SLEEP: WANT IT, NEED IT, GET IT!

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Kinds of Sleep

• Non-REM Sleep
  (Non-Rapid Eye Movement)

• REM Sleep
  (Rapid Eye Movement)
Non-REM Sleep

Stage 1: Light sleep
Stage 2: Eye Movement Stops
Stage 3: Considered Deep Sleep
Stage 4: Considered Deep Sleep

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REM Sleep (Rapid Eye Movement)

- Usually first occurs about 90 minutes after you fall asleep
  - Cycles along with the non-REM stages throughout the night
    - Eyes move rapidly
    - Breathing is more rapid
    - Heart rate increases
    - Blood Pressure increases
    - Dreaming occurs
    - Arms & legs muscles are temporarily paralyzed
Sleep Cycles

Stage 1: Light sleep – easily awakened

Stage 2: Eye Movement Stops – slower brain waves, occasionally rapid brain waves

Stage 3: Considered Deep Sleep – difficult to awaken, brain waves like stage 2

Stage 4: Considered Deep Sleep – difficult to awaken; extremely slow brain waves

REM Sleep: Begins about 90 minutes after falling asleep; Cycles along with non-REM sleep during the night
Dreams

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### How Much Sleep Is Enough?

<table>
<thead>
<tr>
<th>Life Stage</th>
<th>Average # of hours sleep needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants</td>
<td>16 – 18</td>
</tr>
<tr>
<td>Babies &amp; Toddlers</td>
<td>12 – 14</td>
</tr>
<tr>
<td>Preschoolers</td>
<td>10 – 12</td>
</tr>
<tr>
<td>Elementary School Age</td>
<td>Minimum 9</td>
</tr>
<tr>
<td>Teenagers</td>
<td>Minimum 9</td>
</tr>
<tr>
<td>Adults</td>
<td>7 - 9</td>
</tr>
</tbody>
</table>
The Sleep – Health Connection

• **Brain at Work**
  - Forming pathways necessary for learning
  - Consolidates & fixes memories & advances learning
The Sleep – Health Connection

• Memory
  • Sleep needed for short-term or working memory & procedural memory
• Moods
• Sleep helps with emotional control, decision-making, & social interaction
• Lack of sleep increases irritability, volatility, & depression
• Immune System

• More sleep needed when body is fighting infections or inflammations
• Being well-rested improves the body’s response to infections
• Obesity

• Sleep needed for appetite-regulating hormonal balance (less ghrelin, more leptin)
• Digestive Problems

• Constipation, diarrhea, excessive gas, abdominal pain, heartburn
• Heart, Blood Pressure, and Stroke
  • Dip in blood pressure needed
  
• Too little sleep causes increase in proteins associated with heart disease (C-reactive protein)

Sleep: Want It, Need It, Get It!
• Hormones

• **Growth Hormone**
  Released (for growth in children & boosting muscle mass in adults)

• **Puberty and fertility** related to release of sex hormones which occur during sleep
• Diabetes
• Rise & Fall of Blood Sugar Levels in a Pattern Linked to Sleep Stage
Common Signs of a Sleep Disorder

• Takes more than 30 minutes to fall asleep
• Awaken frequently
• Awaken too early
• Frequently don’t feel well rested
• Feel sleepy during the day
• Bed partner claims you snore loudly
Common Signs of a Sleep Disorder

• Have creeping, tingling, crawling feelings in your legs
• Have vivid, dreamlike experiences
• Sudden muscle weakness
• Legs or arms jerk
• Regularly need stimulants to stay awake during the day
Snoring

May indicate other health concerns, such as sleep apnea, nasal obstruction, obesity
• **Tip 1 for Getting a Good Night’s Sleep**
  Stick to a sleep schedule
Tip 2 for Getting a Good Night’s Sleep:
Exercise, but not too late in the day

* If possible, exercise 5 – 6 hours before bedtime
• Tip 3 for Getting a Good Night’s Sleep
Avoid Caffeine and Nicotine
* Caffeine (a stimulant) can take 8 hours to wear off
* Nicotine withdrawal
* Causes light sleep
• Tip 4 for Getting a Good Night’s Sleep
Avoid Alcoholic Drinks Before Bed
  * Robs deep sleep; * causes awakening in a few hours; * increases need to urinate
• **Tip 5 for Getting a Good Night’s Sleep**
  Avoid Large Meals and Beverages Late at Night

  * Increases Indigestion & Need to Urinate
Tip 6 for Getting a Good Night’s Sleep
Avoid Medicines that Delay or Disrupt Sleep, if possible

* Prescribed: Heart, blood pressure & asthma medications
* Over-the-counter & Herbal medications for coughs, colds or allergies
• Tip 7 for Getting a Good Night’s Sleep
Don’t Take Naps After 3 p.m.

* Limit naps to one hour * Can help you learn to do some tasks quicker
• Tip 8 for Getting a Good Night’s Sleep
  Take a Hot Bath Before Bed

* Helps a person
  Relax, Slow down, & Prepare for sleep
* Body temperature drops when get out
• Tip 9 for Getting a Good Night’s Sleep
Have a Good Sleeping Environment
* Eliminate light, noise & other distractions
* Keep room cool
* Comfortable mattress & pillow
* Use bedroom for bedroom purposes

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• Tip 10 for Getting a Good Night’s Sleep
Have the Right Sunlight Exposure

* Natural sunlight
30 minutes daily
* Set Biological Clock
by getting 1 hour
exposure to morning sunlight
• **Tip 11 for Getting a Good Night’s Sleep**
  Don’t Lie in Bed Awake

* If not asleep after 20 minutes, do a Relaxing Activity until sleepy
• Tip 12 for Getting a Good Night’s Sleep
  RELAX, relax, relax
  * Park Your Worries
  * Visualize Relaxing Scenario
  * Tighten & Relax Muscles
  * De-stress rituals, like Meditation
• Final Tip for Getting a Good Night’s Sleep: See a Doctor for Trouble Sleeping

* Talk to your doctor before taking sleep medications
* Read Warnings
* Can create dependency
Let this be clear:
Rest is not laziness.
Rest is building breaks into our lives before we collapse so we don’t collapse.