

REST: Restoring Effective Sleep Tranquility

Group A Tuesday Feb. 2, 2016 12:15-1:15

Week 2

Agreements

- Talking one at a time
- No Judgment
- Be an Active Listener
- Take care of yourself
- Confidentiality

Our room will be open at 12:00
Please be prepared to begin at 12:15

RELAXATION IS A PRACTICE

The great thing about relaxation is that
it doesn't have to be perfect,
it's a *practice*,
an ongoing process

How was your calming breath practice last week?

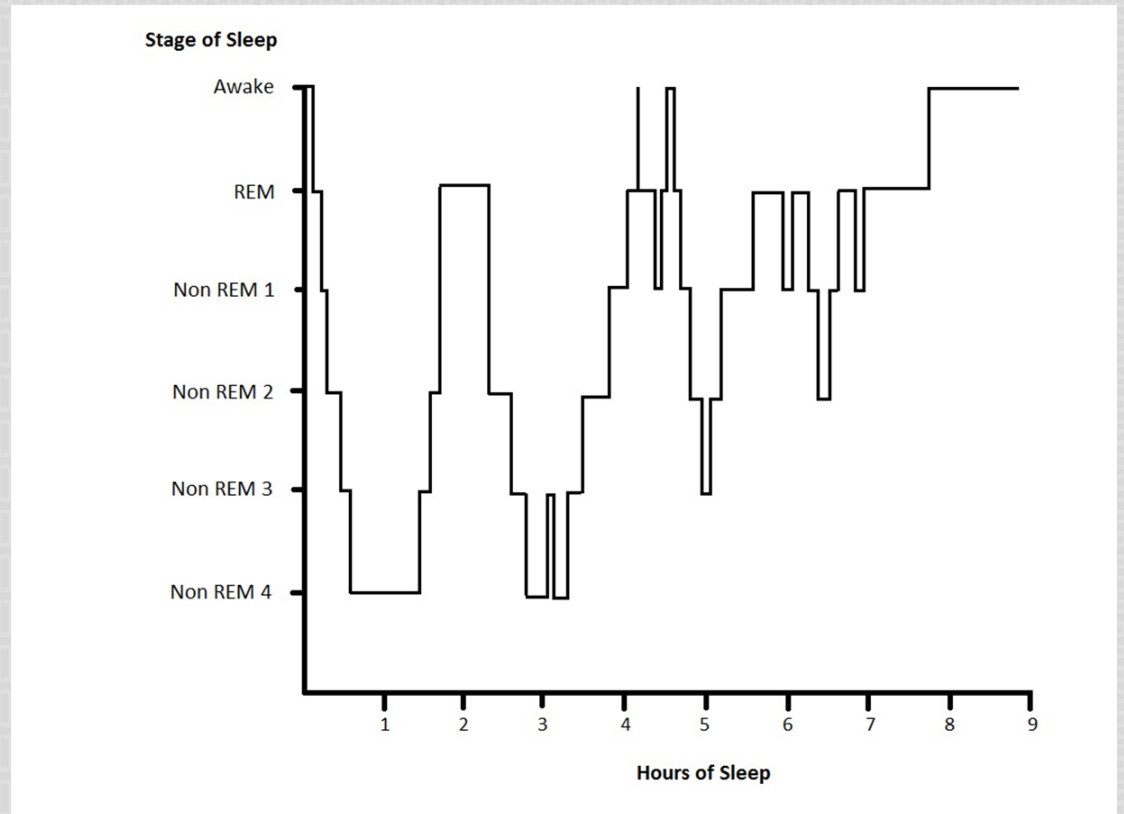
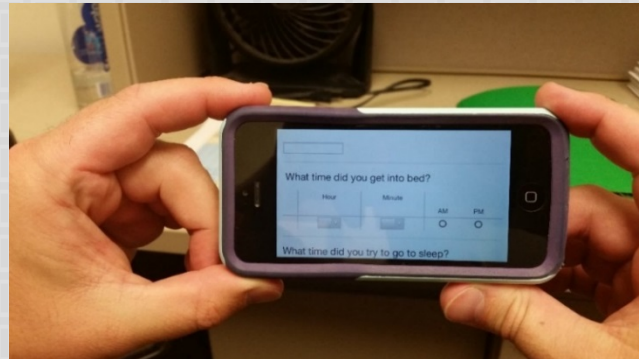
Introducing Calming Breath Practice Tools

- Breathing is the body's internal mechanism to calm us down
- Practiced, slower breathing may stimulate the parasympathetic reaction
- Progressive guided breathing exercises from 3-10 minutes
- Please – Practice daily...



What have you learned about your sleep from completing the daily sleep diary?

- How's the sleep diary going?
- What difficulties do you have falling or staying asleep?
- How's the Fitbit working?



