

HEALTHY SLEEP MATTERS!



Who Needs Sleep?

EVERYONE!

The **Cherry Creek School District** aims to be the healthiest community in the nation, together with our students, staff and families. Developing and maintaining healthy habits are important skills that help people of all ages feel their best and be their best. Living a healthy lifestyle includes devoting time to taking care of one's physical, social and emotional health. Getting the right quantity and quality of sleep is essential to overall well-being, and can be a health habit that many people underestimate.

How can you tell if you are getting enough sleep?

How much sleep you **need** is different than how much sleep you can **get by on**. Most teens need have a biological need for about 9 hours of sleep, but each person has an individual sleep need, so some need more and some need less. You will know you need more sleep if:

- 1. It is REALLY hard to wake in the morning.** Whether you wake on your own or with an alarm clock (or parent) waking you, when you are getting enough sleep you should be able to get up and get going within 15 minutes. If you have to use multiple alarm clocks, or your parents have to repeatedly shake or shout at you to get you up, this is a sign you are not getting enough sleep.
- 2. You sleep 2 more hours on weekend nights than on week nights.** This is a sign that your body is trying to catch up on sleep that you missed during the week.
- 3. You fall asleep at school or other times you should be awake.** You should not be falling asleep in school or during meetings (no matter how boring it feels) if you are getting enough sleep. You should also not be falling asleep while doing homework, attending sporting events, or other activities throughout the day.

In addition to feeling sleepy or tired when you don't get enough sleep, most people also feel more irritable, sad, or angry. If you pay attention to these cues, you can figure out how much sleep you need.



Dedicated to Excellence
Cherry Creek Schools

Every aspect of your life is impacted when you don't get enough sleep. For example, when you don't get enough sleep it is harder to concentrate in school or at work, you are more likely to get sick, you may feel more irritable, and it will be harder for you to perform your best in ways that are important to you. If you've ever thought "sleep is for slackers" or "sleep is a waste of time," watch the video called *The Effects of Sleep Deprivation* at the bottom of the CCSD Fit home page at <http://challenge.ccsdfit.org>

SLEEP HEALTH HABIT 1

Go to Bed and Wake Up at the Same Time, Every Day!



Maintaining a consistent sleep schedule is key to being able to fall asleep at bedtime and wake up on time in the morning. Sleep is controlled by two main things: *homeostatic sleep pressure* requires that we are awake a certain number of hours before we can fall asleep again; and our *circadian rhythm*, or internal clock, prepares our body for sleep at the right time.

Sleep Debt

Have you ever owed someone money? That is a type of debt that may take a while to pay back. We also can end up with a sleep debt, where we owe our bodies more sleep. For example, if your body needs 9 hours of sleep every night, and you only get 7 hours on weeknights, by Friday night you owe your body 10 hours of sleep! You can try to pay down your sleep debt on weekends by sleeping in, but if you also stay up later, you are likely not getting that much extra sleep.

Studies have shown that if you deprive yourself of sleep for a few nights and then binge on sleep, you are going to have more problems with concentration, performance, and mood. Rather than pulling an all-nighter, or cheating yourself of a couple hours of sleep each night, you should aim for a consistent sleep amount every night. This may mean you have to create a different schedule for activities, homework, physical activity, dinner and relaxation to ensure that you and your family can get enough sleep during the week.

Social Jetlag

Another issue with staying up late and sleeping in on weekends is *social jetlag*. Because our internal clocks run on a 24.2 hour day instead of a 24 hour day, it is easier to make our days longer by staying up later. Think how much you like that extra hour of sleep in the fall when we go off daylight saving time. But it is really hard to make your day shorter, which is what happens when we go on daylight saving time in the spring and lose an hour of sleep.

On weekends, if you stay up late and sleep in, you are basically having your body travel to Hawaii (without the sunshine and scenery). On Sunday night, when you try to return to Denver, you can't fall asleep! One reason is that it can take only 1 or 2 days to adjust to making your day longer, but it can take 4 to 5 days to adjust to making your day shorter again. Also, if you sleep in on Sunday morning, you will not be awake enough hours during the day to help you fall asleep Sunday night when you should. So, on Monday morning it is REALLY hard to wake up, then your body continues to struggle to recover the next few days, just in time for your next weekend trip to Hawaii!

