



## TOOL 2.7: Strategies to Promote Good Sleep and Alertness

### Healthy habits to promote good sleep and alertness

Make sure the child/adolescent:

- Maintains the same sleep and wake times during the week and on weekends throughout the year, including in the summer, to the best of their ability. If this is challenging to maintain on weekends and holidays, try to keep the child/adolescent within one hour of weekday bed and wake times.
- Has a fixed bedtime routine. A warm bath about one hour before bed may help to facilitate sleep through relaxation. (Note: taking a warm bath too close to bedtime may raise body temperature, which can delay sleep.) If taking a warm bath or shower close to sleep time is unavoidable, it can be followed by a cool (not cold) rinse or shower to prevent the body temperature from rising.
- Turns off the computer and electronic devices including cell phones, at least 30 minutes before bedtime. This helps to ensure that the light emitted from these devices does not affect the ability to fall asleep or maintain sleep, and, that the cognitive or thinking activities involved with screens don't affect the ability to quiet the mind in preparation for sleep.
- Gets increased sleep and naps in the first few hours/days after a concussion. During this acute period, the child/adolescent should be allowed to sleep as much as needed throughout the day and night. Consult a physician or emergency department if the child/adolescent is not easily awoken in the first few hours or days after a concussion. After this acute period, those who have night-time sleep issues should avoid naps (unless it is part of the younger child's typical routine) to promote night-time sleep and gradual return-to-activity.
- Limits naps to once a day. If the child/adolescent is sleepy during the day and cannot avoid napping, then a nap should take place before 3 pm and for no longer than 30 minutes.
- Naps in bed, and not in another room or in front on the TV.

### Nutrition, exercise, and lifestyle

Make sure the child/adolescent:

- Avoids caffeine (coffee, tea, chocolate, some over-the-counter medications) within 4-6 hours of bedtime.

## Tool 2.7: Strategies to promote good sleep and alertness (cont'd)

- Avoids energy drinks and alcohol altogether.
- Avoids eating heavy meals late in the evening.
- Avoids sugar 4 hours before bedtime. Try a bedtime snack containing proteins.
- Has a balanced diet. Foods such as Goji berries, walnuts, almonds, pineapple, bananas and oranges all contain substantial amounts of melatonin, a hormone produced in the brain that promotes sleep.
- Has an adequate amount of magnesium and zinc in the diet or by supplement. Zinc is known to regulate sleep and magnesium is also directly involved in sleep and relaxation. Magnesium and Zinc-rich foods include:
  - Dark leafy greens
  - Seeds and nuts, including sunflower and sesame seeds, cashews and almonds
  - Squash, broccoli, and other vegetables (magnesium)
  - Potatoes (zinc)
  - Legumes
  - Dairy products
  - Meat
  - Unprocessed whole grains.
- Does 30-60 minutes of vigorous exercise a day, when tolerated and medically indicated, and at least 2 hours before bedtime. Exercise during the 2 hours before bedtime can delay sleep while regular exercise earlier in the day can promote sleep.
- Gets some natural light during the day, especially in the morning.
- Gets 15-30 minutes of quiet time after periods of cognitive activity, if he/she has significant cognitive fatigue (not sleepiness) during the day. Ideally, quiet time should be in an environment with natural light and no electronic devices. This can also promote night-time sleep.
- Avoids loud music with a strong beat before bedtime. If the child/adolescent is used to listening to music before bed, make sure that it is music that promotes relaxation.

## **Sleeping environment**

Make sure the child/adolescent:

- Has a dark, cool and comfortable sleeping area.
- Removes all sources of light in the bedroom while sleeping.
- Opens the curtains and has natural light immediately upon awakening.
- Keeps the bedroom clean, tidy and quiet. Neutral or natural sounds can help to block out distracting sounds.
- Reserves the bed and bedroom for sleep, and does other activities (reading, watching TV, using the internet, playing games) in another room. Ideally, there should be no electronic equipment in the bedroom. If this is unavoidable, make sure that all computers, tablets, cell phones, etc. are turned off or are in —“sleep” mode.
- Turns any digital clocks with numbers that light up away from the bed during sleep.

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