



The
Hunt Club
Dental Centre

Dear Patient,

Is snoring ruining your relationship? Do you snore or do you know someone who snores? It is estimated that about 90 million North Americans snore and under 40 million probably suffer through the night from a partner who snores.

Clinical studies show if you are a heavier snorer, you can suffer from high blood pressure, premature heart attacks, impotence, and chronic fatigue. All these symptoms are associated with oxygen loss and breathing interruption often seen in heavy snorers, but sometimes a snore is more than a roar. It may be a sign of a more serious problem: obstructive sleep apnea.

Now there are simple, easy-to-wear dental appliances that have been proven effective in clinical tests for the treatment of snoring and sleep apnea.

I've enclosed an informal brochure giving you a little insight as to what snoring and obstructive sleep apnea are all about. Included in the brochure is a quiz. Answering these simple questions may be the first step to a restful night's sleep for you and your family. I recommend that you discuss these questions with your family members, as they may be the first to recognize these signs.

Please call if you have any questions or to set up an appointment.

Sincerely

SLEEP APNEA

symptoms, causes, diagnosis & treatment

SOUND FAMILIAR?

- Does your spouse or sleeping partner complain that you snore and wake yourself often during the night to catch your breath?
- Do you feel tired in the morning, even when you think you have slept through the entire night?

DID YOU KNOW?

- One in five adults suffers from at least mild sleep apnea. 40 million North Americans have undiagnosed sleep apnea.
- Sleep apnea can be life-threatening.
- Sleep apnea treatment has a 70% success rate

If you snore and you also have other signs of disrupted sleep like excessive daytime sleepiness and headaches, you might be experiencing sleep apnea. Below are some questions to consider. If you answer yes to any of them, keep reading and consult your doctor.

- Do you snore on a regular basis? Does your snoring cause you or your sleeping partner to wake up?
- Do you ever wake up suddenly, gasping or choking for air?
- Do you experience excessive sleepiness during the day? Do you often have trouble staying awake, even when occupied?
- Do you experience headaches, sore throat, or dry mouth in the mornings after waking up?

Sleep apnea is a dangerous and progressive sleep disorder (it gets worse as you age). Not only does sleep apnea result in sleep deprivation, but it also can threaten your life. This article discusses the symptoms of sleep apnea, causes, diagnosis, dangers, and treatments.

WHAT IS THE DIFFERENCE BETWEEN SNORING AND SLEEP APNEA?

Snoring is a loud sound that a person makes as they breathe during sleep.

Sleep apnea is a true breathing obstruction, which requires the sleeper to awaken to begin breathing again. A person with sleep apnea wakes up many times a night to regain breathing, but usually remembers nothing at all about the awakenings. The sleep partner of a person with sleep apnea remembers a great deal about the awakenings and is generally a good witness of the incidents.

Distinctive signs of sleep apnea include:

- Frequent waking episodes at night
- Disrupted breathing, gasping, gagging, or choking for air during sleep.
- Sleep apnea is a breathing problem during sleep that creates a sleep disorder.

Snoring is a common symptom of sleep apnea, a result of a partial obstruction of the airway. Snoring by itself does not involve the cessation of breathing.

WHAT ARE THE SYMPTOMS OF SLEEP APNEA?

Sleep apnea causes a person to stop breathing periodically throughout sleep, which upsets the balance of oxygen and carbon dioxide in the blood. The brain senses the reduction in oxygen and the increase in carbon dioxide and sends a signal to resume breathing. The person wakes up in response to the breathing arousal signal from the brain. The muscles of the tongue and throat awaken to enlarge the airway and allow carbon dioxide to escape and oxygen to enter. The waking episodes are necessary to restart breathing (and save the person's life), but they prevent the individual from getting high-quality sleep.

On a physical level, the sleep apnea sufferer cannot breathe because they have an obstructed airway. The throat muscles and tongue relax too much and may be enlarged or misshapen, so the air passage is narrowed during sleep.

