

Introduction

Sleep is an important habit to maintain good health. Those that don't get enough sleep are at higher risk for having health and behavior problems. The amount of sleep someone needs in a day varies based on age. Youth ages 6-12 need 9-12 hours of sleep daily and teens ages 13-18 need 8-10 hours of sleep daily. A majority of youth are not getting enough sleep on school nights. 1 sentence on connection to heart health. 1 sentence to introduce the topics that will be incorporated throughout lesson.

LEARNING OBJECTIVES

- Identify strategies to improve sleep health.
- Design and practice a sleep routine plan to reached recommended amount of sleep.
- Demonstrate choices to reduce behaviors that negatively impact sleep.

SUPPLIES

- "A Day in the Life" handout, one copy per student
- Colored pencils or crayons

STANDARDS

21st Century Skills: Health Literacy, Standards 6 and 7

- 21.3-5.HL.6.5.1 Set a personal health goal and track progress toward its achievement.
- 21.3-5.HL.6.5.2 –
 Identify resources to assist in achieving a personal health goal.
- 21.3-5.HL.7.5.2 –
 Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health.
- 21.6-8.HL.6.8.1 –
 Assess personal health practices.
- 21.6-8.HL.6.8.2 –
 Develop a goal to adopt, maintain, or improve a personal health practice.
- 21.6-8.HL.6.8.3 Apply strategies and skills needed to attain a personal health goal.
- 21.6-8.HL.7.8.2 –
 Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.

This content connects well with the Health Literacy portion of the lowa Core Standards (21st Century Skills).





Activity 1: A Day In The Life...

Do you realize how much time you spend doing normal daily activities?

This activity is going to encourage you to reflect on your daily routine and chart out the different activities. Maybe it will help you discover healthy habits or even habits you want to change or improve.

DO: Distribute the "A Day in the Life" worksheet to each participant. Instruct them to reflect on a typical day in their life during the school year and chart what they do each hour over the course of a 24-hour period. The worksheet provides a list of categories. The next step is to have them color code the categories and then shade in the chart based on the activities and how they would categorize them. It is acceptable to have activities that fit more than one category. (For example, meal time might also be social or spending time with family.)

REFLECT: Once the youth have their worksheets filled out and activities categorized, these are a few reflection questions to help them analyze their daily routine.

- How much time is spent on a screen? (Ask youth if they recall the recommended limit for recreational screen time. It is 2 hours.)
 Were you able to limit it 2 hours or less? If not, are there activities you could adjust to reduce screen time in your free time?
- How much time were you active? (As youth if they recall the recommendation for time youth should be physically active each day. It is 1 hour.)
- Do you have three meals charted? To consume the recommended amount of nutrients, it helps by having breakfast, lunch, and dinner each day.
- How many hours of sleep did you chart?
 Did it fall in the recommended range for your age? (9-12 hours for youth ages 6-12, 8-10 hours for youth ages 13-18). If it didn't, what steps could you take to increase your sleep to the recommended range?
- Was there anything that surprised you from this activity? Maybe an activity that is missing that you wish you had time for or something in there you wish you didn't have to spend as much time on?

APPLY: Put a star next to the activities in your day that bring you joy or make you happy.

- What is it about these activities that make you happy? (Is it because you are doing something you're good at, something that makes you happy, maybe you get to do that activity with certain people?) Provide the class a couple minutes to do this. Ask for a few participants to share what they starred and why.
- Now that you have a better idea of what your daily routine truly consists of, are there things you can think of you would change? Is there an option to fit in more activities that bring you joy or that you would star?
- Think about how you could make these changes starting this week. Chat with your family to discuss these ideas and see if they can help you strategize ways to improve your schedule.

There are certain behaviors that can impact quality of sleep. Busy schedules can make it more difficult to carve out time for sleep, but they aren't the only culprit or cause of inadequate sleep.

The next few activities will review these other types of lifestyle choices and challenge participants to consider simple changes that would improve their sleep habits.

Activity 2: Caffeine Chaos

When feeling sleepy, we often turn to beverages to re-energize us.

A common ingredient in these drinks is a drug known as **Caffeine**. It stimulates our central nervous system, causing increased alertness.

While caffeine can help you feel alert and focused, it also can cause other reactions like anxiety, upset stomach, headaches, the jitters, and difficulty sleeping.