SLEEP IS THE NUMBER ONE HEALTH PROBLEM SOLDIERS FACE

This Is The Number One Health Problem Soldiers Face

Deployed soldiers are sleeping as little as three hours a night.



Erin Schumaker
Healthy Living Editor, The Huffington Post



Posted: 09/14/2015 07:00 AM EDT



WAKIL KOHSAR VIA GETTY IMAGES

Body Clock

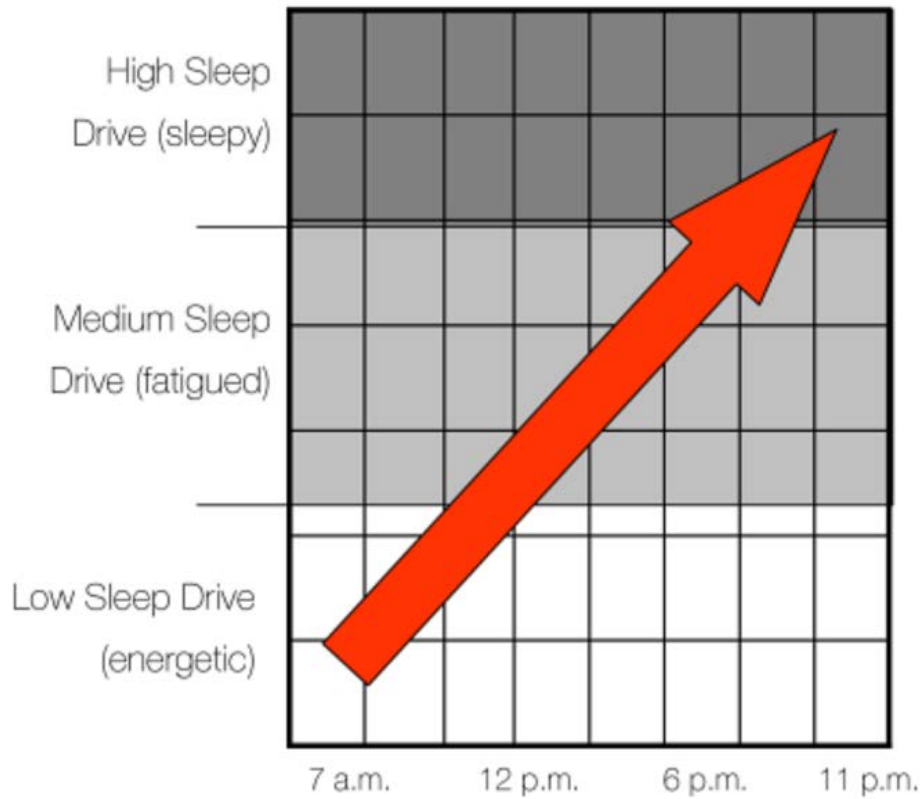
- Your internal clock controls the timing of your bodily systems – notably SLEEP...
 - When and how much of different hormones are released (e.g. melatonin)
 - Natural rise and fall of body temperature
 - When we feel mentally, physically, and emotionally best and worst
 - morningness and eveningness (Lark or Owl)



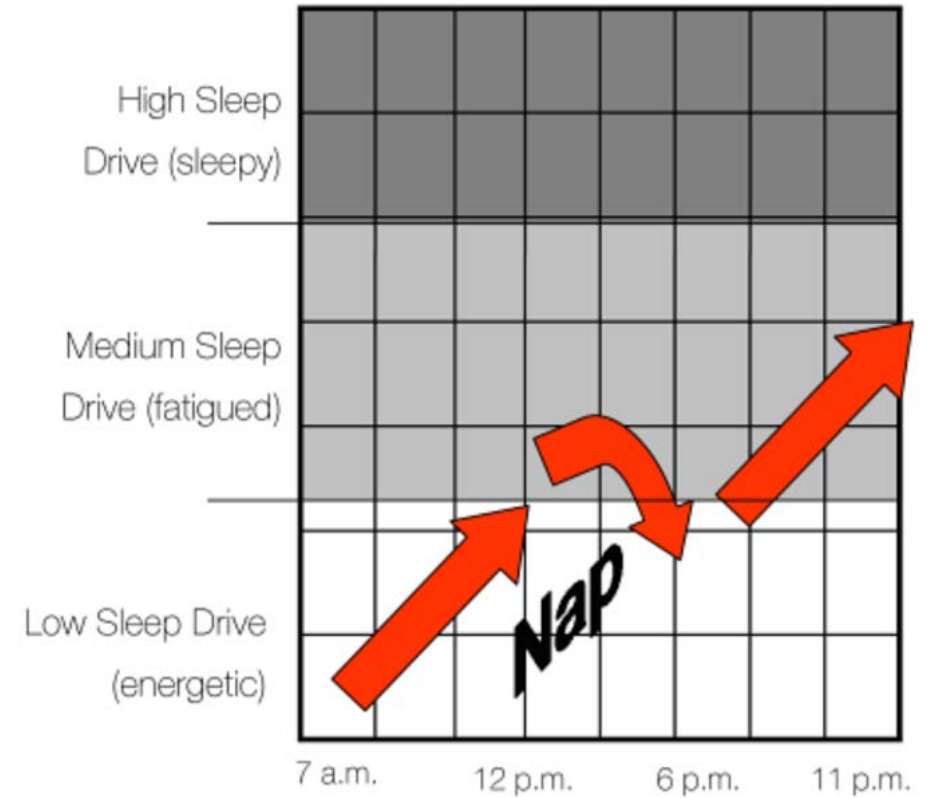
Image from Dreamstime (<http://www.dreamstime.com/royalty-free-stock-photos-body-clock-image3822838>)



