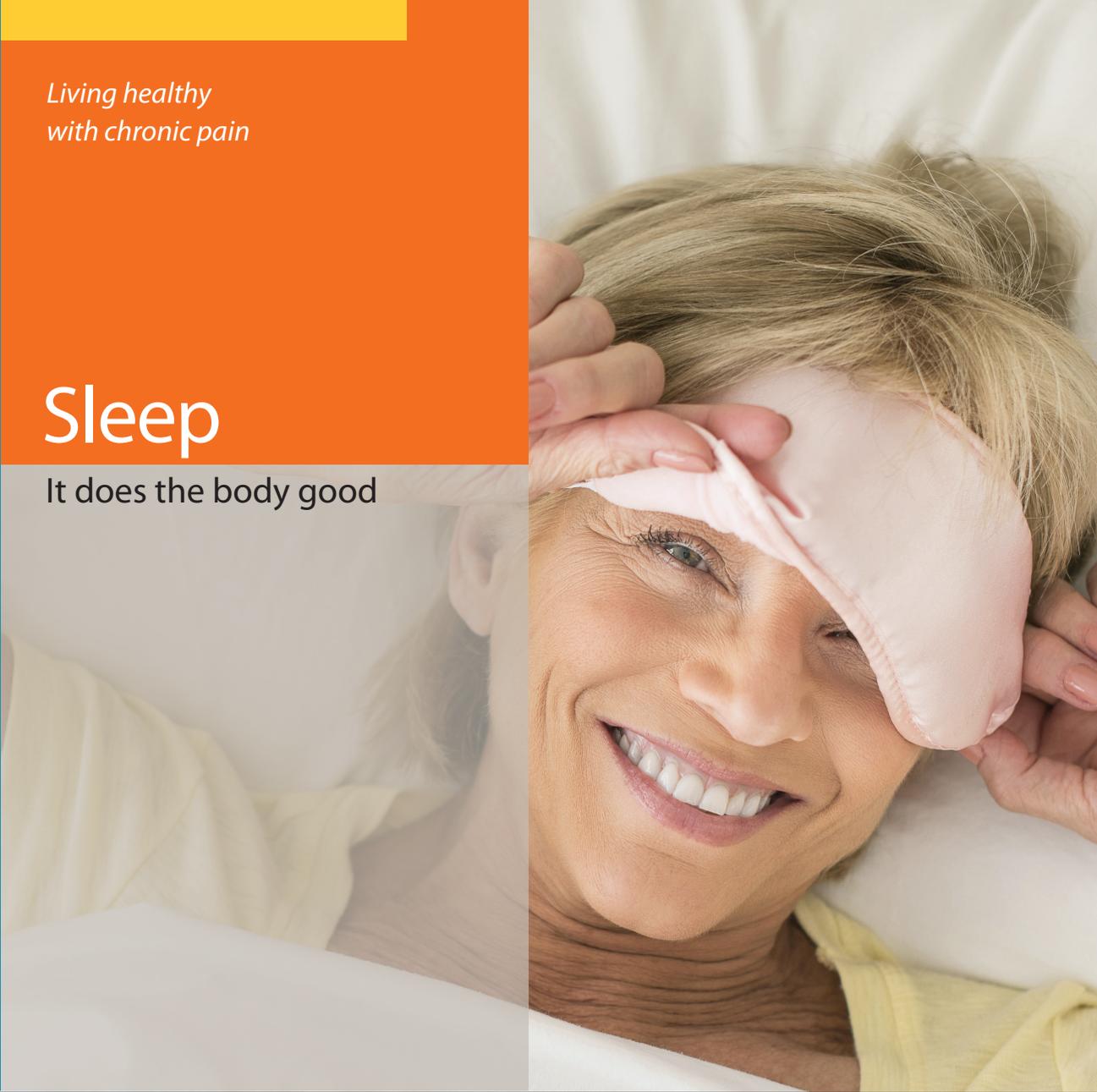


*Living healthy
with chronic pain*

Sleep

It does the body good



nura[®]

Precision Pain Management

Sleep

Your sleep habits directly affect your pain

Sleep is an important part of a healthy lifestyle. Most people need seven to nine hours of sleep per night. More than 60 million Americans struggle with insomnia. Lack of sleep impairs judgment, increases perception of stress, results in irritability and difficulty concentrating. Lack of sleep also is related to depression as well as decreased productivity. It can also cause increased blood pressure, increase blood sugar, and decrease immunity. Also, when people are deprived of sleep, pain tolerance decreases. Most motor vehicle accidents occur between midnight and 6:00 AM. Motor vehicle crashes even increase with daylight savings time when there is one less hour available to sleep. And finally, people who have difficulty sleeping are more sensitive to pain.

The stages of sleep include:

Stage 1: Light theta wave sleep. During this stage, temperature drops and muscles relax. We may be easily aroused from this stage.

Stage 2: True light theta wave sleep. EEG waves slow, and heart rate and breathing slow. We spend about 45 to 60% of sleep in this stage.

