# $Disability Campaign. {\it org}$

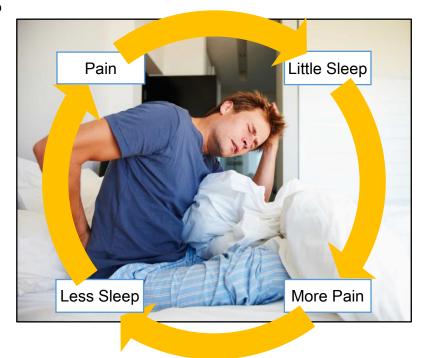
## Sleep and Chronic Pain

If you live with chronic pain, you know getting a good night's sleep can be hard. The problem is, not sleeping well for one night or several in a row just makes pain worse — making you more stiff, worsening your mood ... all of which don't help with the next night's sleep. And before you know it, you can get stuck in a vicious cycle of pain and lack of quality sleep.

According to the National Sleep Foundation, 2 in 3 Americans living with chronic pain experience poor or unrefreshing sleep. Likewise, more than 4 in 10 people with insomnia report chronic pain. What's more, when not addressed, lack of quality sleep can lead to the development or worsening of other health conditions. But there are ways you can break the

cycle of pain and poor sleep

— and not all require taking a pill. Below are ways in which sleep affects pain, as well as ten things you may want to consider to improve your sleep quality and, in turn, reduce your pain.



### The link between sleep and pain

It's believed that sleep and pain share similar neurotransmitter systems —that is, that both share special messenger chemicals that transmit signals related to pain and sleep. When you sleep, your tissues grow and repair, energy is restored, and essential hormones are released. In several pharmaceutical studies, treatment of sleep disorders resulted in improved pain levels in patients. Other studies have shown that sleep deprivation can alter your perception of pain and increase inflammation. The good thing is, because sleep and pain are connected, treating one will likely improve the other.

### 12 Things you can do to get a good night's sleep



- 1. Keep a sleep schedule. This includes the time at which you go to bed and wake up. By doing so, you'll help regulate your body's clock, helping you to fall asleep, stay asleep, and wake up more refreshed. Don't forget to incorporate the amount of time it takes you to get ready for bed, as well as to get up and going in the morning.
- 2. Evaluate your naps. If you're sleep deprived, you may feel the need to take a nap, but napping at the wrong time of day or for too long can cause problems, too. You may wake up from a nap feeling groggy or disoriented. Some people, particularly those with insomnia or other sleep problems, may find napping to interfere with nighttime sleep quality.
- **3.** Practice a relaxing bedtime routine. Give yourself enough time to brush and floss, wash your face, etc. If you feel rushed, you may end up going to bed anxious. Consider

incorporating relaxation techniques, such as mindfulness, listening to instrumental music or nature sounds, and deep breathing exercises. It all depends on what *you* find relaxing. For some people, it may be reading a few pages of a good book, whereas for others, that may be too stimulating before bed. Whatever you choose to do, make it a part of your every-day routine before bed.

4. Avoid caffeine, cigarettes, alcohol, and heavy meals. Drinking coffee too late in the day can affect your ability to fall asleep. Cigarettes and alcohol have also shown to disrupt sleep. Eating a big or spicy meal can cause indigestion, heart-burn, and a feeling of

fullness that keeps you from sleeping. If you're hungry before bed, try a light snack about an hour before lying down.

5. Take a warm bath or shower to help with muscle aches, joint stiffness, and to relax you before bed. Doing so in the



mornings can also be helpful as well, especially if you wake up with stiffness.

6. Assess the comfort of your mattress and pillow. How old is your mattress? It may be time to replace it; most mattresses have a lifespan of 7-10 years, with some lasting longer than others. Also, don't neglect your pillow: it's height, shape, and level of firmness. Consider visiting your local mattress store and lying down on various beds/pillows to test which one is best for you. If you're shopping for a new mattress, ask about any guarantee with the purchase because you won't really know if the mattress is right for you until you get a chance to actually sleep on it.

7. Consider herbal and dietary supplements. Some plants and herbs that can help you sleep include chamomile, valerian, lavender, and St John's Wort. Dietary supplements containing ingredients such as melatonin, valerian, Kava, and L-tryptophan may also help those with insomnia. Just make sure to check with your doctor before starting any herbal or dietary supplements, as some may interfere with other prescriptions (for example, St John's Wort reduces the efficacy of oral birth control pills) and excess of any supplement may be harmful.



8. Exercise regularly. Consult with your doctor on the best exercise routine given your chronic pain, and then begin to incorporate it into your day. Researchers at Northwestern University performed a study on the effect of aerobic exercise on insomnia in middle-aged and older adults. The participants

who were in the exercise group reported an improvement in sleep quality, as well as fewer depressive symptoms, more vitality, and less sleepiness throughout the day.