Sleep apnea sufferers awaken frequently to restart breathing, but they remember little or nothing of being awake. Frequent waking at night may be a sign of sleep apnea. The frequency of waking episodes varies, but may be between ten and sixty per night.

Severe sleep apnea may cause the sleeper to experience more than 100 waking episodes in a single night. One measure of sleep apnea is that the person must stop breathing for a period of at least ten seconds or more, five times within an hour. Severe sleep apnea sufferers may stop breathing for as long as two minutes.

Signs and symptoms that can alert you to sleep apnea are:

- Frequent cessation of breathing (apnea) during sleep. Your sleep partner may notice repeated silences from your side of the bed
- Choking, gasping, or gagging during sleep to get air into the lungs
- Loud snoring
- Waking up sweating during the night
- Feeling unrefreshed in the morning after a night's sleep
- Headaches upon awakening
- Daytime sleepiness, including falling asleep at inappropriate times, such as during driving or at work
- Lethargy
- Rapid weight gain
- Memory loss and learning difficulties
- Short attention span
- Poor judgment
- Depression
- Personality changes

If you or a sleep partner experiences symptoms that might indicate sleep apnea, seek the advice of a doctor.

WHAT DETERMINES A DIAGNOSIS OF SLEEP APNEA?

A bed partner typically reports a sleep disorder involving disrupted breathing and can provide this information to a doctor, who can make the diagnosis of sleep apnea. The easiest way to determine whether you have sleep apnea is to ask your spouse or sleeping partner to record your sleep habits. A sleep diary and a tape recorder are useful recording devices. Because your partner is awake anyway, keeping a record of awakenings can be a constructive way to move toward solution of the problem. You can also automatically audiotape yourself during sleep with a noise-activated audio recorder.

To make a sleep diary, your bed partner can keep a notepad, a pen, and a flashlight near the bed, and they can make written records for an entire night every so often. Whenever they wake up, they can note it:

- How loud the snoring is
- Whether you are asleep or not
- Whether you are having trouble breathing (choking, etc.)

If you don't have someone to record your sleep patterns, it may be helpful to consult your doctor and go to a sleep clinic to be observed and diagnosed.

To diagnose sleep apnea, a doctor will probably:

- i) Perform a physical examination of your mouth
- ii) Recommend an overnight sleep study in a sleep clinic

Sleep tests in a sleep clinic help to diagnose sleep apnea by measuring how frequently you stop breathing. Polysomnography is a test that records body activities, such as electrical activity of the brain, eye movement, muscle movement, heart rate, respiratory effort, and blood oxygen levels during sleep. The Multiple Sleep Latency Test (MSLT) measures the speed of falling asleep at different points in the day. You can get comprehensive tests during an overnight stay at sleep center. You may be able to obtain a home sleep evaluation; this option is useful if insurance coverage prevents testing at a sleep center for a diagnosis of sleep apnea.

WHAT ARE THE TYPES OF SLEEP APNEA?

There are three types of sleep apnea:

Obstructive Sleep Apnea (OSA)

Obstructive Sleep Apnea is the most common type of sleep apnea. OSA is caused by an obstruction in the airway, which actually stops the air flow in the nose and mouth. Throat and abdominal breathing continue normally. Obstructive Sleep Apnea is commonly accompanied by snoring and causes the sleeper to wake up, gasping or snorting, and then go back to sleep again.

WHAT ARE THE TYPES OF SLEEP APNEA? (cont.)

Central Sleep Apnea (CSA)

Central Sleep Apnea is a much less common type than Obstructive Sleep Apnea. Central Sleep Apnea is due to a brain signal problem: the brain signal that instructs the body to breathe is delayed. With CSA, oral breathing and throat and abdominal breathing all cease at the same time. The periods of breathing interruption may last a few seconds, and breathing may be too shallow to provide oxygen to the blood and tissue. Central Sleep Apnea is due to heart failure.

