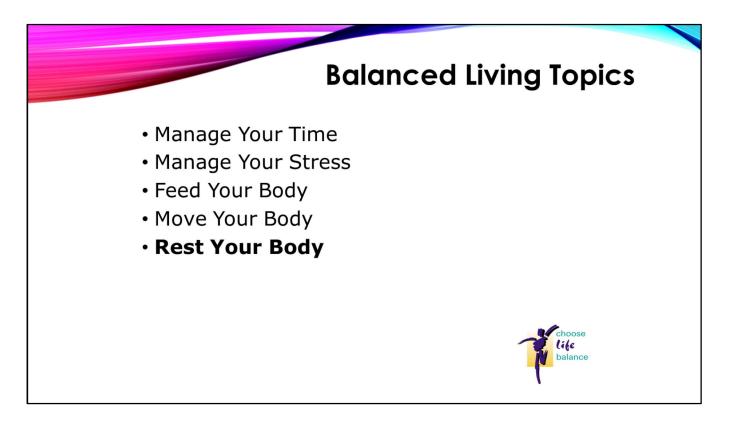
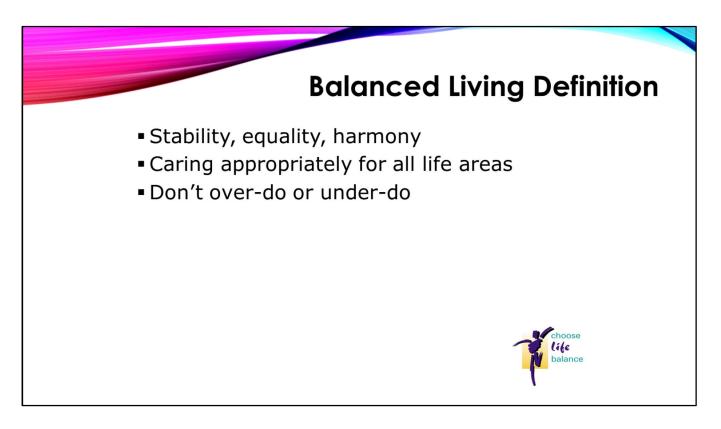


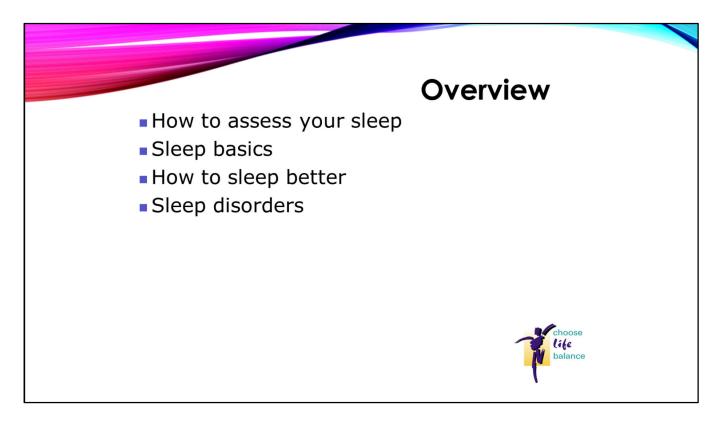
Welcome to the Choose Life Balance self-study course from K-State Research & Extension.



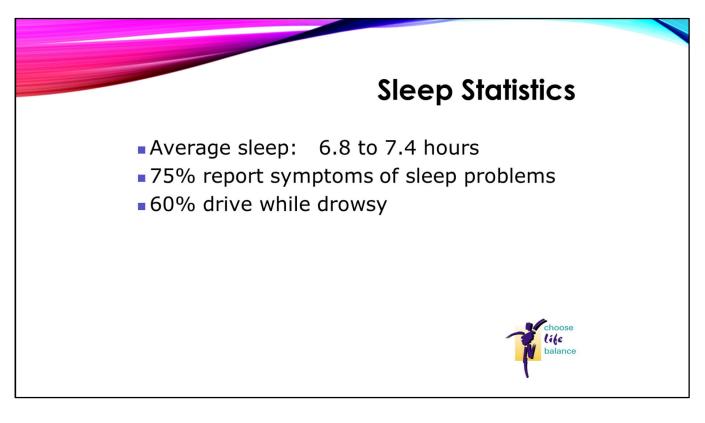
This self-study course will examine five topics that are important for balanced living: time management, stress management, nutrition, physical activity and sleep. This session will focus on the importance of sleep in balanced living.



