

### **What is Obstructive Sleep Apnea?**

Snoring is noisy breathing resulting from upper airway structures such as the uvula, soft palate, and tongue intermittently coming in contact and temporarily obstructing airflow. Factors that contribute to snoring include nasal blockage due to deviated nasal septum, large tonsils or adenoids, an elongated and thickened soft palate, a large uvula or tongue, and excess tissue surrounding and narrowing the throat (obesity).

Snoring can indicate a more serious medical condition known as obstructive sleep apnea. Obstructive apnea occurs when the collapse of upper airway structures during snoring causes complete blockage of airflow lasting 10 seconds or more or causing the oxygen level to decrease by greater than 4%. Frequent breaks in sleep result in restless sleep, daytime fatigue, morning headaches, poor concentration, daytime sleepiness, dry throat and reduced productivity at work. Additionally, if left untreated, sleep apnea can lead to heart and lung disease, as well as stroke.

Sleep apnea is diagnosed via a sleep study (polysomnogram). A sleep study is performed at a sleep facility, where sleep is monitored for periods of decreasing oxygen levels and blockage in airflow, among other variables. A sleep study helps to identify the presence of obstructive sleep apnea, as well as severity of sleep apnea.

Medical and surgical treatments exist for both snoring and obstructive sleep apnea. The physical examination and sleep study results along with the patient's desires help determine the appropriate therapy. Treatment options include:

### **Medical Treatment of Snoring and Sleep Apnea:**

- Weight loss-diet and fitness regimen
- Alcohol and sedative avoidance
- Sleep position training
- Breathe Right Strips (when external nasal collapse is a contributing factor)
- Continuous Positive Airway Pressure (CPAP) machines
- Oral appliances and mouthpieces worn at night