Mixed Sleep Apnea

When individuals experience a combination of the two other types of sleep apnea, Obstructive Sleep Apnea and Central Sleep Apnea, they may have mixed sleep apnea.

WHAT ARE THE CAUSES OF SLEEP APNEA?

- i) An obstructed airway
- ii) A central nervous system disorder such as a stroke, a brain tumor, or even a viral brain infection
- iii) A chronic respiratory disease

WHAT CAN CAUSE AN OBSTRUCTED AIRWAY?

The following risk factors predispose you toward having an obstructed airway, and therefore are causes of sleep apnea. If you have a number of these risk factors, and you suspect you are not sleeping well, you might wish to see a sleep specialist for a diagnosis of sleep apnea.

1. Obesity or excessive weight gain

Fatty cells in the throat tissue narrow and block the airway when the muscles are relaxed. A large neck or collar size is associated with sleep apnea, whether or not the person is obese. Note that almost half of people with sleep apnea are not obese. It is important that all patients routinely have the size of their necks measured and recorded as part of the examination. Males with neck sizes in excess of 17" or females with neck sizes in excess of 16" are susceptible to sleep apnea.

WHAT CAN CAUSE AN OBSTRUCTED AIRWAY? (cont.)

2. Age

Aging is usually accompanied by a loss of muscle mass and tone. Among these muscles that become more lax are those near the windpipe. With age, the tongue more easily falls back during sleep and blocks the airway, and the soft palate becomes looser and can impede the free flow of air. Sleep apnea very commonly appears in people who are in their late 40s or 50s.

3. Gender

Men are more likely to experience sleep apnea because they have narrower airways than do women. However, sleep apnea may occur in women after menopause when more fat is deposited in the neck area in some women.

4. Irregular Sleep Hours

Particularly a difference between work days and non-work days, can throw off your sleep cycles. Stage 1 sleep (when you first fall asleep) and REM sleep (when dreaming is prevalent) are extremely responsive to disruption. Unstable breathing during those parts of the sleep cycle can be the result. Chronic sleep disturbances, such as a snoring bed partner, a new baby, aggravation from the day's events, not following a natural preference to sleep during non conventional hours, or overuse of caffeinated products can all disrupt important Stage 1 and REM sleep. This can cause sleep apnea.

5. High Blood Pressure

This is another risk factor for sleep apnea

6. Anatomic Abnormalities or Facial Deformities

Such as nasal obstruction, an enlarged tongue, constricted arch, high palate, a narrow airway, a receding chin, a small jaw, tissues blocking the airway, a deviated septum, polyps, or certain palate and jaw shapes, can cause sleep apnea.

7. Snoring Itself

This is not only a result of sleep apnea, but also a cause. The repeated vibrations of the soft palate during snoring can cause the soft palate to lengthen, which can obstruct the airway, which can cause obstructive sleep apnea.

WHAT CAN CAUSE AN OBSTRUCTED AIRWAY? (cont.)

8. Enlarged Tonsils or Adenoids

These can often cause Obstructive Sleep Apnea in children.

9. A Family History of Obstructive Sleep Apnea

No specific genetic marker has been discovered, but OSA seems to run in families. This may be a result of facial and neck characteristics or anatomic abnormalities that are passed along to succeeding generations.

10. Immune-System Abnormalities

These may cause sleep apnea. High levels of some immune factors are related to fatigue, breathing problems, obesity, and pumping problems in the heart.

11. Use of Alcohol and Sedatives

Especially before bedtime, these can relax the musculature in the upper airway, which obstructs breathing.

12. Smoking

This causes inflammation and swelling of the upper airway, which restricts the flow of air. A history of smoking or exposure to secondhand smoke is also a risk factor for sleep apnea.

13. Hypothyroidism

Acromegaly, amyloidosis, vocal chord paralysis, post-polio syndrome, neuromuscular disorders, Marfan's syndrome, and Down's syndrome all can contribute to obstructed breathing, and therefore to sleep apnea.