A reminder that the definition of balance is stability, equality, and harmony. Overdoing or underdoing even good things can lead to imbalance. Ultimately, living an unbalanced life can lead to stress, health problems, poor relationships, and lost productivity.



Today you will assess how well you currently sleep and learn the basics of sleep. You will also learn strategies to sleep better. Finally, you will learn about common sleep disorders.

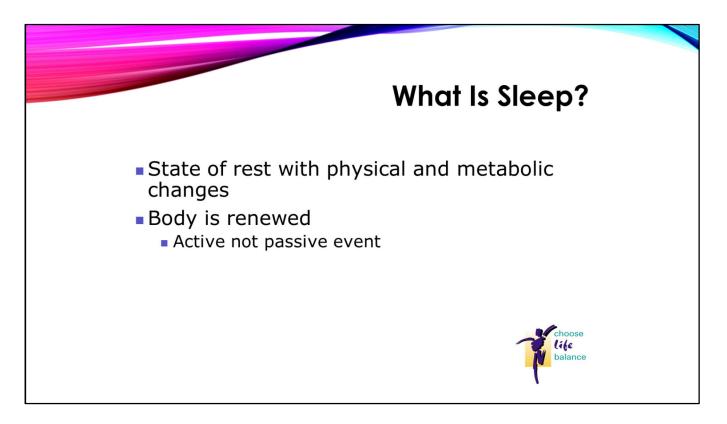


Every year, the National Sleep Foundation conducts the Sleep in America poll about different aspects of participants' sleep. Results from one of these polls included the following.

• Americans sleep an average 6.8 hours on weeknights and 7.4 hours on weekends. A majority of Americans (71%) do not get the recommended 8 hours of sleep needed for good health, safety, and optimum performance.

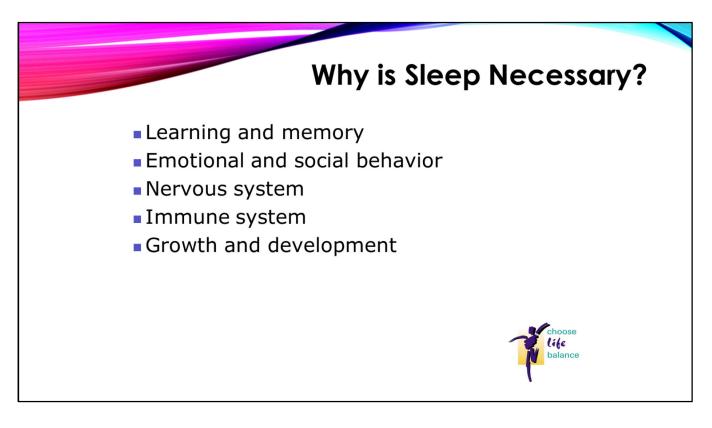
• A large majority (75%) of Americans report having had at least one symptom of a sleep problem a few nights a week or more.

• Sixty percent of America's adults who drive or have a license report that they have driven a car or motor vehicle when feeling drowsy.



Sleep is a state of rest for the body and mind. It is characterized by physical and metabolic changes including a relaxed posture, altered consciousness, decreased movement and responsiveness to stimulation, lower metabolism, and cycles of brainwave activity.

Despite all of these characteristics, sleep is not a passive event but an active process involving changes and renewal of the body and mind.



Sleep helps restore and rejuvenate many body functions.

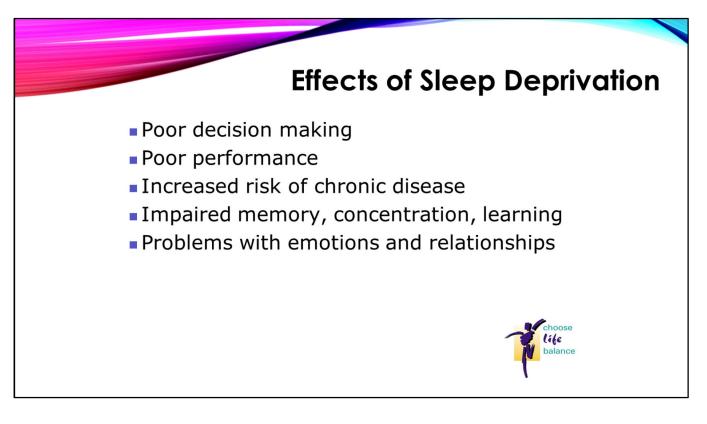
• Learning and memory. Sleep helps solidify new learning in your brain. It also helps consolidate, organize, and recover memories.

• Emotional and social behavior. Sleep is necessary for rational, emotional, and social behavior. Those who do not get enough sleep experience more activity in the emotional centers of the brain which can lead to irrational behavior.

