stir fry with rice
whole grain bread with fruit salad
waffles
bowl of breakfast cereal

Bedtime snack

slice of cake
cookies
muffin
pretzels
orange juice
honey or jam on toast

Why the dietary changes? Depending on the food you eat, you may be robbing yourself of valuable nutrients crucial to the natural metabolism of melatonin. Melatonin production by your brain is the way you achieve a natural sleep. If you do not have the dietary precursors to ensure melatonin production you will have a difficult time sleeping. Proteins contain tryptophan which is an essential amino acid our bodies need to get from food to fuel melatonin production at night. The difficulty is, however, that proteins also carry other large amino acids that compete with, and usually overpower, tryptophan for access to the brain where melatonin is made. This is where the carbohydrate comes in. In the presence of the right kind of carbohydrate tryptophan will be readily absorbed and become available for natural melatonin production. The ideal nutritional balance was often achieved in days of old when people ate larger meals earlier in the day and lighter 'teas' at day's end. These dietary changes right that balance again. In this way, the tryptophan in your system from earlier protein meals can be picked up by the later consumed carbohydrates at bedtime without introducing extra protein competition. This provides all the ingredients you need to manufacture natural melatonin at the time you need it.

A word about **Zenbev Drink Mix.** Zenbev is a powdered beverage mix that combines a food high in tryptophan-rich protein with a high-glycemic carbohydrate. The science behind this Sleep Program has been synthesized into an all natural, easy-to-take, product you can mix with the beverage of your choice before bed. Zenbev is all natural, made of organic food ingredients designed to work within brain chemistry. Eat what you like during the day but take a scoop or two of Zenbev in a soothing warm beverage before bed to maximize your melatonin production naturally and deliciously.

BED Checklist

There is more to good sleep than closing your eyes. Review the following behavioural, environmental and dietary changes you can make during the day to set the foundations for a better sleep at night.

Behavioural:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1. I maintained a regular sleep/wake time (i.e. Did not sleep in or stay up late)							
2. I did not nap during the day							
3. I exercised early in the day, not before bed							
4. I planned 'relaxation time' 1 hour before bed							
5. I waited until I was fatigued before going to bed							
6. I turned my bedside clock to the wall							
7. I used the bed for sleep alone							
8. After waking too early I got out of bed if I was not asleep again in 15 minutes							
9. But I went back to bed when tired again							

Environment:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
10. I have blocked out all light from my bedroom							
11. I have reduced noise distraction							
12. My room is a comfortable temperature							
13. I have removed the television, the computer and other distractions from my bedroom.							

Dietary:

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
14. I have not used alcohol as a sleep aid							
15. I have avoided caffeinated beverages since noon							
16. I have avoided protein 3 hours before bedtime (i.e. steak, peanut butter, eggs)							
17. I have increased my carbohydrate intake 3 hours before bedtime (i.e. biscuit, toast, potato)							

My BED Score:

--	--	--	--	--	--	--	--

Place a check mark in the box for each BED item you have successfully observed. If you have not been able to complete an item, leave it blank.

At the end of each day add up the number of checks and place your score in the *My BED Scores* box above.

Sleep Diary

To be completed in the morning. When you get up for the day write down your best guess for each section. Do not attempt to complete this form in the middle of the night.

Complete Each Morning upon Waking	Example	Night 1	Night 2	Night 3	Night 4	Night 5	Night 6	Night 7
1. Yesterday, I napped from ___ to ___ Note the times of ALL naps; aim to reduce	1:50 to 2:30							
2. My night sleep was interrupted ___ times Specify number of awakenings	2							
3. My sleep was interrupted for ___ Minutes Specify duration of each awakening	10 45							
4. This morning, I woke up at ___ o'clock Note time of last awakening	6:15							
5. This morning, I got out of bed at ___ o'clock Specify the time	6:40							
6. My Sleep Efficiency was ___ Time Asleep ÷ Time in Bed x 100	66%							
7. My BED Score was ___	8							
8. When I got up this morning I felt ___ 1 = Exhausted 2 = Fair 3 = Refreshed	2							
9. Overall, my sleep last night was ___ 1 = Restless 2 = Fair 3 = Sound	2							

Sleep Efficiency

The most important parameter in improving your subjective experience of sleep is increasing your **Sleep Efficiency**. Sleep efficiency is a measure of how well you are sleeping within a reasonable amount of time. Simply put, sleep efficiency is the total time asleep divided by the total time in bed:

$$\text{Sleep Efficiency} = \frac{\text{Total Time Asleep}}{\text{Total Time in Bed}} \times 100$$

To calculate your Sleep Efficiency you must keep track of the time you went to bed and got out of bed, as well as the time you fell asleep and the time you woke up. Just bear in mind that you are always working in minutes. Take the total hours for each variable and multiply by 60 (minutes in an hour) to get your number. Then divide *minutes asleep* by *minutes in bed*. Multiplying that number by 100 gives you a percentage point which is your Sleep Efficiency. Ideally you are seeking 100% Sleep Efficiency but if you can achieve at least 70% then you are well on your way to improved sleep.

Here is an **Example** to help with your calculations:

If you went to bed at 11 pm and got out of bed at 6 am, your total time in bed would be 7 hours or 420 minutes. (7 hours \times 60 minutes = 420)

Total Time in Bed would be 420 minutes.

Of that time you estimated that you fell asleep at 11:30pm and woke at 5:30 am.

Your total time asleep would be 6 hours or 360 minutes. (6 hours \times 60 minutes = 360).

Total Time Asleep would be 360 minutes.

Your Sleep Efficiency would = $\frac{360}{420} \times 100 = 86\%$

Time awake in the middle of the night needs to be accounted for. If you estimate that you were up for 2 solid hours in the middle of the night while lying in bed, deduct 120 from the Total Time Asleep.

The calculation then changes to:

$$\frac{240}{420} \times 100 = 57\%$$

If you got out of bed for those 2 hours they would be deducted from your Total Time in Bed calculation making your Sleep Efficiency score higher which is the goal of this exercise.

Your Calculations Here:

Results

Add up your Sleep Diary scores at the end of the week. How did you fare?

	Need More Work	Getting There	On your Way to Better Sleep
My BED Score	0-5	6-10	11+
My Sleep Efficiency	<40%	40-60%	60%+
My Overall Sleep	7-10 (Restless)	11-16 (Fair)	17-21 (Sound)

After working all week to change your behavioural patterns, alter your sleep environment and improve your diet, you should begin to see some improvements in your sleep. If your BED score improved you took steps to make sleep a priority during the day as well as at night. If your Sleep Efficiency improved even a bit you are now associating your bed with sleep and not with wakefulness and restlessness.

Sometimes our memory fails us and when overtired and we can find it difficult upon reflection to identify reliable patterns. This approach applies a little discipline to recording data and applying a healthy routine, revealing tangible results. But don't stop at one week! Keep going and you will reap the benefits of sustained and lasting results allowing you to feel great day and night.