SLEEP DEPRIVATION

The National Sleep Foundation (NSF), in March 2010, conducted the largest poll thus far that illuminates a growing problem: “Our children have poor sleep habits for which they pay a high price and their parents lose an estimated 200 hours of extra sleep in a year due to their child’s nighttime awakenings.” From elementary school through high school and beyond, a great many of children are chronically sleep-deprived, which means they don’t get enough sleep. In studies of elementary school-age children, nearly 40% showed some kind of sleep problem, 50% of adolescents reported at least occasional difficulty falling or staying asleep, with up to 13% experiencing chronic and severe insomnia. Clearly, the amount of sleep most teenagers get is insufficient, with the average getting under seven hours, and with only a mere 15% sleeping the suggested eight or more hours on a school night. Affecting their health, academic performance, and behavior negatively, sleep deprivation is one of the primary causes of instability in youth, and it is important for parents to become aware of the health techniques available to promote better sleep patterns in their children.

Much has been written about how sleep deprivation can be harmful for the adult population but a lack of sufficient sleep can have an even greater impact on the young because of the crucial effects it has on the development of the brain, affecting concentration, attention, and mood. Pediatric research findings are rather startling in this regard: “Poor sleepers reported being significantly more depressed, without energy, tired, tense, moody, stressed, irritable, and less alert than good sleepers. They are more likely to display behavioral problems at school and at home. Interestingly enough, they are also more likely to have a negative self-image. Even 20 fewer minutes of needed sleep may significantly affect behavior in many areas. One study showed that students with lower grades got about 25 fewer minutes of sleep and went to bed an average of 40 minutes later than those who scored higher.” It is clear that persistent sleep problems have been associated with many learning difficulties throughout the school years.

In the 2010 NSF poll, three out of four parents said they would change something about their children’s sleep habits if they could. Doing so as early as possible is crucial because research has found that most children do not grow out of their sleep problems; rather, the sleep problems of their childhood usually settle in the brain and persist into adulthood. In the New York Times bestseller, Secrets of the Baby Whisperer, Tracy Hogg notes: “What many people don’t realize is that babies need parents’ direction to establish proper sleep habits. In fact, the reason why so-called sleep problems are so common is that so many parents don’t realize that they, not their babies, must control bedtime.”

How do parents accomplish this very important task of helping their children get enough quality sleep? The most important first step is to monitor and limit the amount of exposure to mass media, such as television, video games, and computers throughout the day. The American Academy of Pediatrics would recommend that to keep TV watching to a healthy level, parents need to set definite limits to how much and what children can watch, with children under two not watching television at all. This may involve a struggle for the parents to control the time spent on television and computers as a child becomes older, but it is well worth the struggle in the long run. Dr. Judith Owens, Director of the Pediatrics Sleep Disorder Clinic at Hasbro Children’s Hospital, states: “The children who have the most difficulty sleeping, resist going to bed, and wake up most during the night are the children who watched television just before bedtime.” Watching television around bedtime, as Owen states, does not have a benign influence because a television in the bedroom is found to be highly correlated with sleep disturbances. Forty percent of the children studied had a television in their bedrooms.

Other major factors contributing to bedtime battles include putting children to bed too late, failing to create a regular bedtime routine, and giving them confusing messages about going to bed. No matter how much they resist going to bed at an established proper time, it is crucial for children to get enough quality sleep so that the body recharges the nervous system and the brain. It is important for the parents to remember that children, as a rule, need much more sleep than adults. Their growing bodies need this time to create and benefit from the release of human growth hormone, which is secreted at night during deep sleep stages. It has been found that children who sleep poorly for prolonged periods often fail to grow at normal rates. Parents need to help their children develop their own sleeping strategies. They cannot force them to sleep, as trying too hard increases the adrenaline, and a tired child becomes a cranky child. Instead, they must gently facilitate their process of discovering their body’s own innate sleep patterns.

Another factor is to pay close attention to foods and drinks being consumed within the last hour before sleep. All children should avoid drinking sodas and eating spicy foods, sugars, candies, and chips in pre-bedtime hours. Any foods with caffeine, such as colas and chocolate, need to be tapered off after dinner. Foods that help your body produce serotonin, an important neuro-hormone involved in sleep, such as fruit and carbohydrates, can help induce sleep.