• Nervous system. Sleep helps the body repair neurons used during the day to keep the nervous system working properly.

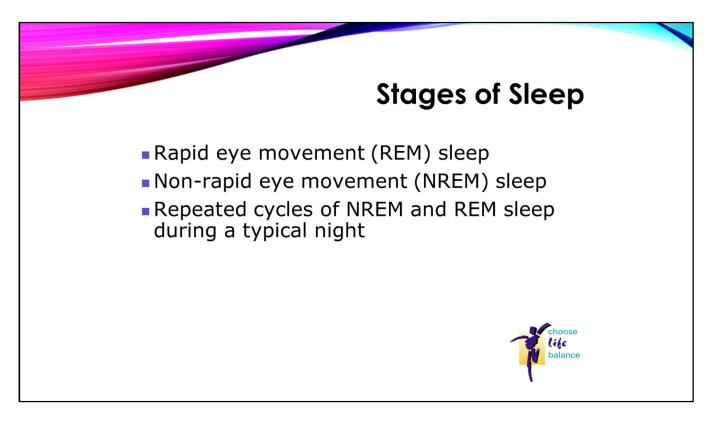
• Immune system. Sleep keeps the body's immune systems working properly to provide protection from infection and disease.

• Growth and development. The body releases growth hormones during sleep. Sleep is important for proper physical and mental development.



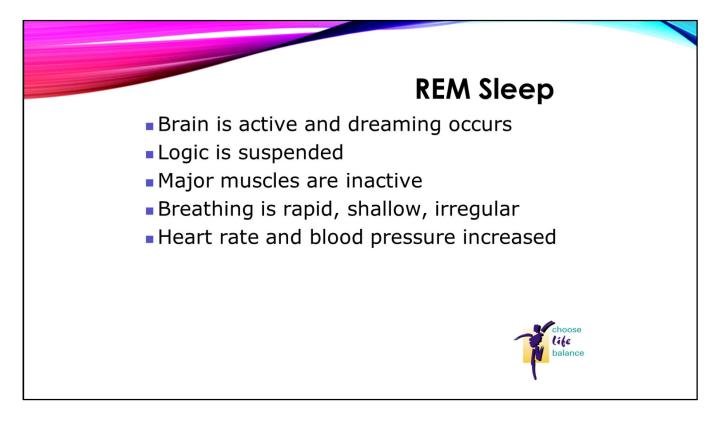
Sleep deprivation affects you both physically and mentally. It can be characterized by the following:

- Poor decision making, poor judgment, and increased risk taking
- Poor performance in school, at work, in sports and other physical activities, and while driving
- Increased risk of developing health problems, including obesity, diabetes, high blood pressure, and heart disease
- Impaired memory, concentration, and ability to learn
- Problems with emotions (including anxiety and depression) and relationships



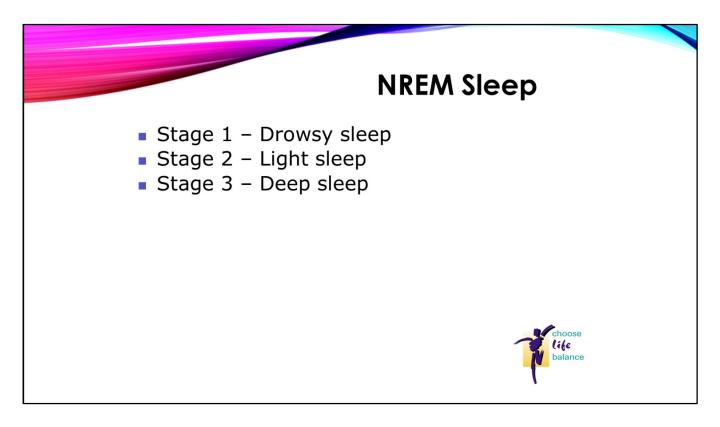
Sleep is typically divided into Rapid Eye Movement (REM) sleep and non-Rapid Eye Movement (NREM) sleep.

People experience repeated cycles of NREM and REM sleep during a typical night. Most memorable dreaming occurs during REM sleep.



During REM sleep, your brain is active, and you dream intensely. Logic, however, is suspended which is the reason that most dreams do not make sense if you remember them. Your major muscles (like arms and legs) do not move during REM sleep. Because of this, you don't act out your dreams. Other physiological changes that occur during REM sleep include rapid, shallow, and irregular breathing, and increased heart rate and blood pressure.

