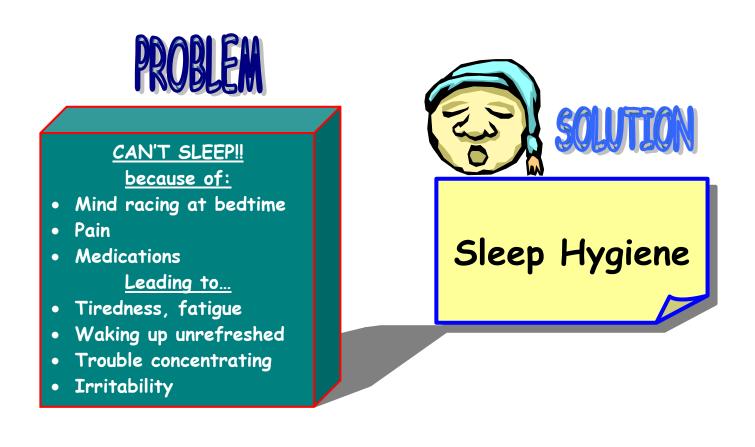
YOU REALLY NEED TO SLEEP: Several methods to improve your sleep

Sleep is essential to our well-being. When humans fail to get good sleep over a period of time, numerous problems can occur.



Why is sleep so essential??

<u>Sleep is an opportunity for our bodies to repair themselves:</u>

• Some forms of sleep are associated with **physical repair** (e.g. torn muscles, organ cleansing, etc.)

• Other forms of sleep are associated with **psychological repair** (e.g. laying down memories, working though anxiety etc.).

• Physical repair is associated with slow brain wave patterns, whereas psychological repair is associated with active dream states. The brain waves of a dreaming person look very similar to someone who is awake.

- ⇒ On average, adults cycle through all forms of sleep every 90 minutes. Therefore if a person sleeps for 8 hours, he or she will have 5 opportunities to repair both the physical and psychological systems. Eight hours is the average length of time that adults sleep.
- ⇒ Each 90-minute cycle serves a unique function. When a person first falls asleep, the bulk of that 90 minutes is spent in physical repair with only a small percentage dedicated to psychological repair. As the night wears on,



the balance shifts so that in the morning, just before awakening, very little time is spent in physical repair with the bulk of sleep time being dedicated to psychological repair. While we do have some dreaming every 90 minutes, we have much more of it near morning. Thus we are more likely to remember dreaming if we awaken during a cycle that is dominated by dreaming.

- ⇒ Age influences the balance of the 90-minute cycles. Babies spend the bulk of their sleep time in a dream state since their bodies require very little repair. Older adults, on the other hand, spend a disproportionate amount of their sleep time in physical repair, as aging bodies are more vulnerable to damage.
- \Rightarrow Recent research also points to inadequate sleep as a factor in the development of obesity and diabetes.

When emotional distress and worry interfere with sleep patterns, the natural ability of the body to repair itself becomes disrupted. If sleep is disrupted over a long period of time, necessary physiological and psychological repair cannot take place, which can lead to pain, fatigue, and memory and thinking difficulty.

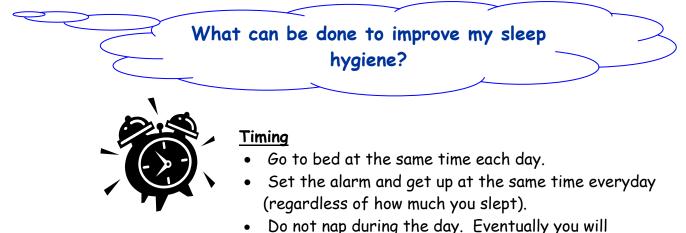
What is insomnia?

About a third (27%) of Americans have occasional insomnia. Nine percent have chronic insomnia. The most common cause of insomnia is a big change in daily routine. Other causes include pain, nausea, shortness of breath, depression and anxiety.



