Good Sleep Practices for Individuals with Down Syndrome

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Disclaimer

This information is provided for educational purposes only and is not intended to serve as a substitute for a medical, psychiatric, mental health or behavioral evaluation, diagnosis or treatment plan by a qualified professional.
Adult Down Syndrome Center
Park Ridge, IL

Our mission is to enhance the well-being of people with Down syndrome who are 12 and older by using a team approach to provide comprehensive, holistic, community-based health care services.
Agenda

• Discuss the importance of sleep.
• Describe ways to promote good sleep.
• Define and explain types of sleep disturbances.
• Share tips for adjusting to new sleep routines.
Why is sleep important?
Benefits of sleep

• Sleep cycle - REM and non-REM
• Restorative
• Learning and creative problem solving
• Promotes healthy mood
• Promotes cardiovascular health
• Improves immune health
• Improves body’s use of blood sugar
• Controls appetite

National Institutes of Health, 2011
Why is it important to get good sleep?

- It gives you energy.
- It helps you be happy.
- It helps you do your best at school, work, and other places.
- It helps you stay healthy!
Impact of poor sleep

- Hypertension
- Obesity
- Type 2 Diabetes
- Impaired immune function
- Cardiovascular disease
- Mood disorders
- Neurodegeneration and dementia (Alzheimer’s disease)
- Loneliness
- Inattention
- Effect on family/group home

Worley 2018
What can cause sleep disturbances?
Sleep disturbances in people with intellectual disabilities

Insomnia
• Including difficulty falling asleep or staying asleep

Hypersomnia
• Excessive sleepiness

Sleep related breathing problems
• E.g., sleep apnea

Brylewski, 1999
Sleep disturbances in people with Down syndrome

- Trouble falling asleep initially
- Trouble staying asleep
- Difficulty falling back to sleep if wake up in the middle of the night
- Restless sleep
- Sleep apnea
- Not wanting to sleep in their bed
- Switching days and nights/staying up very late and sleeping in
Medical and psychological issues that impact sleep

- Thyroid (hypo and hyperthyroidism)
- Depression
- Anxiety
- Obsessive compulsive disorder
- Sleep apnea
- Gastroesophageal reflux disease
- Urinary issues
Treatment for sleep disturbances

- Sleep hygiene
- Behavioral approaches
- Natural products (e.g., melatonin, magnesium, valerian root, tryptophan)
- Medications (e.g., sedatives, trazodone)
- Sleep apnea
  - Sleeping position
  - CPAP
  - Hypoglossal nerve stimulator
  - Medications (for daytime sleepiness)
How can we promote good sleep?
Sleep hygiene

• A series of healthy sleep habits that can improve your ability to fall asleep and stay asleep.

• Refraining from activities that promote excessive evening alertness or interrupt the process of falling asleep.
Good sleep hygiene habits

- Allow time for your body to digest dinner.
- Fall asleep at the same time each night.
- Set up a healthy sleep space.
- Establish a bedtime routine.
- Wake up at the same time each morning.
- Drink water as soon as you wake up.
- Walk/stretch within the first hour of waking up.
Sleep hygiene habits to avoid

- Consuming caffeine before bed.
- Eating sugar before bed.
- Drinking alcohol before bed.
- Vigorous exercise before bed.
- Watching TV in bed.
- Using phone or tablet in bed.
- Lingering in bed in the morning.
Using devices at night

• Turn off alerts
  • Do not disturb or Silent mode

• Minimize the impact of blue light
  • Night Shift / Night Mode device settings
  • Blue light filter apps
Use Night Shift on your iPhone, iPad, and iPod touch

Night Shift automatically adjusts the colors of your display to the warmer end of the spectrum—making the display easier on your eyes.

About Night Shift

Night Shift uses the clock and geolocation of your device to determine when it’s sunset in your location. Then it automatically shifts the colors of your display to warmer colors. In the morning, it returns the display to its regular settings.

Turn on Night Shift

There are two ways to turn Night Shift on and off:

- Open Control Center. Firmly press the Brightness control icon, then tap \(^{2}\) to turn Night Shift on or off.
- Go to Settings > Display & Brightness > Night Shift. On the same screen, you can schedule a time for Night Shift to turn on automatically and adjust color temperature.

By default, Night Shift turns on from sunset to sunrise.

https://support.apple.com/en-us/HT207570

Android Device

Certain Android devices have built-in blue light filters, which can be enabled or disabled from the pull-down menu. However, as with many Android features, availability depends on your specific device and version of Android.

To seek out this feature on your Android phone or tablet, go to Settings > Display. Look for an option for Night Light or Blue Light Filter. If you find it, tap on it to turn on the filter.

https://www.pcmag.com/how-to/how-to-stop-blue-light-from-disturbing-your-sleep
Sleep hygiene

Go to bed at the same time every night.

Wake up at the same time each morning.

Get 7 to 9 hours of sleep each night.

Make a good sleep space.

Have a healthy bedtime routine.

Hygiene
- brush teeth
- wash face
- go to bathroom

Relaxation
- write in journal
- pray
- read
- take deep breaths
- stretch
Adjusting to new sleep routines
Establishing a sleep routine

- Relaxation
- Sleep aids
- Sensory
Relaxation

- Read
- Journal
- Pray
- Drink warm tea
- Take a warm bath
- Meditate
- Stretch
- Take deep breaths
- Use essential oils
- Listen to slow music or white noise
- Dim lighting
Sleep aids

Sound machine
Ear plugs
Sleep mask

Night light
Light Alarms
Fan
What is sensory?
Our sensory system
Calming sensory strategies

- Music, white noise
- Essential oils
- Drink warm tea
- Dim lights
- Massage
Calming sensory strategies

• Proprioceptive input
  • Massage/vibration
  • Weighted blankets/objects
Sensory resources
Details

Sommerfly Sleep Tight Weighted Blankets provide gentle soothing pressure which promotes calmness and better restful night sleep.