REM sleep is important because it helps us process emotions, retain and solidify memories, relieve stress, and transfer information from short- to long-term memory.



NREM sleep is divided into three stages:

• Stage 1: Drowsy sleep. During this stage, the eyes move slowly under the eyelids, and muscle activity slows down. You awaken easily during this stage.

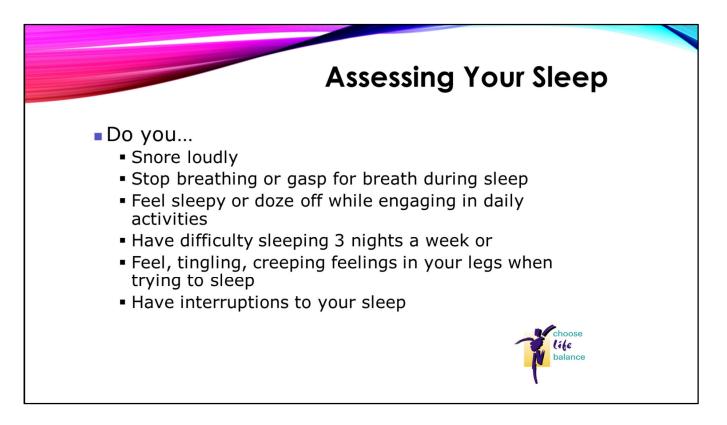
• Stage 2: Light sleep. In stage 2, your eyes do not move, your heart rate slows down, and your body temperature decreases.

• Stage 3: Deep sleep. In this stage, you are not easily awakened. The body repairs itself and regenerates tissues. Your physical energy is restored. Bones and muscles are built, and immune functions increase.

How Much Sleep?		n Sleep?
Group	Sleep Needed	
Infants	16 hours	
Babies/toddlers (6 months-3 years)	10-14 hours	
Children 3-6 years 6-9 years 9-12 years	10–12 hours 10 hours 9 hours	
Teenagers	9 hours	
Adults	7–8 hours	
Older adults	7–8 hours	Choose
Pregnant women	May need more than 7–8 hours	balance

The table on this slide gives general recommendations for the amount of sleep needed for people in different age groups.

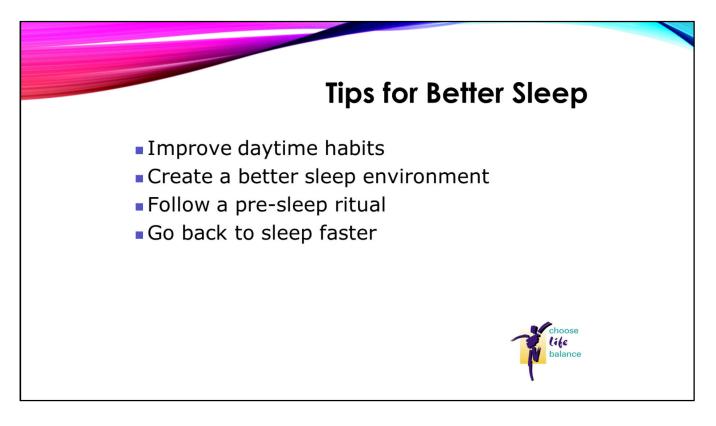
These are based on averages and vary by individual. The amount of sleep that you need depends on your genetic makeup, the amount of exercise you get, your daily activities, and the quality of your sleep. The key to knowing whether you are getting enough sleep is whether you wake up refreshed and don't feel sleepy throughout the day.



The National Sleep Foundation has many sleep tools and quizzes.

Right now you will use one of them. Handout 1 will help you determine the quality of your sleep and identify whether you may be at risk for a sleep disorder.

It should not be used to diagnose yourself, but to help you evaluate certain aspects of your sleep. If the results concern you, you should consult your health care provider.



While there are many possible reasons for having sleep problems, one may be poor sleep habits. Getting a better night's sleep may be as easy as making some simple lifestyle changes.

The tips for sleeping better include the following:

- Improve daytime habits
- Create a better sleep environment
- Follow a pre-sleep ritual
- Go back to sleep faster



• Surround yourself with bright light soon after awakening. Bright light helps regulate your body's natural biological clock. It can help you wake up more fully and be ready to face the day.

• Exercise at the right time. Regular exercise can improve your sleep; however, timing is the key. Because exercise stimulates your body, some research suggests it is best to avoid exercise in the evening or night. Other research indicates that the time you exercise may have little effect on sleep quality. Your sleep response to exercise will be highly individual. Listen to your body and exercise at the time of day that is best for you.