Stage 3: Deep sleep starts. Breathing becomes more regular, blood pressure falls, pulse rate slows and we become more difficult to wake. If awakened in this stage, we are groggy and confused, with poor memory. Renewal and restoration of the body is accomplished during this stage. Increased human growth hormone results in muscle repair and tissue growth. Blood interleukin levels increase, which strengthens the immune system. Stage 3 is essential for our health.

Stage 4: Deepest stage of sleep, essential for proper sleep. Increased growth hormone. Rhythmic breathing, limited muscle activity.

Stage 5: REM sleep — (rapid eye movement)

During this stage, dreams occur. Consolidation of long-term memories and restoration of the brain also occur during this phase. People deprived of this stage become moody, irritable and have difficulty with memory.

Hormones and sleep

Melatonin increases in the evening, helping to facilitate sleep. Growth hormone is secreted in stage 3-4. Cortisol stimulates alertness. It builds through the night and peaks in the morning. Bright light causes cortisol production to increase, so it is best to keep a dark room at night.

The biological clock tissue is primarily located in the brain, but many of our organs have some of this tissue also. So when we go against our circadian rhythm, and are sleep deprived, many of our organs are affected. Human beings are programmed to be awake during the day and sleep at night. Human beings are the only animals that barter their sleep time away. Even though they are tired, they will stay up late for various reasons. TV is the most common reason cited for staying up late.

Sleep deprivation increases blood pressure, thyroid activity, pain sensitivity due to REM sleep deprivation, breast and other cancers, and reduces capacity to metabolize glucose, leading to higher levels of diabetes, and difficulty concentrating. Sleep deprivation is also associated with obesity and depression. Sleep deprivation can be very dangerous on the road. Some studies state that 17 hours of sleep deprivation is equivalent to 0.05 blood alcohol concentration. 24 hours of sleep deprivation is equivalent to 0.1 blood alcohol concentration. Nothing will change this except for pulling over and getting some sleep.

There are many things that may hinder the ability to sleep soundly. Among these are alcohol, nicotine, opioids, sedatives, and caffeine. Even some sleep aids prevent ones ability to get into the deep stages of sleep that are so important for our health. Many people with pain have difficulty sleeping, and paradoxically, sleep deficit results in increased pain.

Sleep disorders

Insomnia: Treatment consists of sleep hygiene measures.

Restless leg syndrome (RLS): Reduce caffeine, especially after noon. Warm bath and relaxation exercises before bed. Hot or cold packs on legs. Medications for RLS. Treat or prevent iron deficiency. Try daily magnesium or drinking 8 oz. of tonic water before bed.

Sleep apnea: Sleep apnea results in not enough oxygen getting to the brain and muscle, which may lead to serious cardiac issues. The lack of oxygen may also cause an increase in pain. Continuous positive airway pressure (C-Pap) is the treatment of choice for sleep apnea. Weight loss may improve the condition. Dental appliances that hold the lower jaw forward are often used if C-pap is not tolerated.

Consider referral to a sleep specialist for evaluation if you have signs of a sleep disorder (examples are):

- Snores loudly 3 or more times per week
- Stops breathing or wakes gasping during the night
- Feels sleepy or nods off while doing an activity such as watching TV or driving

- Has difficulty sleeping three or more nights a week
- Wakes unrefreshed
- Has restless feelings in the legs at night and has to “walk it out” in order to sleep
- Has unusual behaviors while sleeping that bother them or their bed partner

Sleep hygiene

Get the right amount of sleep for you. Most people need seven to nine hours of sleep per night. It is most healthy to go to bed at the same time each night and wake up at the same time each morning to maintain a regular sleep routine.

Sleep hygiene tips to try

- Avoid naps if possible
- Don't stay in bed awake for more than 5-10 minutes
- Don't watch TV before bed
- Don't drink caffeinated drinks in the afternoon
- Avoid substances that interfere with sleep like nicotine and alcohol
- Exercise regularly
- Quiet, comfortable bedroom



nura[®]
Precision Pain Management

*Living healthy
with chronic pain*

Tips to sleep on

Keep a sleep routine

Wake at the same time each morning, avoid sleeping in, try to go to bed at the same time each night, aim for 7-9 hours of sleep

Only sleep in your bed

No work or TV in bed, this helps your body associate your bed exclusively with sleeping

Do not dwell on falling asleep

If it has not happened after 20 minutes, get up and distract yourself with something calming and try again

Skip daytime naps

If you must, nap before 2pm and only for 30 minutes

Avoid caffeine after noon

It is a stimulant and will keep you awake

Exercise regularly

Exercise early in the day if possible, avoid exercising in the three hours prior to bedtime

Monitor eating habits

Do not overeat, do not eat within three hours of bedtime, but do not go to bed hungry either

Unwind and relax before bedtime

Take a warm bath, listen to soft music, drink something warm, read something soothing, write down some of your racing thoughts to clear them from your head



nura[®]

Precision Pain Management

2104 Northdale Blvd. NW, Suite 220
Minneapolis, MN 55433
763-537-6000
nuraclinics.com

©2020 Nura Pain Management. All rights reserved.