



CONQUERING INSOMNIA & ACHIEVING **SLEEP WELLNESS**

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INSOMNIA FACTS



- A) Under-recognized & Under-treated
- B) Negatively Affects Physical Health
- C) Major Cause of Depression & Anxiety

Insomnia Is Very Treatable

Medication



CBT



Sleep Hygiene

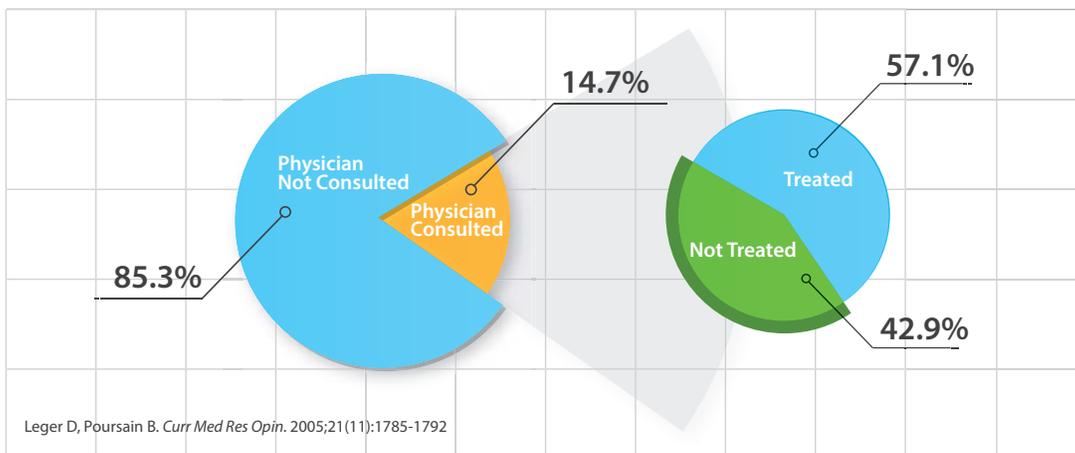


Consider the next two illustrations below to better understand why insomnia is so problematic



Insomnia is Underrecognized and Undertreated

- Telephone survey of adults >18 years conducted in France, Italy, Japan, and the United States in 2003 (N=2,061)
- 27.1% (n=570) in the United States had insomnia symptoms in the previous 12 months
 - 88% of those had sleep problems >12 months
 - 14.7% consulted a physician
 - 8.4% of these received a prescription



Health Problems Associated with Insomnia

MENTAL HEALTH

Stress
Anxiety
Depression
Neuroticism
Reduced vigilance
"Burnout Syndrome"

CIRCADIAN RHYTHM DISRUPTIONS

Body temperature
Respiratory rate
Hormonal production
Menstrual cycle
Urinary excretion
Cell division

BRAIN EFFECTS

Sleep loss
REM sleep reduction
Stage 2 sleep reduction
Fatigue
Reduced brain volume

CARDIOVASCULAR DISORDERS

40% increased risk for:
Angina pectoris
Hypertension
Myocardial infarction

GASTROINTESTINAL DISORDERS

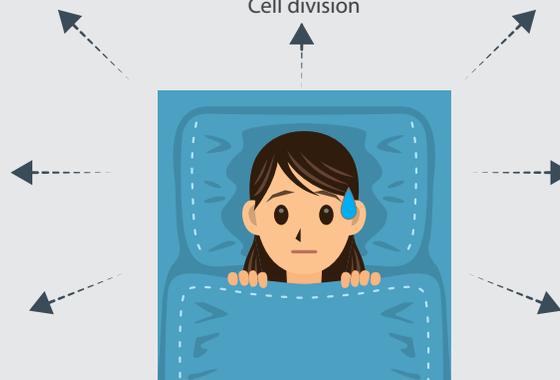
Dyspepsia
Abdominal pains
Heartburn

REPRODUCTIVE EFFECTS

Spontaneous abortion
Low birth weight
Prematurity

INCREASED CANCER

Breast cancer
Colorectal cancer



REM, rapid eye movement.
Foster RG, Wulff K. *Nat Rev Neurosci.* 2005;6(5):407-414.