• Avoid napping. Napping can throw off your body's clock, making it difficult to fall asleep and stay asleep at night. If you need to nap, try to limit it to 30 minutes or less.

• Limit caffeine and alcohol. Caffeine is a mild stimulant and can keep you awake. While it is unlikely that moderate caffeine intake will disrupt sleep, heavy daily caffeine use (more than 500 to 600 milligrams a day, or about four to seven cups of coffee) can cause sleeplessness. Additionally, caffeine can stay in your body for up to 8 hours, so avoid caffeine after 2 p.m. for better sleep.

• Even though alcohol may decrease the time it takes to fall asleep, it can disrupt normal sleep patterns during the second half of the sleep period and can lead to less overall

sleep. Even consuming a moderate dose of alcohol as much as 6 hours before bedtime can increase wakefulness during the second half of sleep. If you are having trouble sleeping, you may want to avoid drinking alcohol after 6 p.m.

• Don't smoke. Nicotine is a stimulant which can make it hard for you to fall asleep and stay asleep. In addition to the sleep benefit, there are many other health benefits for those who do not smoke.



• Have a comfortable bed. Test different types of mattresses and pillows to find the ones that are most comfortable for you. If you are frequently disturbed by a restless bedmate, try switching to a larger bed.

• Save the bedroom for sleeping. Reading, watching television, paying bills, or working on the computer while in your bedroom can actually hurt your sleep. When you do these other activities, your body associates these activities with the bedroom. For this reason, it is recommended that the bedroom be saved for sleeping and intimacy.

- Keep the bedroom peaceful.
- Quiet. To keep your bedroom quieter, close doors and windows. Use a fan or a "white noise" machine to help block outside noises. Try ear plugs if needed.
- Dark. Block out light sources by closing doors and windows, turning around your clock and other sources of light, or using a sleep mask.
- Comfortable. Make sure that your bedroom is well ventilated and at a consistent temperature. A temperature that is too low or high can disrupt sleep. Most people sleep best at a temperature around 65 degrees Fahrenheit.

- Without pets. Consider keeping pets off your bed and out of your bedroom. They can

disrupt your sleep by aggravating allergies, making movements or sounds, and affecting temperature.



• Keep a regular sleep schedule. This includes going to bed and waking up at about the same time every day, even on weekends and holidays. A regular sleep schedule helps your body to expect sleep at the same time every day. Even if you have a poor night's sleep, it is best to still stick to your sleep schedule so you don't make it harder to have a good rest the next night.

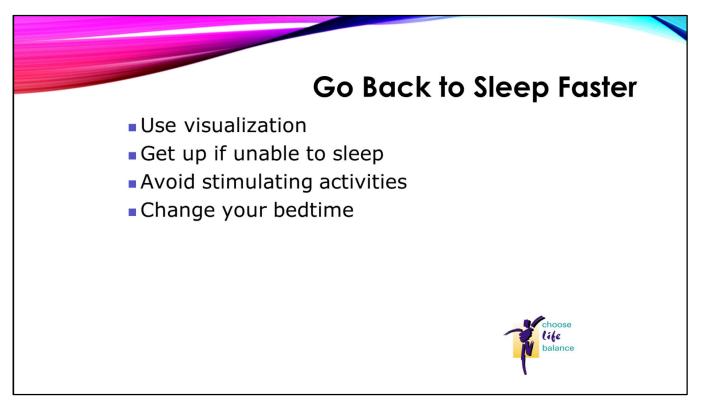
• Avoid over-the-counter sleep aids. There is little scientific evidence that supplements and other over-the-counter sleep aids are effective. In some cases, there are safety concerns. For example, antihistamine sleep aids tend to stay in your system a long time and may cause daytime drowsiness. Also, make sure that your prescribed medications do not affect your sleep. Always talk with your doctor before taking over-the-counter sleep aids.

• Embrace bedtime rituals. Bedtime rituals tell your body that it is time to slow down and prepare for sleep. Like a regular sleep schedule, your body will do best if you establish a certain bedtime routine that includes rituals. Rituals may include listening to soft music, taking a warm bath, reading for pleasure, meditating, and doing relaxation or breathing exercises.

• Eat right for you. A full stomach and/or indigestion from a large, heavy meal can disturb your sleep. However, hunger can also affect your sleep. Try to eat your dinner at

least 2 hours before going to bed to prevent a large, heavy meal from disturbing your sleep. Conversely, if you are hungry at bedtime, include a light bedtime snack. What about liquids? Drinking liquids before bed may also interrupt sleep. Steer clear of drinking fluids at least 2 to 3 hours before bedtime to avoid needing to use the bathroom during the night.

