## **OCTOBER 2020**

## **Quantity and Quality**

Air, food, water and sleep are some of the most important resources our bodies need. Sleep is a basic, physiological need which our bodies cannot survive without. It's the only effective countermeasure to fatigue. Sleep is the process responsible for restoring energy to both our body and brain.

The sleep/wake cycle is regulated by a natural, internal process called the circadian rhythm. It's also known as the body clock. The hypothalamus is housed in the brain and is responsible for governing circadian rhythm. It controls many of the body's internal processes in response to light and dark. This body clock helps regulate hormone secretion, blood pressure, cardiovascular strength and body temperature. As the sun sets, melatonin is secreted, which helps the body relax and prepare for sleep. When the sun rises, that secretion stops. This is just one example of how the cycle affects mind and body. Staying awake throughout the nighttime hours can be done by intentionally overriding the circadian rhythm. Working rotating shifts requires a person to override these natural queues for sleep in ways that can be disruptive to the system.

If shiftwork contributes to your inability to get restful sleep, you are not alone. Let's explore ways to get the quality sleep you need, in the right amount. There are individual differences, of course, but generally adults need seven to nine hours of sleep each day in order to do and feel their best. Make sleep a priority, second only to your work schedule. Use your Pipeline Performance Group fatigue calendar to mark your work schedule for the month, then mark your corresponding sleep schedule. This allows you and your family to see when you have availability to participate in other activities. Choose wisely when deciding how to spend your off duty time. Choose to care for your body's need for restorative sleep.

Even after you've carved out the time you need for proper rest, it can still be difficult to enjoy a good night's sleep. A number of things may stand in the

way of quality sleep. Again, individual differences play a role, but there are some sleep disrupters that may be common to all of us. Heavy meals eaten just before bedtime can disrupt rest due to the active nature of digestion. Alcohol can disrupt sleep, as it is known to block rapid-eye-movement (REM) sleep. Because light queues the brain to alertness, it should be blocked from your room with black-out shades. Noise disturbances can be quieted with a fan or sound machine. An excess of caffeine consumed during the waking hours may result in insomnia during sleeping hours. Establish a bedtime routine that promotes brain relaxation and prepares you for sleep.

Finally, sleep disorders can be deterrents to sleep quality and can also be dangerous to your health. Sleep disorders are treatable. Contact your physician if you have questions or are experiencing symptoms such as:

- Loud snoring accompanied by pauses in breathing
- Persistent daytime sleepiness
- Involuntary sensations or movement in arms / legs

Make sleep a priority and enjoy the difference it makes.