SLEEP DRIVER SYSTEM



Under normal circumstances, the drive for sleep builds throughout the day until the drive is strong enough at bedtime to produce sleep.



Sleep drive builds as the day goes on; however, napping reduces sleep drive significantly, such that there's not enough time to rebuild enough of a sleep drive before bedtime.

- **Losing sleep one night has a positive effect on the next night's sleep:**
 - The sleep driver pushes more strongly for sleep the longer you're awake and active during the day
 - If you're awake during the night, the driver will push for sleep the next night to compensate

Body Clock and Sleep Driver

- When your usual bedtime approaches:
 - Body clock decreases alert signals
 - Sleep driver operates at its maximum level
 - Balance tipped in favor of sleep
- During the night:
 - Sleep decreases the pressure from the sleep driver
 - Body clock continues to decrease its alert signal
 - 2 hours before you naturally wake up, body clock increases alert signal again and signal from sleep driver is at its minimum level

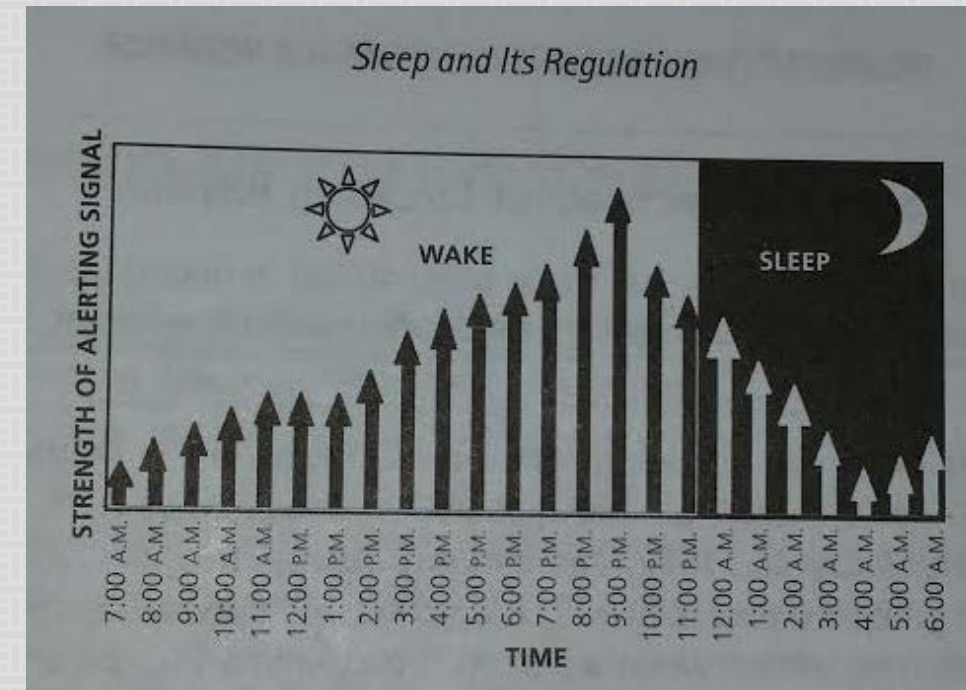


Image from Manber & Carney (2015) Treatment plans and interventions for insomnia (p 19)

