



OVERVIEW:

This ebook will give an overview of medical causes of fatigue and poor sleep including the commonly undiagnosed vein reflux. About 75% of people with a vein condition have poor quality sleep, and this ebook is based on some practical observations from my practice. It will also focus on common problems you can change and improve yourself, problems we see in our patients routinely.

Everyone experiences fatigue or a sleep problem at some point in their life. Some more than others. Not everyone who has a sleep problem can tell that it is a problem, mainly because you're asleep and not conscious when the problem is occurring. Next morning, you wake up feeling washed out and exhausted. When this happens people feel run down, fatigued and tired all day but they may not link it to a sleep problem.

As a vein care practitioner, I know that 75% of people with a vein condition have poor quality sleep and 95% have fatigue so this is a common problem for me. Because of this we are very aware of the impact sleep quality has on people and how to help people sort out their fatigue.

Poor sleep and fatigue have a number of undesirable effects: reduced performance at work, difficulty enjoying life, emotional irritability, difficulty concentrating (brain fog) depression, poor relationships, poor appetite control, lower energy level with reduced activity and increased weight gain, and increased risk of accidents on the road, at home or at work. In some specific causes such as sleep apnea, it can even cause heart failure. When poor sleep begins to cause problems like these, it is time to get some help.

It is important to understand that the terms fatigue, sleep disorder, and insomnia describe different, but overlapping conditions.

- 1. Fatigue is low energy and stamina, and can be due to a number of medical conditions including sleep disorders and insomnia. When you suddenly develop fatigue during the day, both you and others may chalk it up to simple laziness. You push yourself to keep going by grabbing energy drinks, coffee, or caffeinated soda only to struggle to get to sleep at night. If you are middle-aged or older, you may tell yourself that feeling chronically tired is a normal part of aging and there is nothing you can do about it. In my vein care practice, nearly all (95%) patients have fatigue and 75% have poor quality sleep which improves with treatment. Vein reflux is in fact a common cause of undiagnosed fatigue and poor sleep.
- 2. Poor sleep often represents a sleep disorder and describes a condition in which the individual falls asleep but sleep is fitful and interrupted throughout the night with frequent awakenings. The individual may not be aware that they are experiencing poor sleep. During the day, the individual usually feels sleepy and is easily fatigued, and may only realize a problem exists when it's pointed out by a sleep partner or after a sleep study. The sleep partner may notice fitful sleep, snoring, periodic pauses in breathing or restless legs. Additionally, those affected by sleep disorders have abnormal sleep cycles of REM and non-REM sleep, which can only be characterized by a sleep study. Patients with vein reflux follow both patterns: some are awakened due to restless legs or leg pain while others do not wake up but feel exhausted in the morning, experiencing what's called "non-restorative" sleep. Both patterns with vein reflux are improved with vein treatments.



3. Insomnia is the condition when someone cannot fall asleep. Insomnia can be a sleep disorder but is more commonly the result of anxiety or stress. When people have insomnia, they experience fatigue and the emotional lability and depression of a sleep disorder. Not everyone feels tired, though. Because of the underlying stress and anxiety, some describe feeling "wired" with an inability to relax. When you have insomnia, it feels nearly impossible to fall asleep at night. Even though you may feel tired and want to sleep, you lie awake and look at the clock or ceiling, feeling more stressed by the minute knowing you need to be out of bed by a certain time in the morning. You may even get out of bed in frustration, figuring that you should do something around the house as long as you are awake. Patients with vein conditions often experience insomnia due to restless legs and leg pain, both of which improve with treatment.

Unfortunately, dealing with even one of these sleep-related issues on a long-term basis can greatly increase your chances of serious health consequences. It can also lead to depression and anxiety since healthy sleep is the foundation for a happy and productive life.

A Deeper Look: Pinpointing the Causes

An article published on the website On Health, which the Physician Review Network reviewed in May 2016, indicates that a variety of health conditions can lead to fatigue. You may also experience fatigue as a symptom of illness. Here is a summary of possible causes of fatigue as well as what we have learned from treating patients over the years.