14. Nasal Congestion, Nasal Blockages and Nasal Irritants

Household dust, mold, pollen, and animal dander can inhibit breathing through the nose and force breathing through the throat, which may also be blocked.

15. Severe Heartburn or Acid Reflux

Gastroesophageal reflux disease, or GERD, is another cause of sleep apnea.

WHAT ARE THE RESULTS OR EFFECTS OF SLEEP APNEA ON HEALTH?

Sleep apnea has serious health consequences and can even be life-threatening. Some of the symptoms of sleep apnea are actually results of the obstruction. The sleep deprivation that is a result of sleep apnea affects both the sleeper and their bed partner. The effects of sleep deprivation are:

- Daytime sleepiness
- A compromised immune system and slower healing
- Poor mental and emotional health
- Lack of smooth functioning of the body
- Decreased productivity
- A negative mood, irritability
- Low energy
- Unclear thinking, lack of concentration
- Slower reaction time

SOME MILD EFFECTS OF SLEEP APNEA

- Frequent bathroom visits to urinate during the night
- Heartburn due to gastric esophageal reflux
- Excessive sweating during sleep
- Dry mouth in the morning
- Loud snoring
- In children, a concave chest during sleep

MORE SERIOUS HEALTH PROBLEMS FROM SLEEP APNEA

(Resulting from reduced oxygen going to the brain)

- Restless sleep, insomnia
- Premature death
- Type II Diabetes. Mild sleep apnea is associated with increased glucose intolerance and insulin resistance, conditions that lead to diabetes.
- High blood pressure
- Hypertension

MORE SERIOUS HEALTH PROBLEMS FROM SLEEP APNEA (cont.) (Resulting from reduced oxygen going to the brain)

- Stroke
- Heart disease
- Hypercapnia, or excessive carbon dioxide levels
- Right-sided heart failure
- Arrhythmia, or abnormal heart rhythm (irregular heart beat)
- Memory impairment, learning difficulties, and lack of attention
- Rapid weight gain and obesity. Sleep apnea disturbs rapid-eye-movement (REM) sleep, a disruption that increases the risk for obesity.
- Impotence, sexual dysfunction, or reduced libido
- Morning headaches
- Fat cells secrete leptin, a neurotransmitter that controls appetite. Sleep deprived patients such as those with OSA have leptin secreted, which tells the brain there is a shortage of food and this increases the appetite and leads to obesity.
- Depression
- Sevenfold increase in involvement in auto accidents
- Sudden infant death syndrome may be a result of sleep apnea in the infant.

WHAT ARE THE TREATMENTS FOR SLEEP APNEA?

Treatment for sleep apnea is determined by the individual's specific sleep apnea characteristics. Treatments include:

- Behavioral changes
- Physical or mechanical therapy
- Surgery
- Medication is not usually an effective treatment for sleep apnea.

Sleep apnea responds well to treatment. You may wish to try several treatments, either in succession or simultaneously.

WHAT BEHAVIORAL TREATMENTS CAN CURE SLEEP APNEA?

Behavioral therapies are an important part of the treatment for sleep apnea, especially in cases where a doctor has identified a specific cause of the obstructed airway.

The following are the most effective home remedies you can try:

1. **Lose weight**

One of the most significant remedies for sleep apnea is weight loss. Overweight individuals who lose even 10% of their weight can reduce sleep apnea during the night and dramatically improve the quality of their sleep.

2. **Eliminate the use of alcohol, tobacco, and sedatives such as sleeping pills**

Avoiding the use of alcohol, tobacco, and sleeping pills can reduce the likelihood of airway closure during the night.

3. **Sleep on your side**

People who experience sleep apnea only when they sleep on their backs can benefit from special pillows or folk remedies that encourage side-sleeping, such as the tennis ball trick.