9. Try aromatherapy or essential oils. Dr. Marilyn Wei, MD, JD, explains that the olfactory nerve, which gives us our sense of smell, is connected to parts of the brain responsible for emotions, mood, and memory. She recommends these six essential oils: lavender, lemon, bergamot, sage, ylang-ylang and jasmine, which have been found to have calming, anti-anxiety, and anti-depressant-like effects. It's important to note, however, that essential oils are not regulated by the FDA; therefore, care must be taken in researching the quality and purity of the oils.

- 10. Remove distractions. Let your bedroom be a place of rest. Keep entertainment, such as TV or music players, outside of the bedroom. This also applies to work and studies. If space allows, move your desk to another area of your home. Also, keep bright lights turned off. If light peaks in through your blinds, consider installing a curtain to darken the room a bit more.
- 11. Treat chronic pain and other underlying health conditions. If it's the pain that's making it hard for you to fall or stay asleep, don't ignore it. Talk to your doctor about how you can better treat your pain be it with medication, physical therapy, diet, exercise, or a combination of these. Also,



review the medications you are taking, as some may interfere with sleep; opioids in particular are known to cause sleep disturbances, including night terrors and disrupted sleep cycles. Other health conditions may also be interfering with your sleep, resulting in an increase in pain, such as hormonal imbalances (for example, menopause in women), diabetes, and depression. Your doctor may help you pinpoint what else could be affecting your sleep.

12. Treat sleep disorders. If after addressing lifestyle changes, you still find you are having difficulty falling and/or staying asleep and that your poor sleep is affecting other areas of your life or health, talk to your doctor about what else can be done. He or she may want to refer you to a sleep specialist and/or prescribe a medication that can help you sleep. Make sure to thoroughly discuss treatment options with your physician, including side effects of medications and potential complications associated with long-term usage.

#### References:

The Effect of Sleep on Chronic Pain: Enhancing sleep can lead to less pain and better outcomes. *Optum.* (2016). <a href="http://helioscomp.com/docs/default-source/White-Paper/insomnia-whitepaper-and-chart.pdf">http://helioscomp.com/docs/default-source/White-Paper/insomnia-whitepaper-and-chart.pdf</a>

Healthy Sleep Tips. *The National Sleep Foundation*. <a href="https://sleepfoundation.org/sleep-tools-tips/healthy-sleep-tips/page/0/1">https://sleepfoundation.org/sleep-tools-tips/healthy-sleep-tips/page/0/1</a>

King, S. Pain, Sleep, and Opioids. *Psychiatric Times*. (2014, October 22). http://www.psychiatrictimes.com/pain/pain-sleep-and-opioids

Mayo Clinic Staff. Napping: Do's and dont's for healthy adults. *Mayo Clinic*. http://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/napping/art-20048319

Moore, J. T., & Kelz, M. B. (2009). Opiates, Sleep, and Pain: The Adenosinergic Link. *Anesthesiology*, *111*(6), 1175–1176. http://doi.org/10.1097/ALN.0b013e3181bdfa2e

Pain and Sleep. *The National Sleep Foundation*. <a href="https://sleepfoundation.org/sleep-disorders-problems/pain-and-sleep">https://sleepfoundation.org/sleep-disorders-problems/pain-and-sleep</a>

Schrimpf, M., Liegl, G., Boeckle, M., Leitner, A., Geisler, P., & Pieh, C. (2015). The effect of sleep deprivation on pain perception in healthy subjects: a meta-analysis. *Sleep medicine*, *16*(11), 1313-1320.

Sleep-Wake Cycle: Its Physiology and Impact on Health. *The National Sleep Foundation*. (2006). https://sleepfoundation.org/sites/default/files/SleepWakeCycle.pdf

Wei, M. 6 Aromatherapy essential Oils for Stress Relief and Sleep. *The Huffington Post.* (2016, April 29). <a href="http://www.huffingtonpost.com/marlynn-wei-md-jd/6-aromatherapy-essential-b\_9805630.html">http://www.huffingtonpost.com/marlynn-wei-md-jd/6-aromatherapy-essential-b\_9805630.html</a>

Joni and Friends can ass	me no liability in the recommendation of any product, service or organizati	on,
nor does this constitute ar		ĺ
		ŕ
	endorsement. © Joni and Friends, 2017 Used by permission of <b>Joni and Friends</b>	,
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	,
	endorsement. © Joni and Friends, 2017 Used by permission of <b>Joni and Friends</b>	,
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	ŕ
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	
	endorsement.  © Joni and Friends, 2017  Used by permission of <b>Joni and Friends</b> P.O. Box 3333, Agoura Hills, CA 91376	