- 1. Autoimmune condition: Chronic health conditions that cause inflammation such as arthritis, celiac disease, Crohn's disease, inflammatory bowel disease, Lupus, and polymyalgia rheumatica, lead to fatigue due to the presence of inflammation in the bloodstream. Although these conditions can have significant overlap that can make diagnosis challenging, doctors typically start by ordering a blood test.
- **2. Anemia:** Most often caused by a deficiency of vitamin B 12 or iron, anemia causes a low hemoglobin count that causes the tissues to receive less oxygen. That means your tissues cannot work as hard as they should to keep you healthy. You will need a blood count analysis to confirm anemia.
- **3.** Chronic Fatigue Syndrome and/or Fibromyalgia: Fatigue, poor sleep quality, brain fog, and joint and muscle pain are the most common symptoms associated with both conditions. Assessing your sleep quality is the first step towards proper diagnosis and treatment.
- 4. **Drinking alcohol before bed:** Contrary to popular belief that alcohol helps you relax before bed, it is a stimulant that can make it difficult to fall asleep or stay asleep. If you struggle with either problem, look at your alcohol consumption patterns.



- **5. Heart disease:** The term heart disease also includes heart failure and coronary artery disease. Fatigue, shortness of breath, and pain in the arm, chest, or jaw are common symptoms.
- **6. Hypothyroidism:** This refers to having too little of the thyroid hormone. Common symptoms include brain fog, cold intolerance, dry skin, weight gain, and potentially dozens of others. Since hypothyroidism mimics so many other health conditions, your doctor should order a blood thyroid analysis before making a diagnosis.
- **7. Low testosterone:** Men lose approximately 10 percent of their total testosterone each decade with the loss typically peaking after age 60. Associated symptoms include abdominal weight gain, erectile dysfunction, fatigue, and reduced sex drive. Doctors can usually diagnose low testosterone with a blood test.
- **8. Lung disease:** This covers asthma, chronic obstructive pulmonary disease (COPD), bronchitis, cystic fibrosis, and more. The most common symptoms include fatigue and shortness of breath. A lung function test should provide you with the correct diagnosis.
- **9. Medications:** Both prescription and non-prescription medications have the potential to disrupt sleep. Speak to your health care provider or pharmacist about changing your medication or altering your dosage if you suspect it is contributing to your sleep issues.
- **10. Menopause:** Common symptoms of menopause include poor sleep quality along with mood swings, irregular menstruation patterns, and hot flashes. If you are a female nearing the age of menopause, your doctor will diagnose it based on your self-reported symptoms.
- 11. Narcolepsy: An uncommon neurological disorder, narcolepsy has a negative impact on sleep and wake cycles. Excessive sleepiness and falling asleep during the day are the main symptoms. Narcolepsy is difficult to live with because sufferers can fall asleep at any time. Severe cases can include sleep paralysis, sudden muscle tone loss, and hallucinations. Visiting a neurologist or a sleep specialist is the first step in diagnosis.
- **12. Poor sleep quality:** Many lifestyle factors and choices contribute to poor sleep quality. These include anxiety, depression, chronic illness involving inflammation, excessive use of devices with screens, excessive alcohol consumption, drinking caffeinated beverages late in the day, and eating late at night.
- 13. Restless leg syndrome: People with restless leg syndrome experience an uncontrollable desire to move their legs due to unpleasant sensations like tingling or prickling. This is a common condition diagnosed based upon the presence of an uncontrollable urge to move the legs which worsens at night when you are sitting or lying down. Restless legs are often associated with a vein condition and improves with vein treatment. Activity helps alleviate symptoms some, and medication may reduce the severity or eliminate it altogether.