Help Your Body Clock “Reset” Each Day

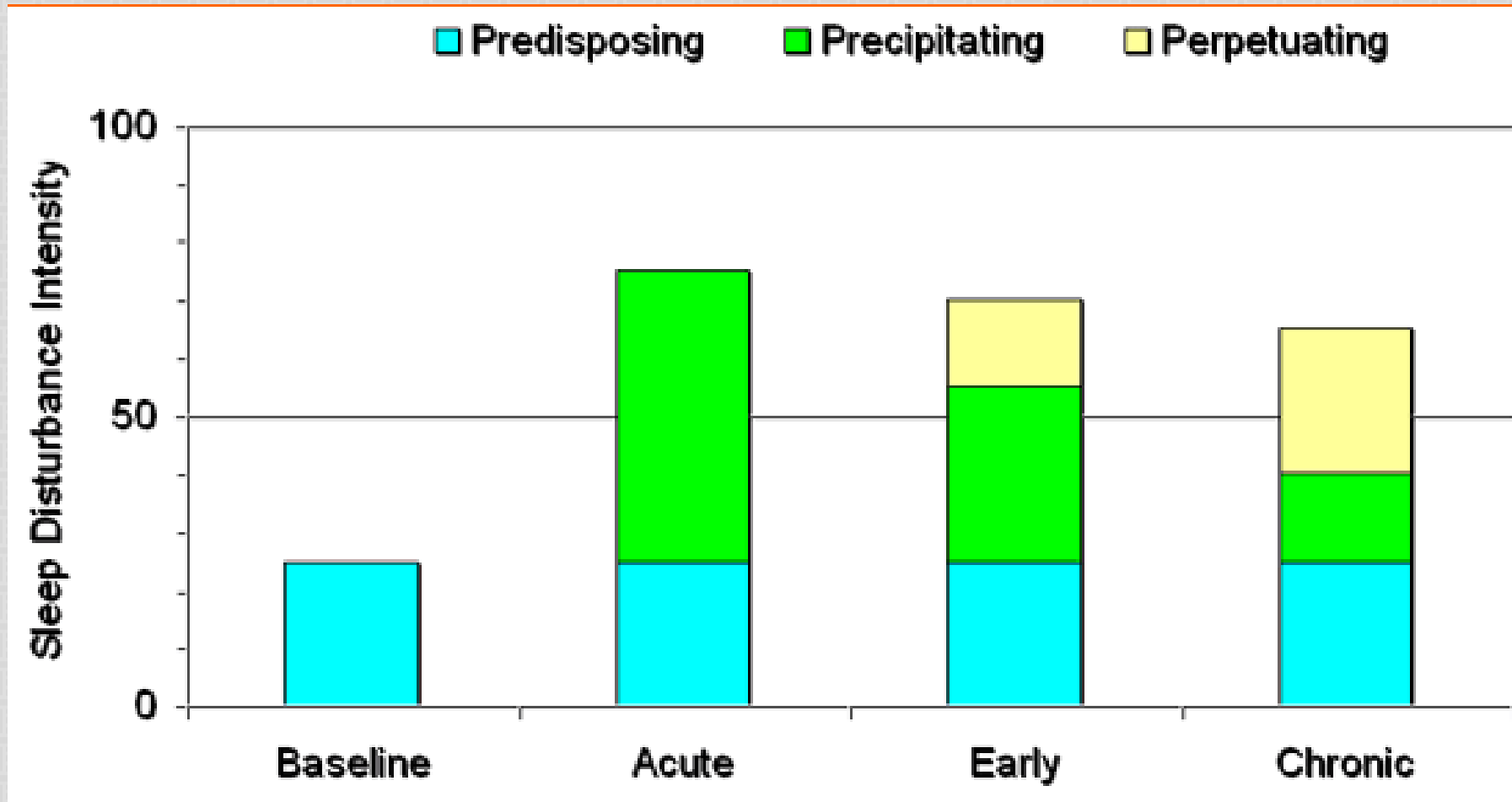
- Getting out of bed at a **regular time each morning**: strengthens the beat of your internal clock and naturally leads to a sleepy feeling at around the same time each night
- Performing the same activities on most days at around the same time helps set your body clock to a more reliable beat
 - Regularity and timing of meals, social activity, and exercise
 - Building a routine into your day can help
- Regular schedule, especially a regular rise time, produces **better sleep and a better mood** → sends cues to your body clock to keep it working optimally



From *Quiet your Mind & Get to Sleep: Solutions for Those with Depression, Anxiety, or Chronic Pain*. (p. 38), by Carney, C., Manber, R. (2009) Oakland, CA: New Harbinger Publication, Inc.