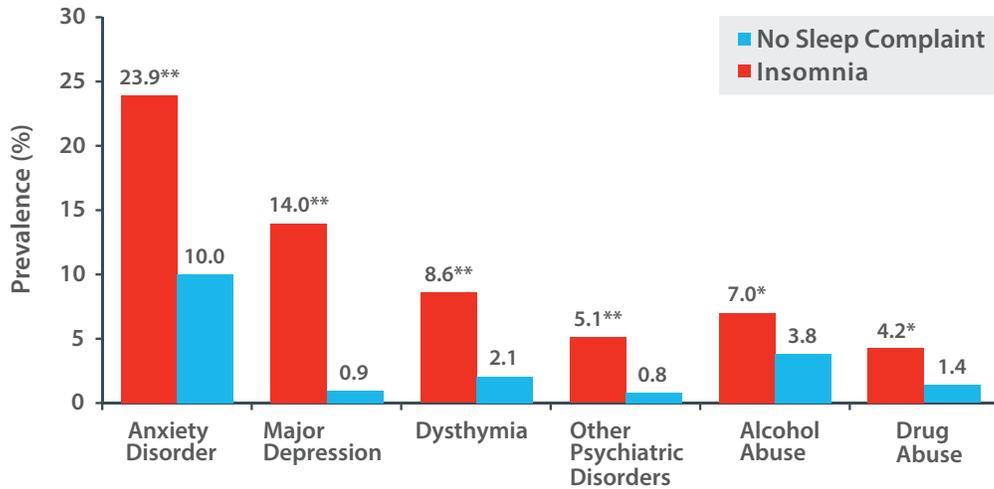
Saarela Jais, MA, PsyD, LPC & Rakesh Jais, MD, MPH

BRAIN & BODY HEALTH & INSOMNIA

The parts of the brain that manage memory, concentration, decision-making, emotional regulation, and alertness are all significantly impaired by insomnia. Insomnia and certain mental health disorders like major depression and anxiety disorders often co-exist. It's almost like these problems – sleep and mood – travel in a pack rather than solo. So if you're struggling with insomnia, be watchful for problems like anxiety and depression.

Insomnia: Highly Comorbid with Psychiatric Conditions

Prevalence of comorbid psychiatric disorders in 811 individuals with insomnia



*P = .05 vs no sleep complaint; **P < .001 vs no sleep complaint. Benca RM, et al. *Sleep Med.* 2008;9 Suppl 1:S3-S9.

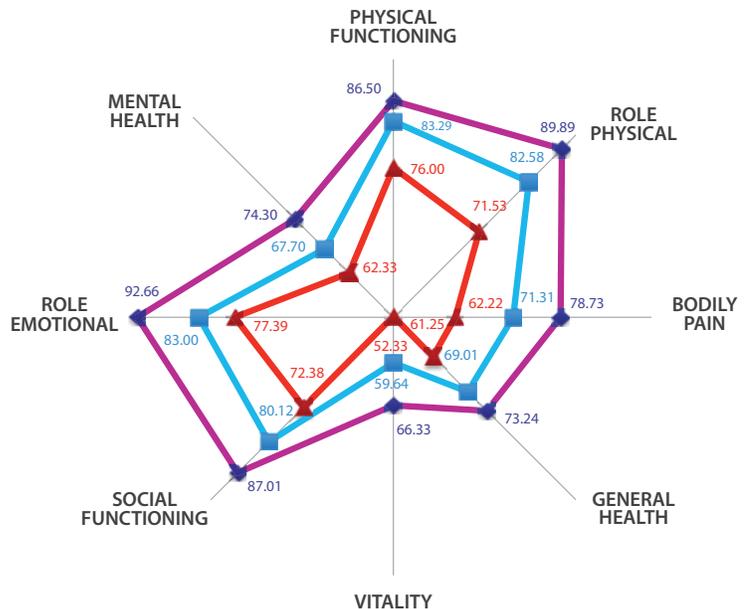
INSOMNIA & QUALITY OF LIFE

If you've ever suffered from insomnia, you know it's like a wrecking ball – all aspects of your life are damaged. The illustration to the right highlights different areas that are impacted including mental health, physical functioning, bodily pain, social functioning, and vitality. Please don't underestimate insomnia's ability to harm human life.

