Appendix 7.5

Behavioural Recommendations for Optimal Sleep*

Objective A: Restrict the time you spend in bed to the actual time you spend sleeping: spending too much time in bed may actually contribute to your sleep problem. (Appendix 7.7)

- 1- Monitor your sleep with a sleep diary (<u>Appendix 7.6</u>) for 1 or 2 weeks. Calculate the time spent actually sleeping (Time spent in bed minus time to fall asleep and awakenings).
- 2- Under the supervision of your health-care provider, set up a sleep window with a duration corresponding to the actual sleep time of the past 1-2 weeks, and with fixed bedtime and rising time. The sleep window should not be of less than 5.5 hours.
- 3- Maintain the sleep window for at least one week.
- 4- Set a consistent wake time (even on weekends), and regardless of amount of sleep obtained.
- 5- On a weekly basis, gradually adjust the sleep window based on your sleep quantity and quality:
 - If you sleep more than 85% of time you spend in bed and/or you constantly feel sleepy during the day, increase the sleep window by 15-20 minutes.
 - If you sleep less than 85% of the time you spend in bed, decrease the sleep window by 15-20 minutes.
 - Continue this procedure until you achieve an acceptable sleep quality and duration AND you do not feel sleepy during the day.

NOTE: feeling tired (unenergetic, weary, having difficulty maintaining attention or effort) is different than feeling sleepy (drowsy, yawning, eyelids drooping).

CAUTION: You may feel sleepy or tired in the first days/weeks when following these recommendations. Be cautious with activities which may put you in danger (e.g., driving, operating machinery).

Objective B: Re-associate your bed, bedroom and bedtime with sleep and sleepiness rather than with sleep-incompatible activities or the anxiety of not sleeping. (Appendix 7.8)

- 1- **Get up at the same time every morning, regardless of the amount of sleep you obtained.** Maintaining fixed bedtime and rising time helps regulating the biological and maximizing sleep drive at the optimal time.
- 2- Allow at least 1 hour before bedtime to unwind. This is intended to facilitate the transition from wakefulness to sleepiness, and to sleep onset. In this time, you should plan quiet, relaxing, and pleasant activities.
- 3- **Go to bed only when sleepy.** Going to bed when feeling wide awake only leads to prolonged wakefulness and further associates the bed and bedroom with insomnia rather than sleep. Wait until you feel the signs of sleepiness (yawning, eyelids drooping) before trying to sleep.
- 4- If you are unable to fall asleep or fall back to sleep within 15-20 min, get out of bed and find something else to do in another room. Again, the rationale is to strengthen the association between your bed and bedroom, and sleep. When applying this strategy, it is important to choose a quiet and relaxing activity, avoid stimulating ones (e.g., computer or TV), and avoid bright light. Go back to bed only when you feel sleepy again. Repeat this procedure as often as necessary.
- 5- **Reserve your bed and bedroom for sleep only.** The bedroom environment should be associated with sleep only, sexual activities being the only exception. All other activities, such as reading, worrying about your personal or health problems, or watching TV, should be done elsewhere.
- 6- **Limit daytime napping.** Beyond the first few days post-injury, it is best to avoid daytime napping. Naps can affect the quantity and quality of sleep the following night. Naps longer than 30 min can be followed by an unpleasant period of sleepiness and difficulty concentrating than can last up to 1 hour upon awakening. If daytime sleepiness is too overwhelming, take a short nap (not exceeding 1 hour and taken before 3:00 PM).

These recommendations should be implemented together with a sleep hygiene program (<u>Appendix 7.4</u>), under the supervision of a healthcare professional.

^{*} Taken with permission from Ouellet MC, Beaulieu-Bonneau S Morin CM. Sleep-Wake Disturbances. In Eds. Zasler ND, Katz DI, Zafonte RD. Brain Injury Medicine: Principles and Practice. New York; Demos Medical Publishing LLC; 2012.