Looking again at the impact of our media-saturated world, it may also be highly beneficial to create an environment in children’s bedrooms that will help them develop deep sleep, patterns. There is so much noise in a modern household that it is effective to provide an appropriate musical background in the bedrooms to shut out other household noises that might interrupt children moving into sleep.

The more researchers investigate the sleeping brain, the more clear it becomes that sufficient sleep is a necessity for children’s health, not just a luxury. Studies of the neurological, chemical, and electrical activity of the brain show that even minimal sleep loss or disruption can have profound and detrimental effects on cognition, mood, performance, productivity, general health, learning, and the immune system.
A. Answer the following questions and complete the sentences based on the reading passage. (1 pt)

1. According to paragraph 1, the 2010 NSF poll...
   A) attracted as many participants as other polls conducted until then.
   B) showed parents have poor sleep habits like their children.
   C) showed children cost their parents a good amount of sleep.
   D) showed 200 hours of sleep is needed both by parents and children.

2. Based on paragraph 2, which of the following is true? (1 pt)
   A) Sleep deficit doesn’t have any effects on children other than psychological.
   B) Children are affected more negatively by sleep deprivation than adults are.
   C) People with sleeping problems tend to be more self-centered than other people.
   D) Depression is as common among good sleepers as it is among poor sleepers.

3. According to Tracy Hogg, parents shouldn’t let their babies control their bedtime because this leads to ______________________________________________________________ (2 pts)

4. Children who watch TV before going to bed are more likely to ______________________________________________________________ (2 pts)

5. If parents force their child to sleep, ________________________________________________________________________________ (2 pts)

6. Which of the following can be inferred from paragraph 6? (1 pt)
   A) Children shouldn’t be allowed to eat snacks at any time.
   B) Serotonin can be obtained from certain foods such as fruit.
   C) Caffeine intake of children should be postponed until after dinner.
   D) Consumption of certain foods by children should be monitored.

7. According to the text why would a family set up a sound system in their child’s bedroom? (2 pts)

   ______________________________________________________________
   ______________________________________________________________

8. Which of the following is NOT mentioned in the passage as one of the negative effects of sleep deprivation on children? (1 pt)
   A) learning difficulties
   B) eating disorders
   C) growth problems
   D) behavioral problems

9. Benign in paragraph 4 is closest in meaning to … (1 pt)
   A) positive
   B) initial
   C) chronic
   D) stable

10. Secreted in paragraph 5 is closest in meaning to … (1 pt)
    A) absorbed
    B) hidden
    C) produced
    D) decreased

11. Those in paragraph 2 refers to _________________________ (1.5 pts)

12. They in paragraph 3 refers to _________________________ (1.5 pts)
B) An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. Now choose three of the statements below. (1x3 pts)

Parents should help their children have better sleep patterns to reduce the negative effects of sleep deprivation.

a. Successful students get 25 more minutes of sleep than students who have low academic performance.
b. In order for children to grow up healthily, it is important for children to have a sufficient amount of sleep.
c. Most children who have difficulty sleeping eat chocolate and drink sodas while they watch television.
d. Insomniacs should limit their own exposure to mass media if they want to achieve better sleep patterns.
e. Children should be kept away from certain foods before they go to sleep so that they can have a good night’s sleep.
f. One of the most significant causes of sleep deprivation in children is too much exposure to mass media.
g. Serotonin is a vital neuro-hormone which children need to become healthy adults in their future lives.
SAMPLE READING I: SLEEP DEPRIVATION

SUGGESTED ANSWERS

1. C
2. B
3. settled sleep problems in the brain persist into adulthood/ permanent sleep problems
4. have difficulty sleeping/ resist going to bed/ wake up during the night
5. the child’s adrenaline increases/ a tired child becomes a cranky child
6. D
7. To create an environment that will help their child develop deep sleep patterns/ to shut out other household noises that might interrupt children moving into sleep.
8. B
9. A
10. C
11. Students
12. Three out of four parents
13. b, e, f