Caffeine can impact heart health as it can increase heart rate, blood pressure, and stress hormones.

What types of food or drink contain caffeine? (Allow youth to respond). Tea, coffee, sodas, energy drinks, and chocolate.

Minimal caffeine consumption is recommended in youth, but the recommended limit is 100 mg/ day. **How much is 100 mg?** This amounts to ~1 cup of coffee or 2 caffeinated soft drinks.

Energy drinks can be a popular beverage choice and are readily available in stores and even school vending machines. Let's look at these five energy drinks and see how much caffeine each contains. Caffeine is not a part of the Nutrition Facts Label, so if the company doesn't include the amount somewhere on the can, you must look it up online.

Energy drinks aren't the only source of caffeine. Let's analyze a variety of popular beverages to see how much caffeine they contain.

DO: Divide students into small groups of 3-4 people and have them fill out their worksheet for the "Caffeine Chaos" section. They will begin by looking up a few energy drinks to assess amount of caffeine, but then their group will brainstorm a list of their favorite drinks. Provide them with the website to determine the amount of caffeine for each beverage.

Monster (16 oz) = 160 **Red Bull** (8.4 oz)= 80

Rockstar (16 oz) = 160 **Bang** (16 oz) = 300

REFLECT: Once the groups are ready, bring them back together as a large group to reflect.

- Of the energy drinks, how many had more than 100 mg? (All but Red Bull)
- But Red Bull comes in a smaller can, so if you had 16 oz of Red Bull like the other cans, would it amount to more than 100 mg? (yes)
- One energy drink has more than the recommended limit!
- How did the other beverages compare?
 (Ask for a few groups to share what beverages they looked up.)
- Which beverage had the most caffeine? (Have each group share the beverage that had the most.)
- What about these beverages do you notice?

APPLY: Caffeine intake, especially in higher amounts, can cause your heart to beat faster and lead to an altered heart rhythm known as atrial fibrillation. Having a couple soft drinks, a cup of coffee, or even an energy drink on occasion likely won't have that type of an impact, but it is when we drink these types of beverages in excess that can have detrimental effects on our heart. Try to limit our consumption of these types of beverages to minimal consumption.

 Are there other beverages you can think of that would be better substitutes than drinks with caffeine?

ACTIVITY 3: SCREEN USAGE (OPTIONAL)

We can be innovative, curious, challenge ourselves, and even participate in exercise through screen time.

There can be many benefits to the advancement of technology, like connecting with loved ones that live far away, complete our homework, discover new information we want to learn about, and endless access to videos, shows, or movies that we find entertaining.

But, there can also be negative impacts from spending too much time on screens.

When our free time is replaced with sedentary behaviors while we sit and watch TV, movies, play video games or scroll social media sites we begin to practice unhealthy behaviors through physical inactivity, less social interaction, and exposure to blue light that can inhibit sleep quality.

Blue light fools our brain into thinking it is daytime. To get better sleep, it is best to:

- 1. Avoid bright screens 2-3 hours before bed.
- 2. Use dim red lights as night lights.
- 3. Use blue light filtering glasses if you are on a screen often.
- 4. Reduce screen usage to no more than 2 hours a day if possible.

DO: If students have cell phone devices. This activity is to help them identify how much time they spend on a phone. Let's check our average use on a mobile device:

- For Android users: Open Settings app, tap "digital wellbeing & parental controls". It should show phone use for the day. Under "Your digital wellbeing tools" it should show data.
- For iPhone users: Open Settings app, tap "ScreenTime". It should show daily and weekly average and comparison from previous week. You can also check how much time you specifically spend in particular apps. This may help you realize how much time you are actually spending on a screen and motivate you to set goals to decrease this time. You can even set limits on your phone for specific apps if you want to try reducing screen usage.

REFLECT: Put your thumb up if your screen usage averaged more than 2 hours per day. That is okay if you raised your thumb, and now we're all more informed and aware of how much time we spend on a screen.

 Anybody relate to how phone usage before bed or keeping a phone in our room at night might negatively impact our quality of sleep?

APPLY: Let's think of some strategies to reduce our recreational screen time usage to set healthier habits for the future.

- How might we decrease our screen usage on our phones?
- How about other electronic devices?