• Write down worries. Worry and anxiety excite the nervous system and make it harder for you to sleep. Write down your worries and possible solutions before you go to bed to avoid thinking about them all night. A journal or task list can aid you in letting go of your concerns until the next day.



Everyone wakes up during the night, but sometimes it is harder to go back to sleep than others. Here are some ideas that may help.

• Use visualization. Think about repetitive or mindless things so that your brain will slow down and succumb to sleep. For example, focus all your attention on your toes, or picture that you are walking down an endless flight of stairs.

• Get up if unable to sleep. Do not lie in bed awake. Worrying about falling asleep may actually keep you awake, and you do not want to associate your bed with worry and anxiety. Get up and go into another part of the house, but leave the lights off. Anxious thoughts will usually stop right away. If they do, go back to bed and fall asleep. If anxious thoughts don't go away, perform a relaxing activity until you feel sleepy.

• Avoid stimulating activities. This is especially important right before bed and in your bedroom. Activities to avoid include reading anything job-related, intense, or upsetting; watching a stimulating television program; and working on the computer. Additionally, avoid bright light. Any light signals the brain to wake up, especially blue light like in , computers, cell phones or digital clocks.

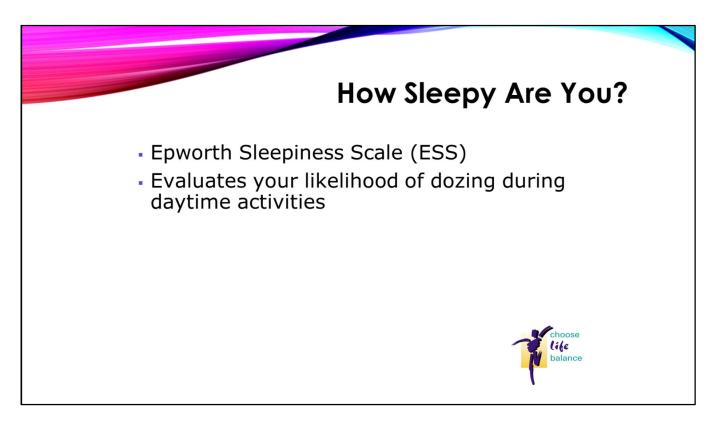
• Change your bedtime. If sleeplessness and insomnia occur consistently, try going to bed later so that the time you spend in bed is spent sleeping. If you get only 4 hours of

sleep at night, figure out what time you need to be up and subtract 4 hours. (For example, if you want to get up at 7:00 a.m., go to bed at 3:00 a.m.) You may feel that this is depriving yourself of sleep, but the process can help train your body to sleep consistently while in bed. When you are spending all of your time in bed sleeping, you can gradually sleep more by adding 15 minutes at a time.



Keeping a sleep diary can be a great way to identify what is preventing you from sleeping well. Here are things to include in your sleep diary:

- Bedtime and waking time.
- Total sleep hours and time spent awake during the night. Include when and what you did while you were awake.
- Sleep quality.
- Caffeine, alcohol, drugs, and medication. Include how much and when you consumed caffeine and/or alcohol during the day. Also jot down any medications you took; include when you took it and how much you took.
- Food and drink. Include what, when, and how much you ate.
- Feelings. Write down your feelings and emotions, like happiness, sadness, stress, or anxiety.

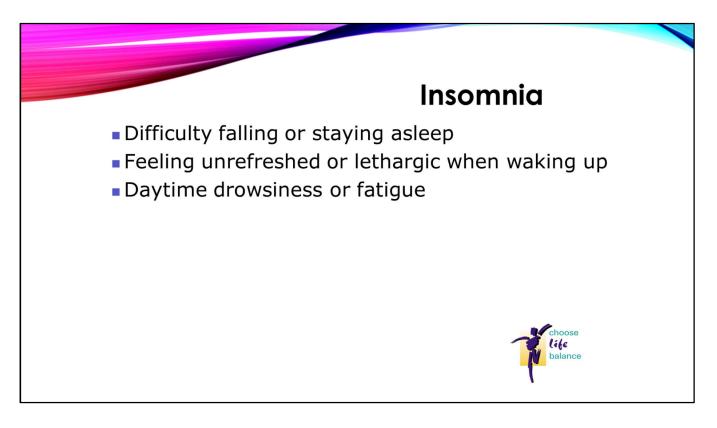


Handout 2 is used to help measure your level of daytime sleepiness, which can be a symptom of a sleep disorder. Answers are rated on the Epworth Sleepiness Scale (ESS), the same assessment tool used by sleep experts worldwide. This questionnaire can help you evaluate certain aspects of your sleep but should not be used to diagnose yourself. If the results of this questionnaire concern you, consult your health care provider.

