

Jet lag

Jet lag occurs when travelers pass through different time zones; your body's clock will be different from your wristwatch. For example, if you fly in an airplane from New York to Dubai, you "lose" 8 hours of time. Therefore, when you wake up at 8:00 a.m., your body still thinks its 12:00 midnight. Making you feel groggy and disoriented. Your body's clock will eventually reset itself, but this often takes a few days. This syndrome consists of symptoms that include excessive sleepiness and a lack of daytime alertness in people who travel across time zones. Other Symptoms: Fatigue, insomnia, disorientation, headaches, digestive problems, lightheadedness

Tips to Help Minimize Jet Lag

- Adjust your bedtime by an hour a day a few days before your trip. This will adjust your sleep pattern to match the sleep schedule you will keep at your destination.
- Reset your watch to the destination time at the beginning of your flight to help you adjust more quickly to the time zone you will be visiting.

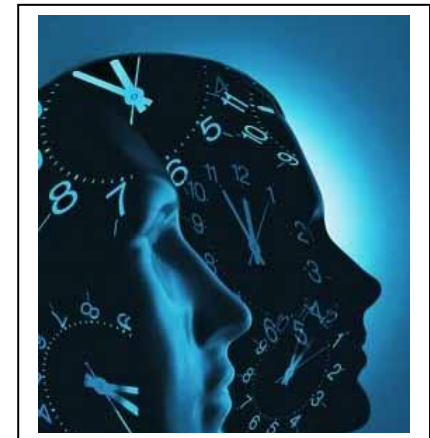
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- Drink plenty of water before, during, and after your flight. Some experts believe that dehydration is a predisposing cause of jet lag.
- Eat lightly but strategically. What you eat can have a direct influence on your wake/sleep cycle. Remember that high protein meals are likely to keep you awake, while foods rich in carbohydrates can promote sleep, and fatty foods may make you feel sluggish.
- Relax on the first day at your destination. If you have the luxury of arriving at your destination a day or two before you have to engage in important activities that require a lot of energy or sharp intellectual focus, give yourself a break and let your body adjust to the time change a little more gradually.
- Sleep on the plane if it is nighttime at your destination. Use earplugs, headphones, eye masks, or other sleep aids to help block out noise and light, and a travel pillow to make you more comfortable so you can sleep
- Stay awake during your flight if it is daytime at your destination. Read, talk with other passengers, watch the movie, or walk the aisles to avoid sleeping at the wrong time.

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Sleep disorders related to biological clock disturbance

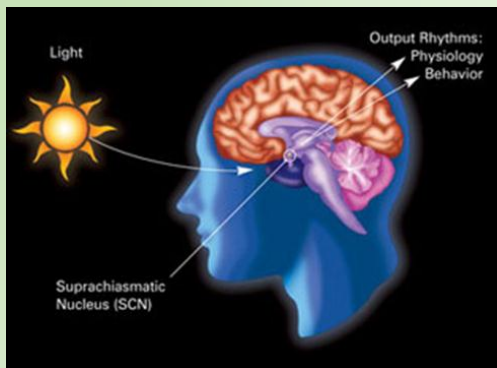


Sleep disorders Center

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What is the biological clock?

The "master clock" that controls circadian rhythms consists of a group of nerve cells in the brain (in the hypothalamus) called the suprachiasmatic nucleus, (SCN), it regulates your circadian rhythm



What are circadian rhythms? And How do they affect your sleep?

Circadian rhythms are physical, mental and behavioral changes that follow a roughly 24-hour cycle; it influences sleep-wake cycles, hormone release, body temperature and other important bodily functions. The brain relies on "outside" influences called zeitgebers to keep you on a normal schedule. The most obvious zeitgeber is sunlight. Other zeitgebers are ambient temperature, sleep, social contact, physical activity, and even regular meal times. They all send "timekeeping" clues to your brain, helping keep your circadian rhythm running on schedule.

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What is the Circadian Rhythm Disruption?

Any time that our normal 24-hour circadian rhythm is altered or interrupted, it will have physiological and behavioral impacts. This is known as circadian rhythm disruption, which will lead to different type of sleep disorders including:

Delayed Sleep Phase Syndrome: some people find that it is difficult to fall asleep before 2:00 am and that they have trouble waking up in the morning (they like to wake up after 10 am) .this problem is very common in young adults and can interfere with school or college schedule..

Advanced Sleep Phase Syndrome: This is a disorder where sleepiness occurs well before the desired sleep schedule. A person feels the urge to go to sleep between in early afternoon around 6:00 and 8:00 p.m. and wakes up too early between 2:00 and 3:00 am. Moreover, this is more common among older adults.

Irregular Sleep-Wake Rhythm This sleep disorder applies to people who do not have a regular sleep pattern and who often have changing sleep periods and irregular times of alertness and sleepiness.

Shift Work Disorder: shift workers are those who work nontraditional hours such as night shifts or rotating shifts. They may not get the same amount of sleep during the day, they may have problems adjusting to sleep schedule, feel less energetic and struggle with focusing,

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Tips for shift workers for Resetting the Biological Clock

- Light is the most powerful influencer of the body's circadian clock and it will negatively affect your ability to fall asleep? Therefore, after the end of your night shift Wear sunglasses if you are commuting home in bright sunlight. In contrast, once you wake up, go outside into the sun to cue your biological clock that it is time to be awake and alert.
- A darkened room signals your brain that it is time to sleep. So keep your bedroom as dark as possible. Heavy curtains and eye masks can help. If you need to get up, use a small nightlight instead of turning on bright lights.
- try to go to bed as soon as possible after your shift, ideally within two hours and allow enough time to unwind and relax.
- Use your bedroom only for sleeping. No paperwork, bills, unfolded laundry, TV, electronics or pets.
- Eliminate noise with earplugs, a fan or a white noise machine. Turn off or unplug the phone. Install carpeting or sound-absorbing curtains, drapes or shades.
- Keep your room well ventilated and the temperature on the cool side, ideally between 60 and 65
- Ideally, avoid caffeine-containing beverages and food such as coffee, tea, sodas and chocolate at least six to eight hours before bedtime
- Don't go to bed too hungry or too full. Avoid eating two hours prior to bedtime
- Avoid consuming protein at bedtime, which may be harder to digest. Do not drink excessive fluids prior to bedtime to avoid having to get up to urinate
- Try to maintain a consistent and regular sleep schedule on workdays and weekends. To help your body know when to be alert and when to sleep

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