- **14. Sleep apnea:** This condition is most common in overweight or obese people, those who snore, and people with a large tongue that does not fit well into their jaw. Untreated sleep apnea contributes to daytime fatigue and a host of other complications. A sleep study is the typical recommendation to confirm or rule out this diagnosis, and this can often be done at home.
- 15. Stress: Chronic stress releases stress hormones and adrenaline that can cause significant health problems.
- **16. Using electronic readers and smartphones:** The light emitted from these devices can trick your brain into thinking your body needs to remain awake. Using them right before bed increases the likelihood you will struggle with insomnia or sleeplessness.
- 17. Vein condition: Inflammation is the most typical result when circulation becomes stagnant. This can quickly lead to fatigue and leg pain, restless legs and leg cramps. Healthcare providers can easily diagnose a diagnose a vein condition with an ultrasound, looking for signs of vein reflux, since it usually presents no outward signs.
- **18. Vitamin D deficiency:** This is most common in people with little exposure to the sun, those who have had weight loss surgery, people with milk allergies, and those who strictly follow a vegan diet. A simple check of your vitamin D levels can confirm a diagnosis.

Potential Solutions

You should let your provider know the impact your sleep issue has on your quality of life and ask what you need to do to feel better. Since fatigue and sleep quality are subjective, give your provider an indicator of how it has affected you such as falling asleep at work, no energy to do hobbies or home chores etc. He or she will order several lab tests to attempt to pinpoint the cause.

Here are a list of 20 items you have control over and which can improve your sleep and fatigue levels

- 1. Avoid heavy meals, especially high in protein, in the evenings. The signal for the body to sleep is a natural fall in core body temperature in the evening, and similarly, the signal in the morning to wake is a rise in core body temperature. Food raises core body temperature, and this is especially so with protein. The so-called specific dynamic action of protein interferes with the natural sleep cycle.
- 2. Avoid late night snacks and consider a 14-16 hour daily fast. Food in the evening will increase core body temperature and also provides a sensory stimulus to your brain; more difficult to sleep. There is a nervous system in the gut called the enteric nervous system which is activated with digestion and has a connection to the central nervous system increasing stimulation of the central nervous system and brain.



- **3.** Avoid excess alcohol in the evening. Alcohol is a depressant but will have a paradoxical but very predictable rebound stimulation of the nervous system hours later as its effect fades away resulting in disrupted sleep and spontaneous waking.
- **4. Don't exercise too close to bedtime.** Avoid strenuous exercise at least an hour before sleep time, and adjust if you feel it is interfering with sleep. Exercise increases core body temperature which prevents the natural sleep cycle from occurring.
- **5. Exercise each day during the day or early evening.** Vigorous exercise will exhaust your body and make it easier to fall asleep. One of the keys to restorative sleep is dynamic active exercise. Target 30 minutes or more a day and make sure you are sweating and slightly out of breath to get the greatest benefit.
- **6. Monitor your bedroom temperature for comfort.** The key is how the room temperature affects your core body temperature: too high core temperature not good, too low and you will be shivering, which is also not good. This will take some experimentation to find the right setting for you, but common recommendations are 61-67 Deg F.
- **7. Take a hot bath two hours before sleep time.** The signal to sleep is your core body temperature falling, so if you get your temperature up a few hours before sleep and then when your core temperature falls after your hot bath, head to bed.
- **8.** Avoid screen exposure to TV, iphones iPads one hour before sleep. The blue light suppresses melanin which is normally released in the evening to stimulate sleep. Even worse, the emails and social media posts keep your brain active, even inciting emotional responses. Your brain stays active as it processes information, and keeps you awake.
- **9. For caffeine-sensitive individuals, reduce early morning caffeinated beverages and avoid late day consumption.** Caffeine interferes with non-REM sleep, the time it takes to fall asleep, and total sleep experience. For caffeine-sensitive individuals, the effect lasts much of the day, so use this formula: When you drink coffee in the morning (for example, four cups), after six hours half is still in your system (two cups). After 12 hours, a fourth of the total (one cup)remains, and after 18 hours one eighth (one half cup). So, if you drink 4 cups in the morning, it is the same as drinking ½ cup of caffeinated beverages just before bed, and can still have an effect on your sleep. For that reason, you may want to reconsider your caffeine consumption.
- 10. Keep to a regular sleep schedule, even if you are a night shift worker. Make sure you get to bed at the same time each evening, and wake up at the same time to wake each morning. Our bodies benefit from routine, so do what you can to keep the same sleep/wake cycle each day. Staying up late on weekends or for night shift workers, switching to daytime activities during your off time, results in very poor quality sleep.