PRACTICE!

Challenge yourself to maintain a consistent bedtime and wake time for one week. You should be able to go to bed and wake up within 1 hour of your goal (but absolutely no more than 2 hours) on both weekdays and weekends. Impossible, you say?!? Give it a try for one week, and see how much easier it is for you to fall asleep and wake up. Remember, not only should you maintain a set sleep schedule, the schedule should **give you a chance to sleep enough hours** that you do not create significant sleep debt.

SLEEP HEALTH HABIT 2

Turn Off Electronics at Least 30 Minutes Before Bedtime



Why Electronic Devices are Bad for Sleep

We love our electronic devices! We use them to connect socially, follow the news, do work at school and home, and for entertainment. For better or worse, we truly feel like we can't live without them. Unfortunately, while electronics help us in so many ways during our waking hours, they can hurt the quantity and quality of our sleep because they are engaging and emit blue light.

We've all been there; you may think you will spend 10 or 20 minutes on your device, and the next thing you know, 2 hours have passed. Electronic devices, including phones, tablets, and computers have allowed us to be more connected than ever before. You can always find friends or new information online, and time flies when you're having fun! But while your electronic device has an on/off switch, **your brain has a dimmer switch**. It takes a little while for it to shut down and fall asleep. This is the first reason why you should turn your electronics off at least 30 minutes before bedtime. Give your brain and your body a chance to wind down and relax so it is ready to sleep. During this time, you can have a snack, prepare your clothes, backpack/work bag, and lunch for the next day, and get ready for bed.

Blue light that comes from devices can also make it hard to fall asleep. Melatonin is released in response to darkness, preparing your body for sleep in a couple hours. But studies have shown that using electronic devices within 1-2 hours of bedtime can keep your brain from making the melatonin it needs. Watch our Basics of Sleep video to learn more (<http://challenge.ccsdfit.org/>).

Here are a few suggestions on how to manage evening light exposure so you can fall asleep easier:

1. After dinner, turn off all overhead lights and only use lamps with dimmer bulbs
2. Dim your screen to the lowest possible level by using to night mode or a program like f.lux (which automatically adjusts brightness by clock time)
3. If your screen is still bright and you have to use it for homework, consider wearing blue light blocking glasses

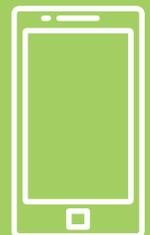
Tuck Your Technology In

Also consider making your bedrooms technology free. We know that kids and adults with technology in their bedrooms sleep on average 30 minutes less **per night** compared to people without technology in their bedrooms. This adds up to 2.5 hours of lost sleep during a 5-night school week. Also, if you wake up during the night (a normal occurrence), it can be really tempting to check for new texts, posts, or pictures, which can ultimately steal even more of your sleep!

To reduce this problem, create a central charging station in your home (e.g., kitchen), where everyone in the family tucks their devices in 30 minutes before bedtime. If you use your device as an alarm clock, either purchase an inexpensive clock that will serve the purpose, or be sure your device is set to a mode that does not make noises or update your messages, apps, or mail while you are sleeping (e.g., do not disturb).

PRACTICE!

While it is best to shut devices down 1-2 hours before bedtime, aim to turn all electronic devices (i.e., smartphone, tablet, computer, television) off at least **30 minutes before bedtime**. Also consider creating a central charging station that every member of the family uses to tuck their technology in for sleep.



SLEEP HEALTH HABIT 3

Limit Caffeine After Lunch



Caffeine is Great for Helping You Stay Awake, Not So Much for Helping You Fall Asleep

Most people who regularly consume caffeine agree it is a good thing. It helps them stay awake and alert, especially when they are not getting enough sleep. It is helpful to understand how caffeine works. Adenosine is a chemical in your brain that is released when you are awake. As adenosine builds up in your brain over the day, you get sleepier and sleepier. Caffeine blocks the parts of your brain that respond to adenosine, which is why you don't feel as sleepy once you've had caffeine.

The problem with caffeine is that it should still be working 4 to 6 hours after you consume it, which can then make it hard to fall asleep. For example, if you have a Dr. Pepper in the evening to give you enough energy to get your homework done, the caffeine will still be blocking the adenosine you need to feel sleepy when you try to go to bed 3 hours later. So, then you can't fall asleep, making it hard to wake up in the morning. Your sleep debt continues to build each day, requiring more and more caffeine to stay awake during the day, but making it harder and harder to fall asleep.