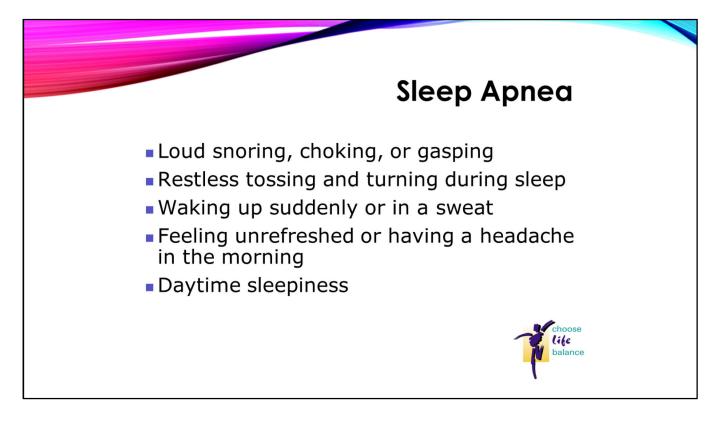


Some behaviors during the day are signs of sleep deprivation, including irritability, sleepiness, slow reaction time, inability to concentrate, and depression. Look back at the "How Sleepy Are You?" questionnaire.

If you are experiencing one or more sleep deprivation signs during the day, you may not be getting a restful night's sleep or you may have a sleep disorder. While there are many different types of sleep disorders, some of the more common ones are insomnia, sleep apnea, restless legs syndrome, and narcolepsy. We will be discussing some common symptoms of each of these sleep disorders. If you feel you may have one of these sleep disorders, consult your physician.



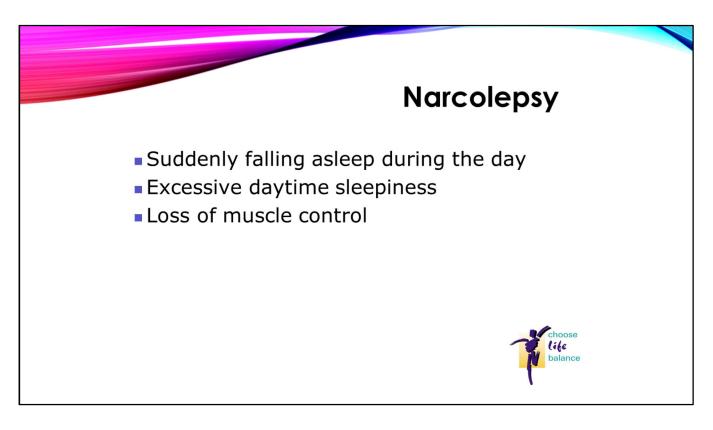
Insomnia is the significant lack of high-quality sleep. It can be short- or long-term. Possible causes may include stress, change in time zone or sleep schedule, poor sleep habits, or an underlying medical or psychiatric condition. Symptoms include difficulty falling asleep even though tired (some people may use harmful sleep aids, such as habitforming pills or alcohol, to fall asleep); awakening during the night or too early and not being able to get back to sleep; feeling unrefreshed or lethargic when waking up in the morning; and daytime drowsiness, fatigue, or irritability.



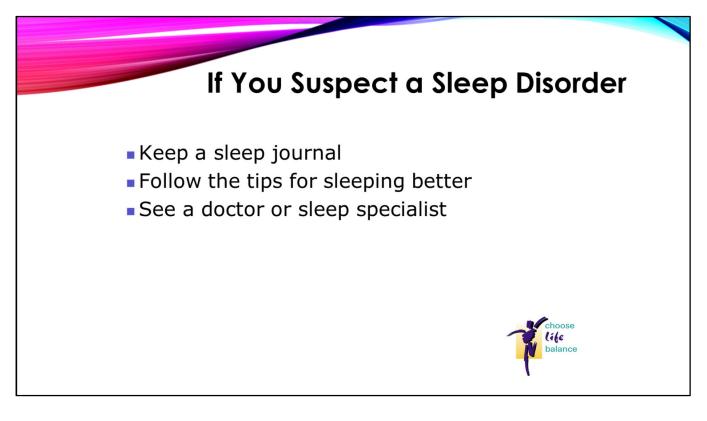
Sleep apnea is a very serious, potentially life-threatening disorder in which people stop breathing repeatedly while they sleep. Some of the symptoms of sleep apnea include loud snoring; choking or gasping during sleep to get air into the lungs; restless tossing and turning during sleep; waking up suddenly to restart breathing or waking up in a sweat during the night; feeling unrefreshed or having a headache, sore throat, or dry mouth in the mornings after waking up; and daytime sleepiness, including falling asleep at inappropriate times, like while driving or at work.