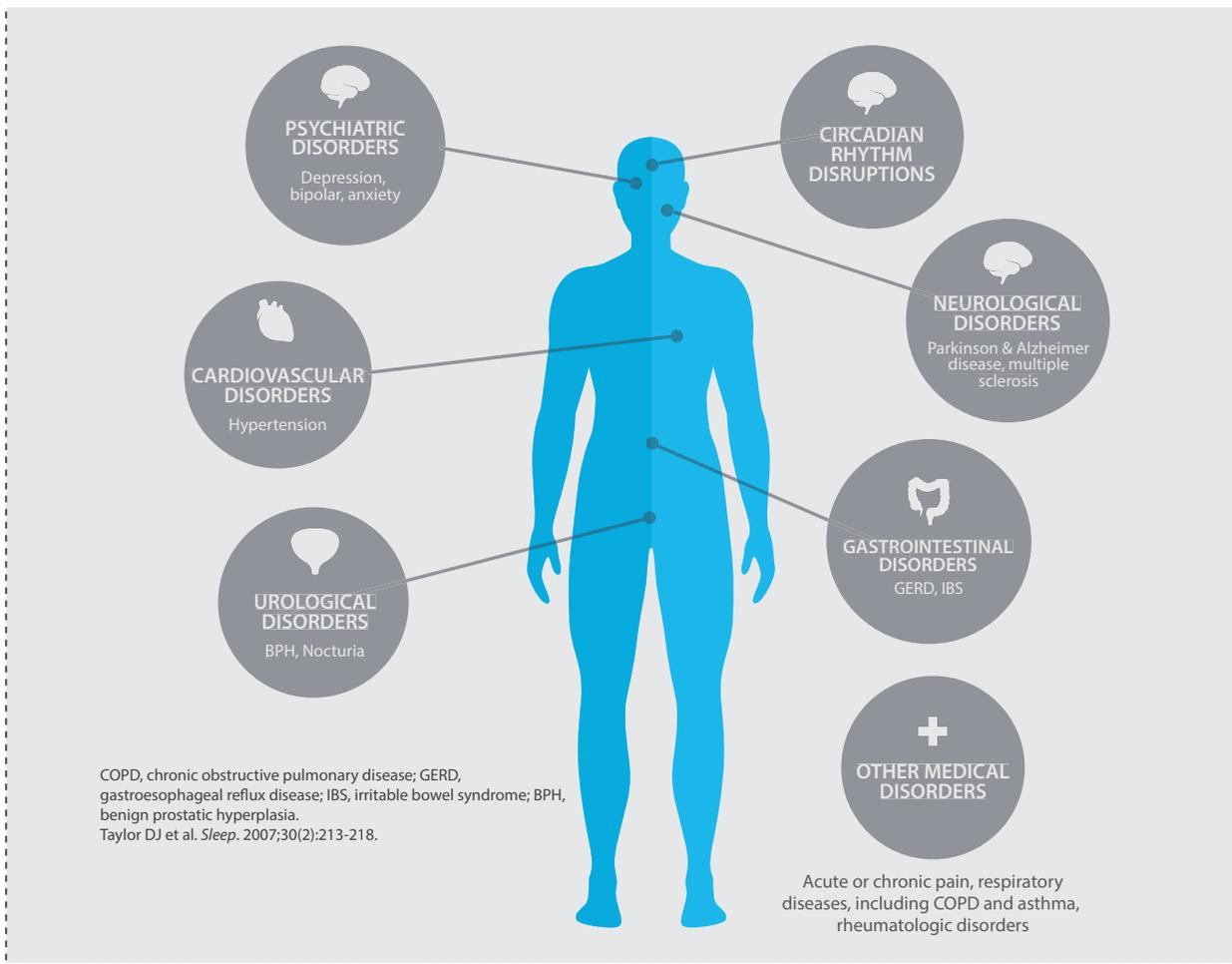
■ Good Sleepers: n=391
■ Mild insomniacs: n=422
■ Severe insomniacs: n=240

P < 0.05 for all measures. Leger D et al. *Psychosom Med.* 2001;63(1):49-55.

Insomnia has a Detrimental Impact on Quality of Life

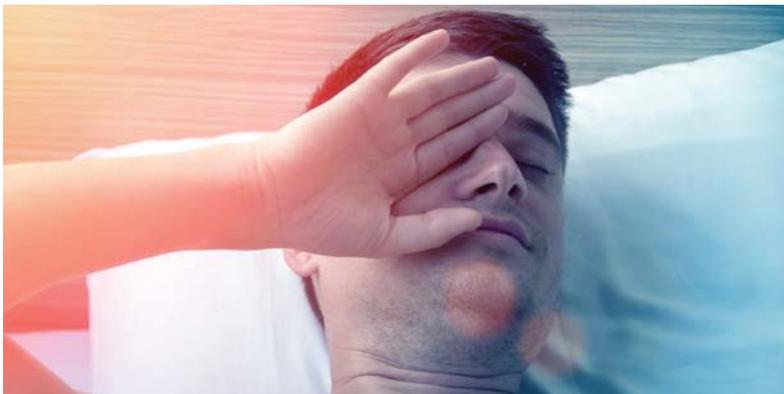


Diverse Medical Conditions Associated with Sleep Disturbance



Insomnia rarely appears all by itself. It's often associated with mental health disorders and other medical conditions. Take a look at the image above to get an idea of the other disorders often seen when insomnia is a problem. If you struggle with insomnia, please consult with your healthcare provider and make sure you don't overlook these other disorders.