4. **Regularize your sleep hours**

Irregular sleep hours can throw off your sleep cycles and lead to breathing problems during the most important sleep stages. Stabilizing bedtime hours across the week and eliminating disturbances to your sleep can reduce sleep apnea.

WHAT PHYSICAL OR MECHANICAL TREATMENTS CAN CURE SLEEP APNEA?

Physical devices or mechanical therapies are effective for many cases of sleep apnea.

These solutions fall into the following categories:

- **Oxygen administration**
- **Continuous Positive Airway Pressure (CPAP)**
- **Surgery**
- **Oral appliances**

WHAT IS OXYGEN ADMINISTRATION IN RELATION TO TREATMENT FOR SLEEP APNEA?

In certain cases of Central Sleep Apnea, which is caused by heart failure, oxygen administration can allow the patient to sleep safely through the night. Oxygen administration, while ensuring the person gets enough oxygen, does not improve the quality of sleep. The person will still experience waking episodes and daytime sleepiness.

WHAT IS CONTINUOUS POSITIVE AIRWAY PRESSURE, OR CPAP, FOR THE TREATMENT OF SLEEP APNEA?

Continuous Positive Airway Pressure (CPAP) is one of the most common long-term treatments for severe sleep apnea. The therapy requires the person to wear a mask over their nose during sleep. The mask blows air through the nasal passages, and the pressure is adjusted to keep the airway open during the night.

CPAP is often successful in treating sleep apnea, although for Continuous Positive Airway Pressure to be effective, patients must consistently use the nasal mask and commit to other lifestyle changes as well, such as losing weight.

Unfortunately, many people find Continuous Positive Airway Pressure a difficult treatment because of discomfort or claustrophobia. While CPAP is effective, it is often unsuccessful because of noncompliance. It has been estimated that 80% of patients are non-compliant after one year.

The American Academy of Sleep Medicine published “Practice Parameters for the treatment of Snoring and Obstructive Sleep Apnea with Oral Appliances: An Update for 2005.”

“Oral appliances are indicated for use in patients with mild to moderate sleep apnea who prefer them to Continuous Positive Air Pressure (CPAP) therapy. They are also indicated for patients who are not candidates for CPAP or who fail treatment with CPAP. Oral appliances must be fitted by qualified dental personnel who are trained in the area of sleep medicine, the temporomandibular joint, dental occlusion, and anatomy. To verify the efficacy of the oral appliance therapy, it is necessary to take a polysomnogram overnight sleep study one or two weeks following the insertion of the appliance. The objective is to not only stop snoring, which is a social nuisance but also to correct the obstructive sleep apnea, which is a significant health risk.”

CPAP is still the most commonly prescribed treatment for patients diagnosed with obstructive sleep apnea. Approximately 750,000 CPAP's are prescribed each year. However, in a study published in **Chest in 1996, Clark, Blumenfeld**, "A crossover study comparing the efficacy of continuous positive air pressure with mandibular positioning devices on obstructive sleep apnea patients," patients preferred the oral appliances 20:1 (twenty to one).

In another study published in **Am Rev Res in 1993, Kribs and Park**, "Objective measurement of nasal CPAP patterns of use by patients with obstructive sleep apnea," they reported that most patients only wear their CPAP machines an average of 4.5 hours per day, five days a week. This has been shown to be an inadequate amount of time to alleviate the symptoms of most patients.

Therefore, due to their high rate of compliance, oral appliances are the treatment of choice for patients with mild to moderate obstructive sleep apnea. However, it is important for the dentist to understand that the initial diagnosis must be made at a sleep clinic by a qualified sleep specialist following the overnight sleep study (polysomnogram). Dentists must encourage their patients to get the sleep study done prior to any treatment, including oral appliances. As mentioned previously, it is equally important two to three weeks after insertion of the appliance and following titration (adjustments) of the appliance to retest the patient with a polysomnogram (hospital attended sleep study) or home unattended study (Watch PAT-100) to confirm that the oral appliance has corrected not only the snoring but also the obstructive sleep apnea.



