## WHAT YOU NEED TO KNOW ABOUT SLEEP

## You need a good quantity of sleep to get a good quality of sleep.

Individual Sleep Need: the amount of sleep each human needs each day. Generally, at least 8 hours.
Sleep Debt: the individual sleep need minus the amount of sleep an individual is actually getting.
Every night of sleep loss adds to this debt.
Biological Clock: a natural system, or internal tool that can affect a person's sleep-wake cycles.
Melatonin: a substance the body produces that helps control the body's sleep-wake cycles.

## REM SLEEP

- REM = Rapid Eye Movement
- This is the phase of sleep that stores short term memory into long term memory as well as repairs muscle damage and fatigue from the day before.
- The body needs 1.5-2 hours of REM sleep to recover each night.
- Maximum REM sleep can only be achieved when you sleep at least 8 hours per night.



## PERFORMANCE EFFECTS

- The brain and central nervous system play the most significant role in optimal mental and physical performance. To function at an optimal level, you need to be well rested!
- Just 2 days of sleep restriction can increase lapses of attention and reactivity by three times.
- A decrease of 1.5 hours of normal sleep time in one night can result in $30 \%$ drop in alertness!
- Not getting sufficient sleep leads to higher blood pressure, blood sugar, and inflammation, meaning an increased likelihood of cardiovascular disease.
- Sleep also affects muscle gain. The majority of muscle repair and growth occurs during sleep when hormones are released.


## BLUE LIGHT

- According to the National Sleep Foundation, 95\% of people use some type of computer, video game, or cell phone at least a few nights a week within the hour before bed.
- The biggest cause of sleep disturbance is blue light.
- Blue light (from technology like phones, computers, TVs, and iPad's) regulates our secretion of melatonin, the sleep hormone. Overexposure to blue light limits the production of melatonin, causing a disruption in sleep or falling asleep.
- Reduced melatonin causes us to be alert and awake longer so we transition to sleep slower.
- Even 1 minute of blue light use in a dark room can cause sleep disturbance by stimulating the
 brain and causing delays in sleep onset.


## SO WHAT DO I DO NOW?

## To get the best sleep, try these tips:

Ideal Sleeping Conditions: COOL, QUIET, DARK

Best sleeping temperature: $68-72^{\circ} \mathrm{F}$

Have a routine! Go to sleep \& wake up at the same times every day

Avoid sugar and caffeine after dinner to prevent hormonal/sleep disturbances

If you do snack, opt for carbohydrates, rather than fatty or spicy foods

Don't use drugs or alcohol
Sleep in a comfortable bed (change mattress every 9-10 years)

No electronics (phone, TV, computer) 90 minutes before bedtime

Put on pajamas, which sends signals to your brain that you are ready for bed

Use a lamp for light, since bright overhead lighting triggers wakefulness

Use a sleep mask to block light

Wind down before bed with yoga or mindfulness practice

Get blackout curtains to block excess light

Try a fan or white noise machine
Use your bed for sleeping only, not homework or TV

Stay hydrated during the day and use a humidifier while you sleep

Follow the National Sleep Foundation on Twitter (@sleepfoundation) for more tips