Insomnia Seldom Travels Alone



INSOMNIA Take Away Message

Understand it,
respect it and
find ways to conquer it!

Let's Take A Look At How The Experts Make A Diagnosis of Insomnia



The illustration below outlines how clinicians make a diagnosis of insomnia. Clinicians use the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) to make this diagnosis. No one wants to be incorrectly diagnosed or have their sleep difficulties missed or overlooked. Occasional sleep problems do not warrant a diagnosis. Clinicians must determine that DSM-5's definition of Insomnia Disorder is met before a diagnosis is made. The good news is if you meet criteria for Insomnia Disorder, there are a number of ways to deal with the problem.

DSM-5 Insomnia Disorder

- A) Dissatisfaction with sleep quantity or quality with \geq of the following:
 - Difficulty initiating sleep (children: w/o caregiver intervention).
 - Difficulty maintaining sleep (children: w/o caregiver intervention).
 - Early morning awakening w/ inability to return to sleep.
- B) Significant distress or impairment in social, occupational, educational, academic, behavioral, or other important areas of functioning.
- C) ≥ 3 nights per week.
- D) > 3 months.
- E) Adequate opportunity for sleep.
- F) Not better explained by and does not occur exclusively during the course of another sleep-wake disorder.
- G) Not attributable to the physiological effects of a substance.
- H) Coexisting mental disorders and medical conditions do not adequately explain the predominant complaint.

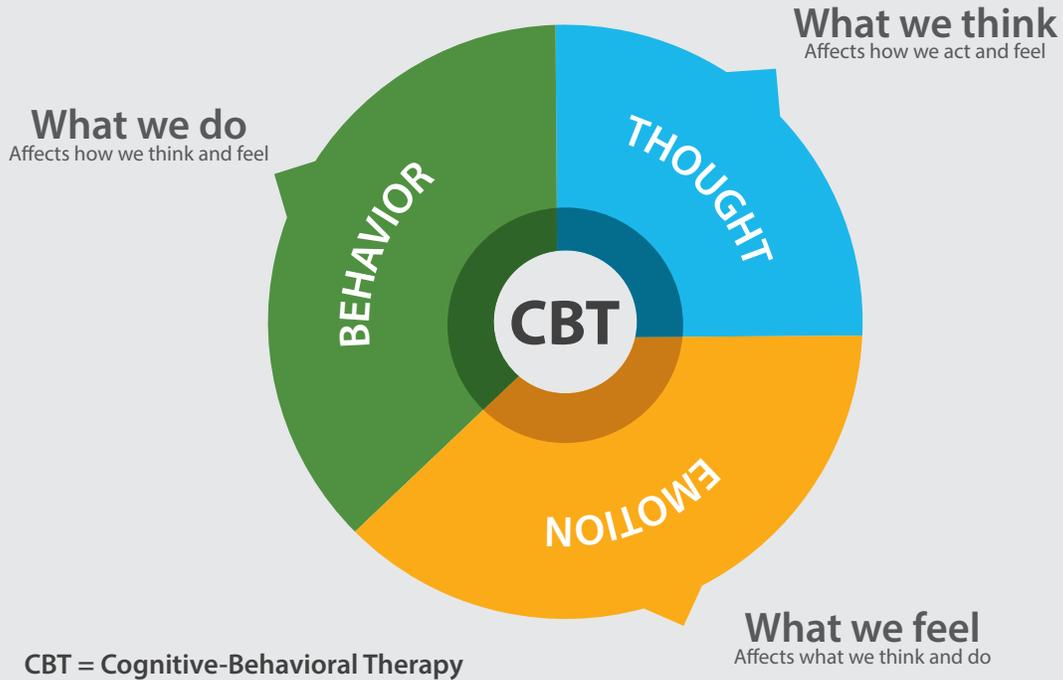
American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*. Arlington, VA: American Psychiatric Association; 2013.