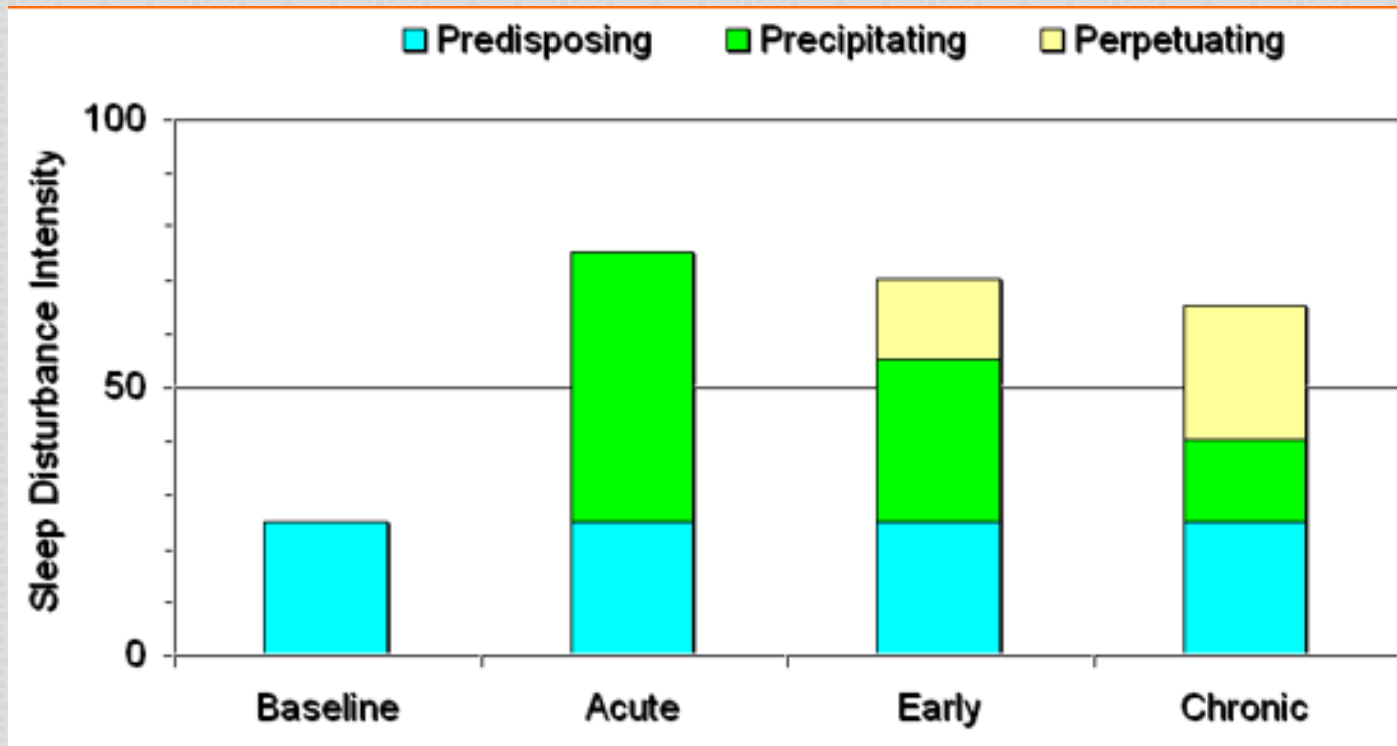
Image from Gail Perry's blog (<http://www.gailperry.com/2014/02/get-emails-opened-read-right-person/>)

3-P Model – So Why does Insomnia Happen?



3-P Model – Acute to Chronic Insomnia

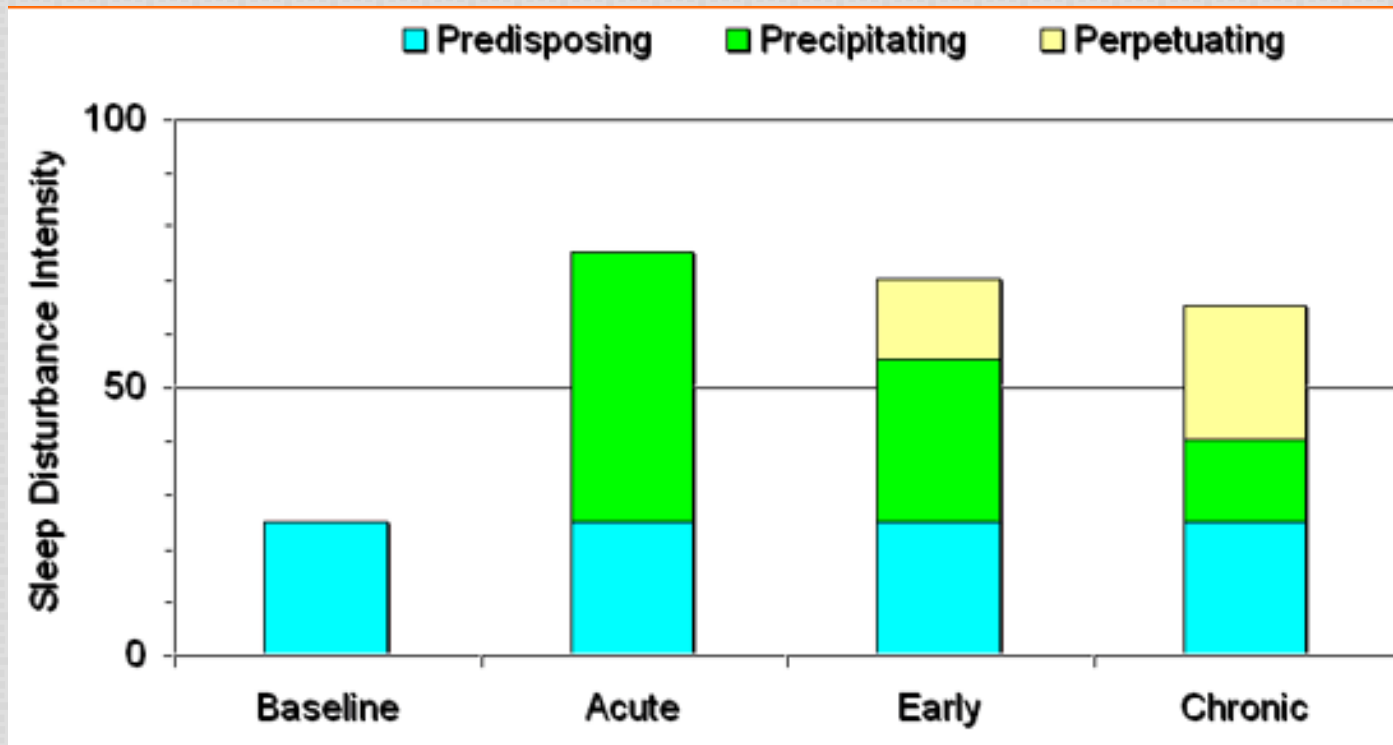
Predisposing: factors increasing insomnia risk