- 11. Turn the lights off when you are going to bed. Melatonin is the signal to sleep at night, and light disrupts the release of melatonin. Light also stimulates the reticular activating system in the brain which regulates wakefulness and sleep. Remember your mother: get to bed lights out! You can also take melatonin supplements 0.2-5 mg 2 hours before bedtime, but you still have to turn the lights and devices off!
- **12.** Use a full spectrum light first thing in the morning to set your sleep wake cycle. This turns off your melatonin and helps set the time of your sleep wake cycle. To be effective, you need to use it at the same time each day and have your eyes open with indirect exposure for it to work. Your eyes should be open but not looking directly at the lamp is safe and best.
- 13. For insomniacs with anxiety, write in a daily journal each evening. If worrying is keeping you up at night, much of this is due to fear of the unknown. If you fill in the blanks with a list of specific worries and specific plans for the next day, week or month, then the anxiety and insomnia are reduced as you learn that you have some control over the process. Schedule a time at the end of the day or evening to allow you to write it all down and have specific plans to address each worry.
- **14. Silence your devices at night.** Chirping, chiming, and beeping will not help your sleep and fatigue. Our brains are designed to be alerted to potential danger when we sleep, and these sounds trigger this alert when you are sleeping. If there is a real need to be reached at night, restrict your notifications to this mode only.
- 15. For insomniacs, create an evening wind-down which may include Yoga, stretching, breathing exercises, listening to a relaxation recording or music, and visualization exercises. This will help break the mind-body loop of anxiety, worry, muscle tension and racing heart rate. For it to work you have to focus on the activity and be mindful. Download a relaxation recording or relaxing music and listen as you fall asleep. Remember, no lights on!
- **16.** If your sleep partner is interfering with your sleep try a different bed or room. They may have a sleep problem, but you may not.
- 17. Ask your provider whether a home sleep study is appropriate. If your sleep partner or you are suspicious that a sleep disorder may be present because you snore or gasp for breath while sleeping, discuss it with your provider. One key point: because you are unconscious while asleep, you cannot make this assessment, someone else must. Phone apps can also monitor how restful your sleep is and may be the place to start sorting this out, although watch apps seem to work better since they can monitor heart rate and movement.
- 18. Get evaluated for a vein condition. End of day/evening fatigue and poor sleep quality are often associated with a vein condition. If your legs or feet ache, hurt, cramp or are restless, you are fatigued and



these symptoms are worse in the evening, it may be caused by a vein condition. The stagnant blood flow causes inflammation in the body which leads to the symptoms. An evaluation including a vein ultrasound can sort this out.

- 19. Get evaluated for a sinus condition and sinus allergy. This can cause trouble breathing and sleep apnea. You may want to consider first trying over the counter antihistamines, eliminating dust/dander from your bedroom and using dust mite proof pillows they can really make a difference if this is your allergy. Read up on allergies and the effect on sleep.
- **20.** For smokers, cut down or stop smoking. Nicotine is a stimulant and interferes with sleep. Stopping is one of the biggest health challenges anyone will face. Ask your provider for suggestions on how to do this.

Take Control of Your Sleep to Take Control of Your Life

Sleep deprivation may not sound like a big deal until it becomes part of your everyday life. It is only then that you will experience its full impact on your mind and body. You have suffered enough already and do not need to allow the problem to get any worse. Try the suggestions above and see your healthcare provider if necessary. If you are concerned that the cause of your sleep issue is a vein condition, know that this is common and treatable. In fact, Medical News Today reports that about 25 percent of the population will experience a vein condition at some point in their life and often suffer leg symptoms and fatigue without knowing they have this diagnosis.

While some doctors may not consider poor sleep a health issue, I do. Evaluating people with poor sleep in my practice has shown me that it is a health and wellness issue that deserves close attention and, if needed, a proper treatment for relief.

