## **CONCEPT: SLEEP AND HEALTH**

# **The Importance of Sleep**

<b>♦</b>	◆ Sleep is critical in maintaining a person's	health and well-being.
	• Recall: Most adults require between to	_ hours of sleep.
	- Lack of sleep negatively impacts physical & me	ntal health and the risk of chronic diseases.

Sleep & Health Effects				
1 - Hormone Regulation	The release of hormone.  Muscle growth  Bone production	2 - Cardiovascular	<ul> <li>◆ Short sleep duration chronic inflammation and risks of:</li> <li>▶ Stroke</li> <li>▶ Hypertension</li> <li>▶ Obesity</li> </ul>	
3 - Immune System	<ul> <li>◆ Weakened with sufficient sleep:</li> <li>▶ Common cold</li> <li>▶ Strep throat</li> <li>▶ Influenza</li> </ul>	4 - Cognitive Function	<ul> <li>impacts cognition:</li> <li>Memory storage</li> <li>Learning</li> <li>Problem solving</li> </ul>	
5 - Metabolism  CO <sub>2</sub>	◆ Sleep regulates boold sugar levels:  ■ sleep risks of obesity & diabetes	6 - Reproduction	◆ impacts reproductive health:     • Men     • [Semen] & mobility, testicles     • Women     • Fertility Rates	

## **EXAMPLE**

When Jerry gets enough sleep before an exam, her mental sharpness seems to improve. This can be attributed to which of the following?

- a) Her cognitive skills being restored during her full night of sleep
- b) Early morning alertness
- c) Higher level of stress management
- d) Decrease in depression during her full night of sleep

### PRACTICE

Which of the following amounts of time would be considered oversleeping?

- a) 3 hours
- b) 5 hours
- c) 10 hours
- d) 9 hours
- e) 8 hours

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#### **PRACTICE**

Getting a sufficient amount of sleep can contribute to which of the following?

- a) An increase in body mass.
- b) An increase in intelligence.
- c) Proper immune response to the common cold.
- d) Increased sluggishness in morning activities.

#### PRACTICE

Samantha is beginning her first semester at her local university with a full course load. She is averaging about 5 hours of sleep per night during the semester. Which of the following is a possible outcome from this amount of sleep?

- a) A strengthened immune system and lower occurrences of illness.
- b) An increase in productivity and multitasking.
- c) Her body adjusting to this lower amount of sleep.
- d) A decrease in cognitive function and academic performance.

#### **PRACTICE**

Jose is on the college basketball team and is known for his three-point shooting. During the spring semester he enrolls in an interesting, but challenging biology course that greatly impacts the amount of sleep he gets a night. At the same time his three-point efficiency has gone from 45% to 21%. How might his lack of sleep account for this decrease in performance?

- a) His long-term memory is being enhanced.
- b) His brain is processing drills and information at a greater rate.
- c) His strength has increased greatly from constantly working.
- d) His motor skills are being impaired.