Non-Pharmacological Treatment Options	TECHNIQUES	METHOD
	Restriction of Time in Bed (Sleep Restriction)	Decrease time in bed to equal time actually asleep and increase as sleep efficiency improves
	Cognitive Therapy	Talk therapy to dispel unrealistic and exaggerated notions about sleep
	Paradoxical Intention	Try to stay awake
	Sleep Hygiene Education	Promote habits that help sleep; eliminate habits that interfere with sleep

Morgenthaler T, et al. *Sleep*. 2006;29(11):1415-1419. Bootzin RR, et al. *J Clin Psych*. 1992;53 Suppl:37-41

Model of CBT

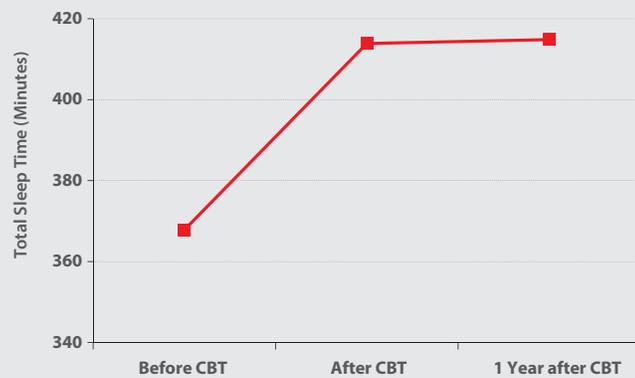
Cognitive Behavioral Therapy (CBT) looks at the relationship between thoughts, emotions and behavior. It is a form of therapy used to treat a variety of different mental health disorders including insomnia. The old saying, "You are what you eat" applies here as well with a minor modification - "You are what you **think**". When unable to sleep, thoughts like, "I'll never get to sleep", "Tomorrow I'll be exhausted", etc. lead to emotions like fear, anxiety, depression, and may potentially impact a person's behavior. However, don't despair, CBT is an effective intervention for insomnia.



A recently published review article (2015), looking at 20 different clinical trials, concluded that CBT-i (cognitive behavioral therapy for insomnia) is an effective treatment with sustained benefits.

Here we see that sleep time in minutes increased after a CBT-i intervention. Please notice that the benefits were sustained even after one year. CBT-i is a gift that keeps on giving – don't you agree?

Outcome of Cognitive Behavioral Therapy for Insomnia



Harvey AG, et al. *Behaviour Research and Therapy*, 2007;45:2491-2501.



Pharmacological (Medication) Treatment Options



Non-medication treatment options are generally a first-line treatment. It's wise to consider non-medication treatments either solo or in combination with medications.



Many medications are FDA approved for sleep problems. Your clinician is a good resource for more information.

There are many different types of Insomnia medications available. Each medication has its own specific risks and benefits.

Benzodiazepines (BZDs) can be helpful in certain situations but occasionally there are problems associated with their use. Being a well-informed consumer is very important so take a look at the two images to the right outlining both the risks and benefits associated with their use. Please consider discussing this information with your healthcare provider.



Benzodiazepines Have Several Positive Attributes

- 01 LOW COST 
- 02 AVAILABILITY 
- 03 RAPID RELIEF OF SYMPTOMS 
- 04 EFFECTIVE THERAPY FOR MANY PATIENTS 

Potts NL, Krishnan KR. *Can Fam Physician*. 1992;38:149-153.

Concerns Associated With Short- and Long-Term BZD Use

- | | |
|--------------------------------|---------------------------------------|
| Over-sedation | Adverse Effects: Elderly |
| Drug Interactions | Adverse Effects: Pregnancy |
| Cognitive Difficulties | Drug Abuse/Dependence ² |
| Depression, Emotional Blunting | Socioeconomic Cost: Long-term BZD Use |
| Neurodegeneration ² | |

Ashton, CH, *Benzodiazepines: How They Work And How To Withdraw*, August 2002, <http://www.benzo.org.uk/manual/ndex.htm>, Accessed Feb 4, 2015; Potts NL, Krishnan KR. *Can Fam Physician*. 1992;38:149-153



Elders must be cautious when taking BZDs of the following risks:

Benzodiazepines:
the Negative Impact on Elder Population

- Impaired Cognitive Functioning¹
- Increased Risk of Falls⁴
- Reduced Mobility & Driving Skills^{2,3}



¹Billioti de Gage S et al. *BMJ*. 2012; 345:e6231,

²Smink BE et al. *CNS Drugs*. 2010;24 (8):639-653,

³Madhusoodanan S, Bogunovic OJ. *Expert Opin Drug Saf*. 2004;3(5):485-493,

⁴Wagner AK et al. *Arch Intern Med*. 2004;164 (14):1567-1572.