EPWORTH SLEEPINESS SCALE

The Epworth Sleepiness Scale (ESS) was developed and validated by Dr. Murray Johns of Melbourne, Australia. It is a simple, self-administered questionnaire and widely used by sleep professionals in quantifying the level of daytime sleepiness.

(Johns, M.W. "A new method for measuring daytime sleepiness: The Epworth Sleepiness Scale." *Sleep* 14 (1991): 540-545.)

NAME _____ DATE _____

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling "just tired"? This refers to your usual way of life at present and in the recent past. Even if you have not done some of these things recently, try to work out how they would have affected you.

Use the following scale to choose the most appropriate number for each situation:

0 = Would never doze

2 = Moderate chance of dozing

1 = Slight chance of dozing

3 = High chance of dozing

SITUATION

CHANCE OF DOZING

Sitting and reading

Watching television

Sitting, inactive in a public place (e.g. theatre, meeting)

As a passenger in a car for an hour without a break

Lying down to rest in the afternoon when circumstances permit

Sitting and talking to someone

Sitting quietly after lunch without alcohol

In a car, while stopped for a few minutes in traffic

TOTAL SCORE

SNORING AND SLEEP APNEA QUESTIONNAIRE

NAME _____ DATE _____

AGE _____ MALE _____ FEMALE _____ WEIGHT _____

Please answer the following questions by indicating frequency

<i>Daily</i>	Every or almost every night or day
<i>Often</i>	At least once or twice per week
<i>Infrequently</i>	Less than once a week
<i>Never</i>	

During your usual sleep, have you noticed or have been told that you do the following (check one answer in each category)?

	<i>Daily</i>	<i>Often</i>	<i>Infreq</i>	<i>Never</i>
Snore loudly	_____	_____	_____	_____
Choke, struggle for breath or stop breathing	_____	_____	_____	_____
Awaken repeatedly because of a breathing problem	_____	_____	_____	_____
Toss and turn frequently	_____	_____	_____	_____
Kick or jerk legs repeatedly	_____	_____	_____	_____

When you wake up after your usual sleep, how often do you experience the following?

	_____	_____	_____	_____
Headache	_____	_____	_____	_____
Dry mouth	_____	_____	_____	_____
Feel tired or unrested	_____	_____	_____	_____

During the time when you are usually awake (daytime and evening), how often do you become irresistibly sleepy or do you fall asleep in the following situations?

	_____	_____	_____	_____
After a meal	_____	_____	_____	_____
Reading or watching T.V.	_____	_____	_____	_____
At church or school	_____	_____	_____	_____
At work	_____	_____	_____	_____
While a passenger in a vehicle	_____	_____	_____	_____
While driving a vehicle	_____	_____	_____	_____

Please answer the following questions by indicating frequency (cont.)

Do you have trouble breathing through your nose?

	<i>Daily</i>	<i>Often</i>	<i>Infreq</i>	<i>Never</i>
Daytime	_____	_____	_____	_____
Nighttime, in bed	_____	_____	_____	_____

Do you consume an alcoholic beverage or take sedatives?

Daytime	_____	_____	_____	_____
Nighttime	_____	_____	_____	_____

Have you had or used any of the following?

Broken nose	Y N	Nose Surgery	Y N	Tonsillectomy	Y N
Hay fever	Y N	Sinus problems	Y N	Antihistamines	Y N
Cigarettes	Y N	Nasal sprays	Y N	Prev. treatment	Y N

Do you take medications for any of the following?