Sometimes insomnia goes away on its own. Sometimes your doctor will prescribe a sleeping pill if the insomnia is short lived. Sometimes people have an alcoholic drink or use over-the-counter sleep preparations that contain alcohol. While these may help you to fall asleep, alcohol suppresses mental activity that you need if the Dream State is going to produce psychological repair. Frequently people do not awaken feeling refreshed following the use of alcohol.

When insomnia is ongoing, the most common approach to treatment is to alter sleeping habits.



reestablish a sleep pattern.

Sleep Behavior

- Go to bed only when sleepy
- Use the bed only for sleep or sex (do not read, eat, watch TV in bed)
- If unable to sleep get out of bed
- Don't lie in bed for more than 15 minutes get up
- Engage in quiet activity return to bed when sleepy
- Repeat the above strategy for as many times as is necessary
- You must teach your body to associate the bed with sleep, not frustration.



• Restrict the amount of time you spend in bed to your usual amount of sleep (e.g. 7 hours) even if you did not get to sleep as well as you would have liked.

- Making an "effort" to fall asleep will not produce sleep.
- Sleep should not be effortful.
- Avoid mentally stimulating activity just before bed (e.g. action movie, stimulating conversation).
- Mentally guiescent tasks such as listening to music, calming thoughts etc. can help.
- Relaxation techniques such as visual imagery and the tense-relax skill can help.

UMHS 2003, Dr. D. A. Williams and Dr. M. Carey

Thermal Tips

- You can raise body temperature by exercising 3 to 4 hours before bed.
- You can raise body temperature by taking a warm bath 20 minutes before bed.
- Sleeping is associated with a decline in core body temperature *from* a state of relative warmth.

Bedroom Environment Tips

- Maintain a steady temperature in the room throughout the night.
- Fluctuations in room temperature disrupt the Dream State.
- Illuminated wall clocks have been associated with awakening.
- Keep the room dark.

Ingestion

- Caffeine (a stimulant) should be discontinued 4 to 6 hours before bedtime.
- Nicotine (a stimulant) should be avoided near bedtime and upon night waking.
- Alcohol (a depressant) causes awakenings later in the night (though initially may promote falling asleep).
- A light snack may be sleep inducing; a heavy meal too close to bedtime is an interference.

Mental Control



Breathing Relaxation is a great relaxation skill that was covered in the "How does stress relate to FMS" module. Don't forget to continue to use





deep breathing on its own or in combination with additional relaxation skills. The relaxation chapter will also give you new relaxation skills to choose from.

Now let's focus on how to improve sleep with sleep hygiene......







<u>Purpose</u>: to improve quality and quantity of sleep <u>Goal</u>: 1) monitor sleep habits to recognize sleep problems 2) try sleep hygiene strategies to improve sleep

Step 1: SLEEP TRACKING. In order to better understand how you sleep, it is helpful to keep a log of your sleep patterns. For the first three days, please answer all questions on the sleep diary after you get up in the morning. It is important that you complete this diary every morning for those three days. For example, when you get up on Wednesday morning, complete the sleep information for Tuesday night. It may be difficult to estimate how long you take to fall asleep or how long you are awake at night but please just record your best estimate. If there is an unusual event on a given night (e.g. emergency) make note of it. Below are some guidelines to help answer each question.

- Napping: Record the times for all naps (intentional or not). For example if you doze off while watching TV record this as a nap. Please include AM or PM
- 2. Bedtime: This is the time you actually went to bed and turned off the lights.
- 3. Sleep-onset latency: Provide an estimate of how long it took you to fall asleep after you turned off the lights.
- 4. Number of Awakenings: This is the number of times you remember awakening during the night.
- 5. Duration of Awakenings: Estimate how many minutes you spent awake after each awakening during the night.
- 6. **Morning Awakening**: Record the time of your last awakening before you decided to start your day.
- 7. Out-of-bed time: Record the time you got out of bed to start your day.