Rebound Insomnia:

- Worsening of sleep compared to pre-treatment baseline.
- Typically lasts 1-2 nights after discontinuation.
- Does not increase in severity with number of repeated nights of use
- More likely following higher doses of short- and intermediate-acting BzRAs.
- Can be minimized by gradual taper (1 clinical dose per week) and by using lowest effective dose.

Another potential risk BZDs and BZD-like medications carry is rebound insomnia. Watch out for this! Don't abruptly stop your medication; always discuss this with your healthcare provider before making any changes. If you decide to discontinue this class of medications, you may want to consider downloading the mailer in the following illustration prior to initiating a conversation with your healthcare provider.





Here you will find several sleep recommendations. As you begin to make these changes, don't give up if you find yourself making progress only to experience a setback with a night of poor sleep. Remember, change takes time so hang in there and continue your daily practice of implementing good sleep habits.

- The bed is only for sleep and sex.
- If you are unable to sleep, get up and go into another room.
- Do something quiet, calm, and relaxing in dim light.
- Do not fall asleep anywhere other than your bed.
- Do not watch the clock.
- Go back to bed only when sleepy.
- Always use an alarm in the morning set for the same time.

GENERAL SLEEP HYGIENE MEASURES



WAKE UP AT THE SAME TIME OF DAY; obtain morning light exposure.

STOP CAFFEINE at least 4-6 hours before bedtime.

RESTRICT NAPPING; educate about impact of naps, if taken.

AVOID ALCOHOL & HEAVY MEALS close to bedtime.

EXERCISE IN THE MORNING OR AFTERNOON, but not within 3-5 hours of bedtime.

MINIMIZE NOISE, LIGHT, & EXCESSIVE TEMPERATURE in the bedroom.

IF READING IN BED IS RELAXING, use low light level and read "appropriate materials".

DO NOT WATCH TELEVISION, listen to the radio, or use computers in bed.

AVOID WORKING, emotional stress, and computers in the bedroom.

WORK TO PROMOTE RELAXATION in the hours before bedtime.

USE BEDROOM ONLY for sleeping and sexual activity.

MOVE THE ALARM CLOCK OUT OF SIGHT; set the alarm for morning awakening.

Erman MK. *Primary Psychiatry*. Vol 14, No 11. 2007.

Please keep a copy of this chart near your bedside so you can review it on a regular basis. This type of cognitive reminder is very helpful in promoting pro-sleep habits.

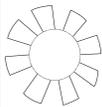
“ The best bridge between despair and hope is a good night's sleep. ”
E. Joseph Cossman

PSYCHOLOGYTOOLS

Please consider keeping this sleep diary for the next two weeks. We highly recommend that you share the results with your healthcare provider. A lot can be learned from documenting your sleep habits on a regular basis.

SLEEP DIARY

WEEK 1

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
 Complete in the MORNING							
I went to bed last night at (time)							
I got up this morning at (time)							
I slept for a total of (hours)							
I woke up during the night (# times)							
 Complete in the EVENING							
Number of caffeinated drinks today							
Time of last caffeinated drink							
Exercise completed today (minutes)							
What I did in the hour before I fell asleep							
Mood today? (0=awful, 10=great)							

SLEEP DIARY

WEEK 2

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Complete in the MORNING							
							
I went to bed last night at (time)							
I got up this morning at (time)							
I slept for a total of (hours)							
I woke up during the night (# times)							
Complete in the EVENING							
							
Number of caffeinated drinks today							
Time of last caffeinated drink							
Exercise completed today (minutes)							
What I did in the hour before I fell asleep							
Mood today? (0=awful, 10=great)							

PSYCHOLOGY**T**OLS

 <http://psychology.tools>

If you prefer a smartphone app, we'd like to recommend, **CBT-i Coach**, which offers a sleep diary, as well as, many other features including lots of educational information about sleep, a self-assessment, and both cognitive and behavioral recommendations specific to insomnia. If you want an app that is a little more comprehensive than just a sleep diary, please download this app and give it a try.



MY ACTION PLAN

Please discuss action plan with your healthcare provider



1. Assessment of my current sleep practices:

2. Ways to deal with any sleep problems:

3. Roadblocks to sleeping well:

4. Current list, if any, of prescribed or over the counter sleep medications:

5. My plan to develop quality sleep health:



“ A good laugh and a long sleep are the best cures in the doctor's book. ”
Irish Proverb



