

## Sleep apnea:

Is a potentially serious disorder in which your breathing repeatedly stops and starts during sleep. It may cause daytime drowsiness, poor concentration, irritability, and morning headache. Sleep apnea makes your breathing stop repeatedly while you're asleep. You may have a few to over one hundred episodes of apnea per hour of sleep, each episode lasting 10-20 seconds. Interruptions in normal breathing lower the level of oxygen and raise the level of carbon dioxide in your blood. Alerted to these changes, your brain wakes you just enough to restart your breathing, often with a gasp or choking sound.

Sleep Apnea occurs in predominately two forms: obstructive and central. These forms of sleep apnea are distinguished by the presence or absence of airway obstruction. In obstructive sleep apnea, breathing stops when the soft tissue in the back of your throat collapses and briefly closes off your airway. Excess body weight (increasing tissue around your throat) and excessive muscular relaxation contribute to obstructive sleep apnea.

Central sleep apnea is characterized by pauses in breathing that occurs when the brain fails to trigger the muscles that cause air movement. Central sleep apnea is less common and is harder to treat than obstructive sleep apnea. Sleep apnea can also be a mixture of obstructive and central components.

Patients with sleep apnea most commonly develop symptoms during middle age but can occur in either gender and at any age. Apnea is more common in individuals with large necks (over 17 inches) and those that smoke. Loud snoring could be a warning of serious health problems such as hypertension, but taking action can help you breathe easier and, perhaps, live longer.

### Taking action:

If you think you have sleep apnea, see your doctor, who can accurately diagnose your condition and recommend appropriate treatment options. This may well involve a referral to a sleep clinic so that you may be definitively diagnosed. The only current method of determining if someone has sleep apnea is to undergo a sleep study or polysomnogram. This study will record a variety of parameters, including your brain wave activity, breathing and movement.

### Treatment:

Treatment of sleep apnea is important to improve your overall quality of life and decrease further health risks. Individuals with sleep apnea should work with their doctors to devise a treatment plan that the patient is willing to follow. Many individuals will take several treatment approaches to find benefit.

**Lose weight.** In most cases, obstructive sleep apnea results from being overweight. Fat can accumulate on the neck, narrowing the airway.

**Positional Therapy** Sleeping on the side is a potential option for some individuals. This could be determined in some sleep studies. When sleeping in the supine position (on back), the tongue and soft palate may rest against the back of the throat and block the airway. To stop from rolling onto the supine position while sleeping, a T-shirt with a tennis ball sewn into a pocket on the middle of the shirt back.

**Avoid sleeping pills and alcohol.** These drugs can increase the risk of airway obstruction during sleep.

**Continuous positive airway pressure (CPAP).** This treatment, utilizes a constant pressure of air to stent open the airway. This therapy requires the individual to undergo a sleep study to determine the correct pressure to keep the airway open in sleep. The individual on this therapy must wear the device every sleep period and commit to the routine maintenance of cleaning the machine. There are over many different types masks and delivery devices and such it is important to find a delivery device that the individual feels comfortable wearing.

**Dental appliance.** A custom-fit mouthpiece made by an orthodontist or dentist may solve the problem in mild obstructive sleep apnea. The appliance, which is worn to bed, repositions the lower jaw and tongue to

help decrease airway obstruction.

**Surgery.** Surgical removal of tonsils, nasal polyps or other tissue impinging on the airway also may relieve sleep apnea. In very rare instances, tracheotomy may be performed for severe, life-threatening sleep apnea. In this procedure, a small hole is made in your windpipe (trachea), and a tube is inserted into the opening to provide an airway, bypassing any upper airway obstruction. During waking hours, you may wear a loose covering, such as a scarf, to cover the tracheotomy hole (stoma).