Heart condition	Y N	Respiratory condition	Y N
Thyroid condition	Y N	Metabolism (weight)	Y N

1. How long have you been aware of your snoring? _____
2. Has it caused problems for relatives/friends? _____
3. Have you been told your breathing stops while asleep? _____
4. Have you been told you move around a lot while asleep? _____
5. What position do you sleep in? Side_____ Back_____ Stomach_____
6. About how many times per night do you wake up? _____
7. Do you have any difficulty falling asleep at night? _____
8. How many hours of sleep per night do you get? _____
9. Do you most often wake up feeling refreshed? _____

10. Do you often wake up with a headache? _____

11. Does a small amount of alcohol give you a headache? _____

12. Do you feel sleepy during the day?
Frequently _____ Occasionally _____ Seldom or Never _____

13. What other doctors have you seen about snoring or apnea?

14. Have you had a sleep lab study?

15. Do you have difficulty breathing through your nose? _____

16. Have you gained weight recently? _____ How much? _____

17. Present weight? _____ Height? _____

18. Do you know if you have any heart irregularities? _____

19. Do you have high blood pressure? _____ What is yours? _____

20. Do you have any loss of memory? _____ Depression? _____

21. Do your jaw joints click? _____ Hurt? _____ Lock? _____

PATIENT

DATE



SCREENING QUESTIONNAIRE SNORING AND SLEEP APNEA

NAME _____ DATE _____
AGE _____ MALE _____ FEMALE _____ WEIGHT _____

1. What time do you go to bed? _____ What time do you start your day? _____
2. Do you have difficulty falling asleep at the beginning of the night? **YES** **NO**
If yes, on average, how long does it take to fall asleep? _____
3. Do you have difficulty staying asleep throughout the night? **YES** **NO**
If yes, how many times do you wake up during the night? _____
How long does it take to fall back to sleep? _____
4. Do you experience an unsettled, restless sensation in your legs while sleeping?
YES **NO**
If yes, how frequently? **Occasionally** **50%** **Every night**
5. Have you been told that you make kicking and twitching movements while sleeping?
YES **NO**
6. Do you snore at night? **YES** **NO**
If yes, how would you rate the severity? **Mild** **Moderate** **Severe**
7. Have you been told that you have pauses in your breathing while asleep? **YES** **NO**
8. Does your bed partner frequently sleep in another room because of how you sleep?
YES **NO**
9. Do you frequently wake up with:
A dry mouth? Headaches? Excessive sweating? Choking or gasping?
Nasal congestion? Chest pain? Heart burn? Drooling on pillow?
10. Are you sleepy during the day? **YES** **NO**
11. Do you take naps often? **YES** **NO**
For how long? _____
12. How many caffeinated beverages do you consume each day? _____
13. Do you occasionally awaken feeling paralyzed? **YES** **NO**
14. Do you experience sudden loss of strength in your legs or arms during the day?
YES **NO**

15. How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?

0 = Never Doze 1 = Slight Chance 2 = Moderate Chance 3 = High Chance

Situation	Chance of Dozing			
Sitting and reading	0	1	2	3
Watching T.V.	0	1	2	3
Sitting, inactive in a public place (theatre)	0	1	2	3
As a passenger in a car for an hour without a break	0	1	2	3
Lying down to rest in the afternoon	0	1	2	3
Sitting and talking to someone	0	1	2	3
Sitting quietly after lunch without alcohol	0	1	2	3
In a car, while stopped for a few minutes in traffic	0	1	2	3

Score _____

Please list your medications

Please list your medical conditions, past and present

10. Do you often wake up with a headache? _____

11. Does a small amount of alcohol give you a headache? _____

12. Do you feel sleepy during the day?
Frequently _____ Occasionally _____ Seldom or Never _____

13. What other doctors have you seen about snoring or apnea?

14. Have you had a sleep lab study?

15. Do you have difficulty breathing through your nose? _____

16. Have you gained weight recently? _____ How much? _____

17. Present weight? _____ Height? _____

18. Do you know if you have any heart irregularities? _____

19. Do you have high blood pressure? _____ What is yours? _____

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21. Do your jaw joints click? _____ Hurt? _____ Lock? _____

PATIENT

DATE