- Gentle pressure through weighted blanket gives a similar effect as swaddling
- 100% Cotton Cover
- Polyester insert with weighted outer layer
- Suitable for all ages
- 5 lb. blanket fits users 22-35 lb.
- 8 lb. blanket fits users 36-65 lb.
- 12 lb. blanket fits users 66-95 lb.
- 16 lb. blanket fits users 96-125 lb., measures 54" x 80"
- 25 lb. blanket fits users 126 lbs +, measures 57" x 80" +
- Machine washable
- Made in USA of cotton and imported materials
- Each Sommerfly Sleep Tight Weighted Blanket Sold Separately
Behavioral approaches for common sleep disturbances in Down syndrome
Behavior strategies

• Trouble falling asleep
  • Sleep hygiene and consistent bedtime routine.

• Waking up in the middle of the night
  • Make sure they are ok and then escort them back to their room or repeat part of bedtime routine.
  • Avoid nighttime drinks.
  • After 15 minutes, encourage a non-screentime activity out of bed like journaling or coloring or one of their relaxation activities.

• Unable to fall back to sleep
  • Check in every 5 minutes or longer and try to re-settle. Encourages them to fall asleep on their own.
  • Gradual withdrawal.
Behavior strategies cont.

• Early waking
  • Reduce light and noise.
  • Praise and positive reinforcement.
  • Alarm clock showing when ok to get out of bed.
  • If they need less sleep, put them to bed later.

• Sleeping in parents’ bed
  • Return them to their bed.
  • Stop sign on your door or their door.
Behavior strategies cont.

- Reverse sleep/wake cycle
  - Determine reason for change.
  - Wake individual up in the morning at reasonable time.
  - Limit opportunities to nap during the day.
  - Have an activity to do that day.
  - Create a bedtime routine and gradually make bedtime earlier.
  - Make bedroom a place for sleep only.
General Reminders

• Ensure bedroom is conducive to sleep.
• Establish consistent evening and bedtime routines.
• From early on, teach individual to fall asleep on their own.
• Reward good nighttime behavior.
• Try to avoid bringing the individual into your room or bed for sleep.
• Avoid prolonged naps in the afternoon.
• Avoid drinks that contain caffeine.
• Restrict TV/videos and screentime in the bedroom around bedtime.
• Be kind, but also firm and consistent.
Sleep studies and CPAP machines
Tolerating a sleep study

- Use sensory strategies to help relax the body.
- Take a tour of the sleep center.
- Practice with a pap nap.
- Request supplies to practice at home.
- Use a social story beforehand.
- Complete bedtime routine at the sleep center.
- Be positive!
Tolerating a CPAP

• Use sensory strategies to help relax the body.
• Practice with a pap nap.
• Use behavior strategies and/or visual supports to increase tolerance.
• Consider alternative masks.
• Be positive!
Visual resources

Going for a sleep study

Going to get my sleep mask

Sleep resources
My CPAP story

I do not sleep very well at night.

I put on my mask when I get into bed. I fall asleep with my mask on.

I take my mask off when I wake up. I feel well in the morning.

Create a Bedtime Routine Visual

Create a visual routine to help make bedtime easier.
Mask options
Things to remember

• Sleep is important for good health.
• Be aware of the impact of sleep on health.
• The need for sleep is biological. However, how one sleeps is a learned behavior.
• People with Down syndrome can successfully improve sleep with good sleep hygiene and some behavioral approaches.
• Be positive!
Resource Library

https://adscresOURCES.advocatehealth.com
Links to resources

All Sleep Resources
https://adscresources.advocatehealth.com/resources/?category=Sleep

Going for a Sleep Study
https://adscresources.advocatehealth.com/assets/1/13/Going_for_a_Sleep_Study.pdf?67

Going to Get My Sleep Mask
https://adscresources.advocatehealth.com/assets/1/13/Going_to_Get_My_Sleep_Mask.pdf?68

How to Use a CPAP Machine Video
https://adscresources.advocatehealth.com/how-to-use-a-cpap-machine-video/
Links to resources

Affordable Sensory Equipment
https://adscresources.advocatehealth.com/assets/1/13/Affordable_Sensory_Equipment_Recommendations.pdf?33

Proprioceptive Input
https://adscresources.advocatehealth.com/resources/proprioceptive-input/

Upper Body Joint Compression

Lower Body Joint Compression
https://adscresources.advocatehealth.com/assets/1/13/Lower_Body_Joint_Compression.pdf?66
Other resources

- Managing-Sleep-Problems-In-Children-21st-March-KP-28th-June-SM_DSMIG.pdf (downs-syndrome.org.uk)
- Sleep & Down Syndrome | National Down Syndrome Society (NDSS)
- Sleep - Down Syndrome Resource Foundation (dsrf.org)
Free Copy of the Mental Wellness book

https://www.facebook.com/adultdownsyndromecenter
Email list

Do you have questions about health and wellness of adolescents and adults with Down syndrome? Our next webinar is for you! Join Brian Chicoine, MD, Katie Franek, PhD, OTR/L, and Hannah Graham, MD for a Q&A on Wednesday, February 16, at 3:00pm (Central). Questions may be submitted before the webinar and/or during the webinar. Please click the button below to register and submit a question.

REGISTER NOW

http://eepurl.com/c7uV1v

Even if the weather outside is frightful, there are many activities we can do at home to fight boredom, stay active, be social, and have fun. We recently updated our “Activities You Can Do at Home” resource. There are ideas for arts and crafts, cooking, education and learning, fitness and physical activity, games, and more.

Explore activities
Personal contact information

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