- **Predisposing**:
 - biological (weak sleep system)
 - Psychological (tendency to worry)
 - Social (nighttime shiftwork)

3-P Model – Acute to Chronic Insomnia

Precipitating: factor associated with insomnia onset

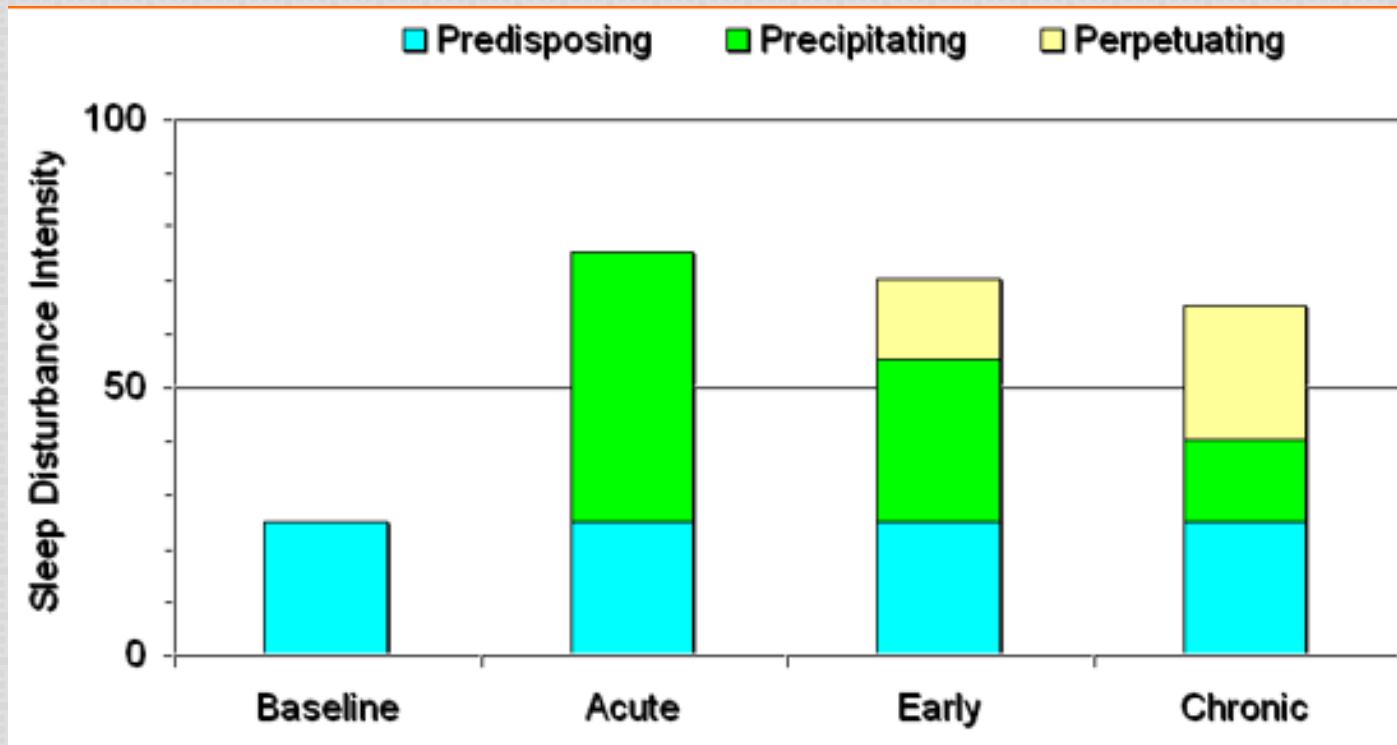


● Precipitating:

- biological (illness or injury)
- Psychological (acute stressor)
- Social (new baby)

3-P Model – Acute to Chronic Insomnia

Perpetuating: strategies that prolong insomnia



● Perpetuating:

- Behaviors adopted in an attempt to get more sleep:
- Excessive time in bed
 - Going to bed early
 - Getting out of bed later
- Napping
- Non-sleep behaviors in bed or bedroom

Perpetuating Behaviors: Things people do that have an unintended negative effect on sleep



- Some might be effective coping behaviors in the initial stages of the sleep problem, but in the long run exacerbate the insomnia
- Examples:
 - Trying to sleep in
 - Going to bed earlier than usual
 - Canceling daytime activities
 - Napping during the day

CONTEXT MATTERS

From *Quiet your Mind & Get to Sleep: Solutions for Those with Depression, Anxiety, or Chronic Pain*. (p. 48), by Carney, C., Manber, R. (2009) Oakland, CA: New Harbinger Publication, Inc.

Image from Moody (<http://www.moody.af.mil/shared/media/photodb/web/110314-F-FD161-138.jpg>)

Conditioned Arousal: When situations associated with sleep become alerting rather than relaxing.

- **Staying in bed when you can't sleep** – the bed becomes paired with an arousing rather than sleep-promoting experience

SO...

- **Don't remain in bed when you can't sleep** – if you are lying awake for 15 minutes then get out of bed – engage in a relaxing activity – return to bed later (e.g., 30 minutes) when feeling sleepy



Note: this may result in initial sleep deprivation, but with consistent use this usually works in 1 to 2 weeks

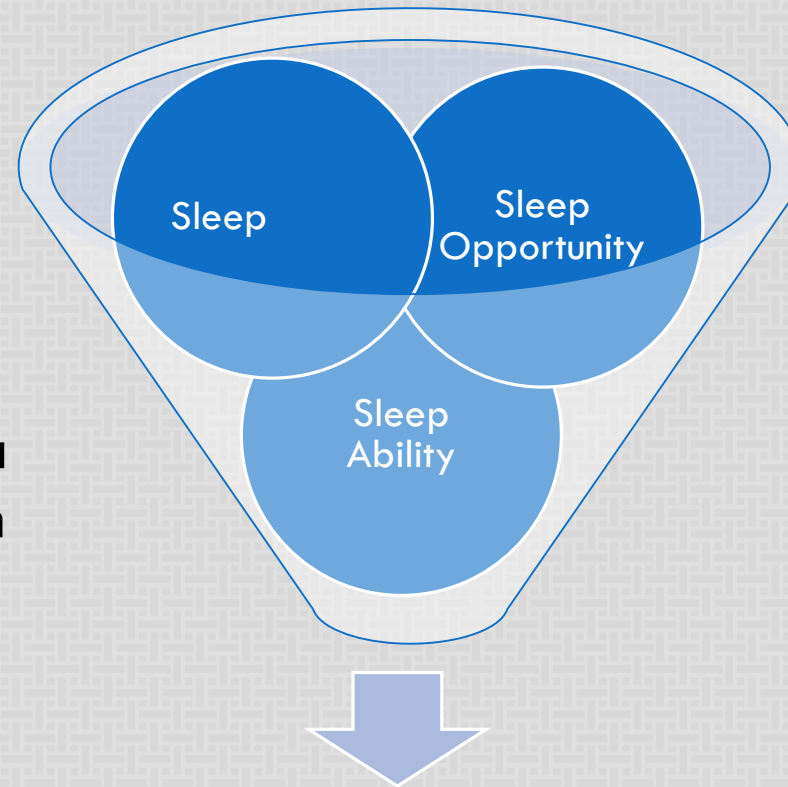
Trying to Sleep: What does it mean to try to sleep?

**Have you been trying
to go to sleep?**

- Get into bed earlier than your normal bedtime
- Linger in bed after the alarm goes off
- Spend much more time in bed than you actually sleep, for example, if you sleep only six hours but are in bed for seven or more hours
- Go to bed when you're tired during the day
- Stay in bed after it has become obvious that you won't be able to sleep
- Take more than the recommended dose of sleeping medication
- Tell yourself, "Go to sleep!"

Quality Sleep: Need – Ability – Opportunity

- Sleep Need is the minimum number of hours of quality sleep a person requires for effective daytime functioning (7-9 hrs*).
- Sleep Opportunity is the availability of a sleep environment (time & place) that can support quality sleep.
- Sleep Ability is the number of hours of quality sleep each night that a person is presently getting.



