

# Sleep

#### Overview:

- Sleep is extremely important for the individual's overall health, and it is just as important as eating, drinking and breathing.
- Sleep is regulated by two systems: the sleep-wakefulness cycle, and the biological clock.
- Those whose sleep is interrupted frequently may not get sufficient amounts of one of the stages of sleep.
- Healthy Naps help children get enough rest, making them more stable and calm at night.
- There are several recommended guidelines for improving the quality of your sleep.

#### Introduction:

All living creatures need to sleep, which is the main function of the brain at the beginning of life. Sleep is regulated by two systems: the sleep-wakefulness cycle, and the biological clock. These systems explain why some individual's sleeping schedules are different. It is also important to highlight that sleep is extremely important for the individual's overall health, and it is just as important as eating, drinking and breathing.

## • The Sleep-Wakefulness Cycle:

When a person is awake for a long time, this system alerts the body about its need for sleep, and it helps the body get enough sleep during the night to regain its energy during the day.

## • Biological clock:

The biological clock regulates the rates of sleepiness and activity during the day and increases and decreases these rates at different times during the day. Peak sleep hours for adults is usually between 2:00 am and 4:00 am, and 1:00 pm and 3:00 pm, taking into account individual differences, such as if the individual is an evening person or a morning person. During these hours, sleepiness intensifies if the person did not get enough sleep.

Around puberty, the individual's biological clock undergoes some changes, and the peak sleep hours shift a little later, becoming between 3:00 am and 7:00 am, and 2:00 pm and 5:00 pm. This explains why young people stay active at



midnight and find it difficult to sleep before 11 pm, which also explains why high school students feel sleepy throughout the school day.

## Stages of sleep:

During sleep, an individual pass through two stages of sleep. Several things happen during every stage:

#### · Deep sleep:

During this stage, the body increases blood flow to the muscles, repairs muscles and tissues, stimulates growth and development, builds up energy for the next day, and secretes important hormones for the processes of growth and development.

### • Rapid eye movement sleep (REM sleep):

This stage is characterized by intense brain activity, it is when dreams start, and the body is unable to move. Respiration and heart rates during REM sleep is typically higher and more variable.

The body needs to pass through both stages to get a healthy sleep. Those whose sleep is interrupted frequently may not get sufficient amounts of one of these stages of sleep.

## Tips for a Better Night's Sleep:

- Stick to a sleep schedule by waking up and going to bed at a specific time.
- Create a restful sleep environment that is quiet, dark and cool.
- Avoid caffeine especially in the afternoon and evening.
- Avoid eating heavy meals before sleeping.
- Do regular early morning exercises.
- Avoid going to bed when you are not sleepy.
- If you don't fall asleep within about ∩ minutes, leave your bedroom and do a mild activity.
- Avoid napping after <sup>™</sup>pm.
- Avoid performing tasks and homework at the end of the day.
- Limit stimuli around bedtime (such as: television, computer, and video games).
- Create to-do lists before going to sleep to minimize thinking about them while attempting to sleep.
- Engage in light and calm activities in the evening.



# **Sleep Disorders**:

- Insomnia.
- Sleepwalking.
- Nightmares.
- Night terrors.
- Narcolepsy.
- Jet lag disorder.

## **Clinical Health Education Department**

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