RLS is a sensation in the legs that usually causes people to move their legs in order to deal with the sensation. This delays the onset of sleep. Some of the symptoms for RLS include the irresistible urge to move legs due to uncomfortable tingly or creeping sensation and small jerky movements of the toes, feet, and legs as you are trying to fall asleep.



Narcolepsy is a chronic neurological disorder affecting the part of the brain that regulates sleep. Some of the symptoms of narcolepsy include intermittent, uncontrollable episodes of falling asleep during the day; excessive daytime sleepiness; and sudden, short-lived loss of muscle control during emotional situations.



If you suspect that you may have a sleep disorder, here are a few steps that will help with getting diagnosed.

• Keep a sleep journal. Begin by recording sleep habits and daily routine as mentioned earlier.

• Follow the tips for sleeping better. Most common sleep problems can be solved by making lifestyle changes and improving your sleep habits. Many tips for improving sleep habits were discussed earlier.

• See a doctor or sleep specialist. If you make lifestyle changes and improve your sleep habits but your sleep does not improve, it is time to see a doctor or sleep specialist. Medical professionals diagnose sleep disorders based on a number of factors including symptoms, age, gender, psychological and medical history, sleep diary, sleep questionnaires, and sleep tests.



Today we have discussed several methods to help you sleep better. First, you learned some basic information about sleep so that you can understand it better. Next, you learned how to assess your sleep using two questionnaires. Then, you learned some tips for improving your sleep habits. Finally, you learned about common sleep disorders.

Your goal this week is to set a specific goal for getting better sleep that will help balance your life. Use **Handout 3** to write down your goal and monitor your progress.

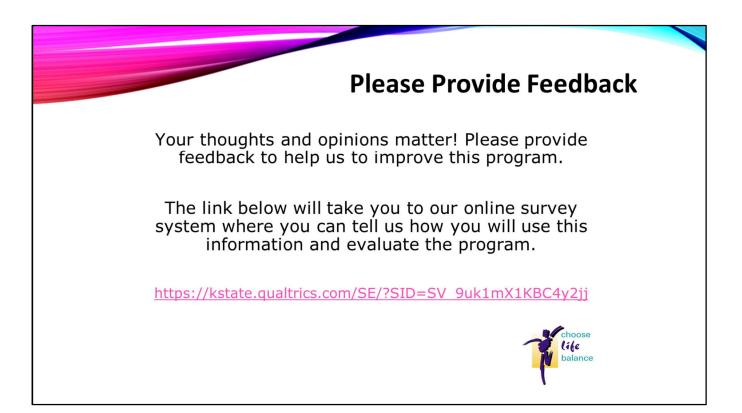
• **S** = **Specific.** Rather than say, "I will simplify my mornings," choose something specific such as "I will set the table for breakfast before I go to bed."

• **M** = **Measurable**. If your goal is measurable, it is easier to track. An example would be to say "I will relax for 30 minutes before bed each night," rather than "I will relax more."

• A = Achievable. Goals that are too lofty set you up for failure. Paying off all your debts in a year may not be achievable. It would be better to set a goal to not add further debt and to focus on paying off one debt at a time.

• **R** = **Rewarding.** You will be more motivated to complete goals that are personally rewarding.

• **T** = **Time-bound.** Set a time frame for accomplishing your goal. Don't say "I'll clean out my closet when I have time." Set a deadline instead, such as "I will spend 10 minutes per day cleaning my closet until it is done," or "I will clean my closet on Saturday morning before lunch."





As we come to a conclusion of the five-part program, Balanced Living, let's take a moment to reflect back on what we have discussed.

While there are many individual and common factors that play a role in balanced living, the five topics we have discussed are essential aspects: balancing your time, managing your stress, feeding your body mindfully, moving your body, and resting your body.

I hope that you will continue to work on the goals you have set in this program and make new goals toward balanced living. Balanced living is not a *destination* but rather a *process*. You will find that you will need to constantly work toward balanced living, but it is worth it. I hope you will use the resources that were provided in this program to help you on your journey toward living a full and balanced life.

In about 1 month, you will receive a follow-up survey to help us further evaluate Balanced Living. I encourage you to fill it out and return it.

Thank you for participating in the Balanced Living program.