Step 2: SLEEP HYGIENE. After monitoring your sleep, notice what kinds of sleep difficulties you are having (e.g., difficulty falling asleep, difficulty staying asleep). Then, choose the sleep hygiene strategies you would like to try to help you improve those areas. Choose at least one new strategy to try. For the next 4 days, place a check next to the strategy you tried.



Step 1: For the first three days, monitor your sleep habits by answering the questions after you get up in the morning.

Step 2: Choose at least one new sleep hygiene strategy that you would like to try. For the last four days, place a check next to the strategy you actually tried.

(sample)

Monitoring	EXAMPLE	Day 1	Day 2	Day 3	Sleep Hygiene Strategies	Day 4	Day5	Day6	Day 7
Naps (record	2pm-2:45	None	2:20-	9-	Same bedtime every day		\checkmark		
times)	4pm-6pm		2:25pm	9:20pm	Same wake time every day	\checkmark		\checkmark	
					Avoid naps	\checkmark		\checkmark	\checkmark
Bedtime (record	10:30pm	11:15pm	11:30pm	12am	Go to bed only when sleepy				
time)					Use bed only for sleep/sex				
					Leave bed if can't sleep				
It tookmin.	45 min	3 min	25min	20min	Stay in bed only 7-8 hrs				
to fall asleep					Warm body with exercise				\checkmark
					Warm body with bath				
I woke up	3	3	2	1	Keep bedroom constant temp				
times					Keep bedroom dark				
					Avoid alcohol				
Each time I woke	20	5	15	4	Avoid caffeine	\checkmark			
up it tookmin	10	5	15		Avoid nicotine				
to fall asleep	30	10			Eat light meal/snack before bed				
again					Avoid stimulation before bed			\checkmark	
I awoke for the	6:30am	5:45am	6:15am	6:30am	Relax with music before bed		\checkmark		
last time at what					Relax with deep breathing				
time?					Relax with other strategy				
I got out of bed	6:45am	5:45am	6:35am	6:30am					
at what time?									

Let's Summarize...

- Good sleep is necessary for our well-being.
- We cycle through different sleep stages throughout a night's sleep. Earlier stages are necessary for **physical** repair, later stages are important for **psychological** repair and memory.
- For ongoing sleep difficulty, the most effective treatment is to alter sleep habits. Eliminating napping, avoiding caffeine and other stimulants, keeping regular bedtime and wake-up times, keeping the bedroom quiet and dark, and practicing relaxation techniques before bed can all help improve sleep.
- Find a relaxation exercise that suits you best. They are all effective.



Step 1: For the first three days, monitor your sleep habits by answering the questions after you get up in the morning.

Step 2: Choose at least one new sleep hygiene strategy that you would like to try. For the last four days, place a check next to the strategy you actually tried.

Monitoring	EXAMPLE	Day 1	Day 2	Day 3	Sleep Hygiene Strategies	Day 4	Day5	Day6	Day 7
Naps (record	2pm-2:45				Same bedtime every day				
times)	4pm-6pm				Same wake time every day				
					Avoid naps				
Bedtime (record	10:30pm				Go to bed only when sleepy				
time)					Use bed only for sleep/sex				
					Leave bed if can't sleep				
It tookmin.	45 min				Stay in bed only 7-8 hrs				
to fall asleep					Warm body with exercise				
					Warm body with bath				
I woke up	3				Keep bedroom constant temp				
times					Keep bedroom dark				
					Avoid alcohol				
Each time I woke	20				Avoid caffeine				
up it tookmin	10				Avoid nicotine				
to fall asleep	30				Eat light meal/snack before bed				
again					Avoid stimulation before bed				
I awoke for the	6:30am				Relax with music before bed				
last time at what					Relax with deep breathing				
time?					Relax with other strategy				
I got out of bed	6:45am								
at what time?									