

## Sleep: Condition Information

### What is sleep?

Sleep is a period of unconsciousness during which the brain remains highly active. It is a complex biological process that helps people process new information, stay healthy, and rejuvenate. During sleep, the brain will cycle through five distinctive phases: stage 1, 2, 3, 4, and rapid eye movement (REM) sleep.

### Why is sleep important?

Each phase is important to ensure that the mind and body are completely rested. Certain phases are needed to help you feel rested and energetic the next day, while other phases help you learn information and form memories.<sup>1, 2</sup>

Inadequate sleep contributes, in the short term, to problems with learning and processing information, and it can have a harmful effect on long-term health and well-being. According to the Centers for Disease Control and Prevention, more than 25% of U.S. adults believe they get insufficient sleep at least 15 of every 30 days.<sup>3</sup>

Sleep affects performance on daily tasks, mood, and health in the following ways:

- **Performance.** Cutting back on sleep by as little as 1 hour can make it difficult to focus the next day and can slow your response time. Insufficient sleep can also make you more likely to take risks and make bad decisions, according to the National Heart, Lung, and Blood Institute (NHLBI).<sup>1</sup>
- **Mood.** Sleep affects your mood. Insufficient sleep can cause irritability that can lead to trouble with relationships, particularly for children and teens. Also, people who don't get enough sleep are more likely to become depressed, according to the NHLBI.<sup>1</sup>
- **Health.** Sleep is important for good health, according to the NHLBI.<sup>1</sup> Lack of sleep or lack of quality sleep increases your risk for high blood pressure, heart disease, and other medical conditions.<sup>1</sup> The quality of your sleep is affected by environmental factors, such as disturbances while you are sleeping and whether you remain asleep the entire night.<sup>1</sup> Also, during sleep the body produces hormones that help children grow and, throughout life, help build muscle, fight illnesses, and repair damage to the body.<sup>1</sup> Growth hormone, for example, is produced during sleep.<sup>4</sup> It is essential for growth and development. Some hormones produced during sleep affect the body's use of energy. This may be how inadequate sleep leads to obesity and diabetes.<sup>5, 6, 7</sup>

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