Quality Sleep: The Right Balance

1) *Hirshowitz, et al. (2015). National Sleep Foundation's sleep time recommendations: Methodology and results summary. Sleep Health. 40-43, doi10.1016/j.sleh.2014.12.010

2) Perlis, et al. (2015) CBT-I Workshop. University of Pennsylvania

Sleep Diary

Individual Sleep Diary Report

Report Parameters

Date Report Generated: January 11, 2016
Participant ID: 2
Date Range for Sleep Data: 12/11/2015 to 12/17/2015

Summary of Time Variables for Date Range

DAY	INBED	SLEEP	WAKEUP	GETUP
Fri 11 Dec	21:30	21:35	07:15	07:20
Sat 12 Dec	01:05	01:05	07:10	07:30
Sun 13 Dec	01:05	01:05	06:30	07:00
Mon 14 Dec	22:00	22:05	07:15	07:30
Tue 15 Dec	22:30	22:35	06:30	06:35
Wed 16 Dec	00:30	00:35	06:35	06:50
Thu 17 Dec	23:30	23:30	06:00	06:10

Summary of Constructed Variables for Date Range

DAY	SOL	NWAK	WASO	TTB	NAPS	TNAP	TST	SE
Fri 11 Dec	15	2	35	590	0	0	535	91
Sat 12 Dec	10	0	0	385	0	0	355	92
Sun 13 Dec	10	1	15	355	1	90	300	85
Mon 14 Dec	15	2	135	570	1	15	405	71
Tue 15 Dec	20	1	15	485	0	0	445	92
Wed 16 Dec	10	1	30	380	0	0	325	86
Thu 17 Dec	10	1	10	400	0	0	370	92
Average	13	1	34	452	0	15	391	87

Summary of Constructed Variables Aggregated by Week

WEEK	SOL	NWAK	WASO	TTB	NAPS	TNAP	TST	SE
1	13	1	34	452	0	15	391	87
2	20	1	15	440	0	0	375	85

PTTB:

Prescribed Time to Bed

PTOB:

Prescribed Time out of Bed

Share your sleep prescription with your bed partner...let them know about your sleep prescriptions.

SLEEP RESTRICTION (SR) AND STIMULUS CONTROL (SC)

Work with Natalie on this!

- Go to bed at your prescribed time to bed (PTTB)
 - STAYING AWAKE UNTIL YOUR BED TIME IS THE FOCUS FOR IMPROVING YOUR SLEEP
- Get out of bed and leave the bedroom when you can't sleep
 - STAYING AWAKE FOR AN ADDITIONAL 30, 60, OR 120 MINUTES WILL BE THE FOCUS FOR IMPROVING YOUR SLEEP
- Get out of bed at your set wake time (PTOB)
 - DON'T LINGER IN BED – PLACE YOUR ALARM (OR TWO) FAR UNDER YOUR BED or FACING AWAY FROM YOU ACROSS ROOM
- Refrain from napping (THIS ALSO MEANS MICRO-SLEEP or NODDING OFF)

Increased Fatigue & Sleepiness after Starting Sleep Restriction and Stimulus Control

- **The initial sleep loss that occurs with treatment can increase the homeostatic pressure for sleep (sleep drive), which can help you fall asleep sooner and wake less often at night – A higher sleep efficiency.**
- **This means the treatment is actually working**
- You will know you require more sleep only if:
 - You're very sleepy at bedtime (meaning that you fall asleep within ten minutes or so)
 - You remain asleep for most of the night
 - You don't yet feel optimally alert during the day
- If all conditions are met, THEN you can increase the time spent in bed – **Work with Natalie on this!**



Summary of Techniques that Improve Sleep

- **Wake up at same time to maintain your circadian clock** (Required gear: alarm clock)
- **Get out of bed when you wake up in morning – Morning routines work!**
- **Be active and engaged during the day to build sleep drive**
- **Eliminate napping to further build sleep drive**
- **Go to bed at a consistent time for needed sleep – use your bed only for sleep and sex**
- **When you can't sleep: get up and leave the bedroom – 30, 60, 120 minutes**



Do these with greater consistency: Sleep is better
Do these inconsistently: Sleep is worse



“The great thing about relaxation is that **it doesn't have to be perfect**, it's a *practice*, an ongoing process.”



Please practice your
Calming Breath this week

[Image from Zen Doctor \(http://zendoctor.com/ZazenPics.html\)](http://zendoctor.com/ZazenPics.html)

Reminder

- Next Group Meeting is **Tuesday, February 9th at 12:15 in OT 101**
- Please read **Chapter 4** in *Quiet Your Mind and Get to Sleep*
- Additional reading:
Perlis et al. (2008). Appendix 1, pp. 161-162.

