



ASSURE[®] BRILLIANCE

COMPREHENSIVE SERVICE & SUPPORT PROGRAM

Diabetes and Sleep Apnea

People with diabetes are at a greater risk of developing certain medical conditions that can negatively affect their sleep. Such conditions include gastroesophageal reflux disease (GERD), depression, heart disease, chronic pain, restless leg syndrome and sleep apnea.¹ This article will focus on diabetes and sleep apnea.

Sleep apnea is a common disorder that causes pauses in breathing or shallow breaths during sleep. Breathing pauses can last from a few seconds to minutes and may occur 30 times or more an hour. Typically, normal breathing then starts again, sometimes with a loud snort or choking sound.²



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turn increases the risk for development of cardiac disease, stroke and/or diabetes, and can lead to worsening of diabetes-related symptoms, particularly those that involve the eyes and kidneys.¹

Sleep apnea, weight and diabetes—how they all relate

In a study related to diabetes and sleep, it was found that one-third of adults with type 2 diabetes—20 percent women and 50 percent men—also have sleep apnea³, and up to two-thirds of people with sleep apnea are overweight. Relative to these findings, there are studies that show that altered sleep can result in decreased growth hormone which contributes to body composition (body fat, muscle and abdominal fat). Additional studies have shown a link between sleep apnea and the development of diabetes and insulin resistance.⁴

Sleep apnea can affect diabetes control in many ways. Struggling for air can put the body into fight-or-flight mode, releasing cortisol, the stress hormone that can raise blood glucose levels and insulin secretion.³ Unstable blood sugars—whether high or low—can interfere with a person’s sleep.⁴ Sleep apnea also causes a decrease in oxygen levels, which limits oxygenation to cardiac and other body tissues. This in

Treating sleep apnea

There are several treatments for sleep apnea including using continuous positive airway pressure (CPAP) machines or oral appliances and lifestyle changes.

Using a CPAP machine is the most common treatment option for sleep apnea.¹

With the CPAP device, there are various mask types—some fit over the mouth and nose, or just over the nose and some are only designed for the nose. The machine gently blows air into the throat. The pressure from the air helps keep the airway open during sleep. Using a CPAP has been shown to decrease daytime fatigue and improve blood pressure readings.¹



Oral appliances to treat sleep apnea.¹

Oral appliances for sleep apnea are designed to pull the lower jaw forward while opening the throat during sleep. Such devices have shown to be less effective than a CPAP machine but more comfortable and easier to use. The appliances are also smaller; therefore more portable, which is ideal for travel.

Exercising and losing weight.¹

For people who are obese, losing 10 percent of body weight can improve symptoms associated with sleep apnea. Other lifestyle-changes that may treat or reduce symptoms of sleep apnea include:¹

- Avoiding alcohol near bedtime
- Sleeping on the side or stomach
- Treating allergies or other nasal problems

References

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- 4 Type 2 Diabetes and Sleep. WebMD. <http://www.webmd.com/diabetes/guide/type-2-diabetes-sleep>. Accessed February 2, 2015.
- 5 What's the Connection between Diabetes and Sleep? Sharecare. <http://www.sharecare.com/health/type-2-diabetes/article/diabetes-and-sleep-problems>. Accessed February 2, 2015.