Activity 4: Sleep Hygiene

In order to practice good sleep habits and get a good night's sleep, here are a few tips:

- Stick to a regular sleep schedule by going to bed at a consistent time each night and getting up the same time each morning, even on the weekends!
- Prep your bedroom: having a quiet, dark, relaxing, and room at cooler temperature can help.
- Turn off and put away electronic devices 2 hours before bed. Artificial light from aTV, computer, tablet, or phone can stimulate the brain and make it more difficult to fall asleep. It is best to not keep these devices in your bedroom.
- Avoid eating snacks or a meal 2 hours before bed. Try to limit beverages to water as sugary drinks can impact your sleep quality.
- Be active during the day but not right before bed. Exercise is a great way to work your muscles
 which need rest to rehabilitate, but exercising vigorously right before bed can stimulate the
 brain and make it difficult to fall asleep.

DO: To wrap up this lesson we are going to create a Nighttime Routine Plan. On the backside of the worksheet, you can write down strategies or habits you would like to practice helping you get a good night's sleep.

- 1. Chart out a routine time to bed and to wake up to ensure you get the recommended hours of sleep.
- 2. Reflect on the different activities we discussed (busy schedules, prioritizing what brings you joy, reducing energy drinks, screen usage before bed) that impact our sleep. What night time routines could you practice to help you wind down and prepare for bed? Chart out your nighttime routine of 2-3 hours before going to bed.

Examples: no screen usage 2 hours before bed, only drink water 2 hours before bed, take a warm shower/bath, read a book, do light exercise like stretching or yoga, write in a journal, etc.

REFLECT: What ideas or strategies did you include in your nighttime routine to wind down for the evening?

APPLY: Let's try your nighttime this week. We'll check back in tomorrow or next week to see how trying your nighttime routine went and how it may impact your sleep.

Take Away Points: Reflection and Application

There are many things that can impact our sleep. Practicing healthier habits and reducing behaviors like screen time, sedentary behavior, energy drink consumption, and unloading a busy schedule, are all great strategies to improve quality of sleep and heart health.

Resources

- https://www.cdc.gov/healthyschools/features/students-sleep.htm#
- https://www.cdc.gov/sleep/about/?CDC AAref Val=https://www.cdc.gov/sleep/about sleep/sleep hygiene.html
- https://www.cspinet.org/caffeine-chart
- https://www.fda.gov/consumers/consumer-updates/spilling-beans-how-much-caffeine-too-much
- https://kidshealth.org/en/teens/caffeine.html



Written in 2020 in collaboration between lowa State University Extension and Outreach 4-H Youth Development and the lowa Heart Foundation.

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Importance Of Sleep Worksheet

A DAY IN THE LIFE ACTIVITY

□ Other _____

	T	
TIME	ACTIVITY	
MIDNIGHT		
1:00 AM		
2:00 AM		
3:00 AM		
4:00 AM		
5:00 AM		
6:00 AM		
7:00 AM		
8:00 AM		
9:00 AM		
10:00 AM		
11:00 AM		
NOON		
1:00 PM		
2:00 PM		
3:00 PM		
4:00 PM		
5:00 PM		
6:00 PM		
7:00 PM		
8:00 PM		
9:00 PM		
10:00 PM		
11:00 PM		
KEY		
□ Sleep	☐ School	☐ Work/Chores
□ Family	☐ Social	□ ScreenTime
□ Meals	☐ Fun/FreeTime	□ Exercise

Caffeine Chaos Activity









Utilize the Caffeine Chart website to analyze	
the amount of Caffeine in a variety of	
beverages.	

https://www.cspinet.org/caffeine-chart

mg

Let's practice by looking up these four energy drinks.

- 1. Brainstorm a list of your favorite beverages with your small group.
- 2. Check the website to identify how much caffeine is in each beverage.

YOUR GROUP'S FAVORITE BEVERAGES

1.		=		mg
2.		=		mg
3.		=		mg
4.		=		mg
5.		=		mg
	ich beverage has more tha			
	ich beverage had the most		affeine	

NIGHTTIME ROUTINE PLAN

_ mg

Go to bed at:pm				
Wake up at:am				
Total Sleephours				
Create your nighttime routine: List the strategies you can incorporate leading up to bed.				
1				
2				
3				
4				