Caffeine Comes in All Shapes and Sizes

You probably know that there is a lot of caffeine in coffee, tea, sodas (e.g., Coke, Pepsi, Mountain Dew, Dr. Pepper), and energy drinks (e.g., Red Bull, Monster, 5 Hour Energy). But did you know that Sunkist orange soda has more caffeine than Coke, or that not all root beers are caffeine free! Juice beverages like KickStart, sweet drinks like Frappuccino or chai latte, or even coffee ice cream also contain a lot of caffeine. You can find caffeinated candy, maple syrup, and even bagels if you want. Here is a website that gives you more information about how much caffeine is in your favorite beverage or treat:

<https://www.caffeineinformer.com/the-caffeine-database>

The American Academy of Pediatrics recommends that adolescents ages 12-18 years have no more than 100 mg of caffeine per day, and children under 12 should not consume any caffeine.

“Caffeine Doesn't Affect Me”

If you are someone who can drink caffeinated beverages right before bed and still fall asleep with no problem, this is not something to be proud of. This means you either are so sleep deprived that the caffeine is not helping you stay awake, or that you have such a high tolerance for caffeine that it does not keep you from falling asleep. So, you should try to either increase your sleep duration, reduce your caffeine intake, or both!

PRACTICE!

Try not to have any caffeine within 6 hours of bedtime. The easiest way to accomplish this is to not consume caffeine any time after lunch.

SLEEP HEALTH HABIT 4

Be Physically Active for 30-60 Minutes Every Day



Sleep and Physical Activity – Partners in Health

Being physically active is another piece of the sleep health puzzle. Physical activity (exercise) has been shown to help you fall asleep faster and stay asleep during the night, and can help you feel less sleepy during the day. There are many other benefits of moderate to vigorous physical activity, including strengthening your muscles and heart, helping maintain a healthy weight, and reducing stress and anxiety (which can also make it hard to sleep).

Not getting enough sleep can make it harder to motivate yourself to engage in physical activity. This could be because you are too sleepy to even get started, or because once you try to get moving you simply don't have enough energy. If you find it difficult to be active even when you are getting enough sleep, an obstacle may simply be finding enough time in your day.

Here are some suggestions for increasing your daily physical activity:

- ▶ Take physical activity breaks throughout your day, such as going on a brisk walk for 10-15 minutes to re-energize yourself in the middle of homework or a work project.
- ▶ Park far away from the entrance to your school, office, or the store to get more steps.
- ▶ Take the stairs!
- ▶ Remembering playing outside? That is good for you at any age! Get outside and do something you enjoy.
- ▶ As a family, turn on some music and dance or play active video games instead of sedentary ones.
- ▶ Sign up for physical education classes and join a sport you enjoy.
- ▶ Find a friend to exercise with you – this can make it more fun and hold you accountable!
- ▶ Remember that physical activity makes you feel good physically and emotionally, so when you are doing activities you enjoy, it is easy to make being active part of your lifestyle!
- ▶ If affordable, use a fitness tracking device such as a smart phone app, Fit Bit or similar device to set personal goals and monitor your daily progress.
- ▶ Physical activity recommendations depend on age and health condition, but a general guideline is to aim for 10,000 steps per day and 30 minutes of moderate to vigorous physical activity for adults; 60 minutes for kids.



PRACTICE!

Aim to get 30-60 minutes of moderate to vigorous physical activity daily. Try to make it something you enjoy (walking outside, riding a bike, playing a sport, dancing, taking a PE class, going to recreation center or gym, you name it!) While this should not be right before bedtime, find a time (or several times) during the day that you can add in some exercise. Not only will this help your sleep quantity and quality, it will also improve your overall physical health!



Thanks to Dr. Lisa Meltzer for her collaboration with Cherry Creek School District and the creation of this content.



Check out the CCSD Fit website to learn more about healthy habits and to participate in occasional wellness challenges:

<http://challenge.ccsdfit.org>

To learn more about the CCSD Wellness Department's framework, programs and practices, please visit:

<http://www.cherrycreekschools.org/Wellness>

