

*News on sleep apnea for the commercial trucking industry*

## fido's new toy:



Photo credit by federico stevanin

### Help pets adjust to your new CPAP unit

By Katia LaManna, LCSW

Once in a while I receive a call from a driver explaining his dog chewed his CPAP hose, mask or more recently, the cat's claws destroyed the hose.

It's no secret I'm an avid animal lover and some would even venture to say I have "crazy cat lady" tendencies. My two male cats rule my home. And yes, they have also had their encounters with CPAP equipment, although at this stage

they don't really pay it much attention.

So, yes, animals either have a love or hate relationship with the CPAP unit. Some are fearful of something new and foreign and others consider it a new playtime addition to the bed.

In time, cats should become adjusted and rather bored of the whole CPAP thing and shouldn't pose a long-term

problem with your equipment. Dogs, on the other hand, especially young ones, really love to chew on almost anything they can get their teeth on, especially a plastic hose, mask etc.

My suggestions? For those of you who rent your home from your pets, you may want to put your hose away and out of sight from both the felines and canines in your life.

Continued on Page 3

- 2 Editor's Note
- 3 Study: OSA damages body after only one month
- 3 Former NFL player blames apnea for defunct career
- 4 Food can help, hinder night-time snoozing
- 5 Reports: Apnea tied to cancer risk and death
- 5 OSA overlooked in treatment for eating disorders

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Precision Pulmonary Diagnostics (PPD), provides professional screening for drivers who are at risk for sleep apnea. This is a HIPPA-compliant, online tool customized to a company's requirements.

Once a driver has been diagnosed with sleep apnea, PPD will provide local diagnostic services with the ease of Web-based scheduling and quick, reliable turn-around – from diagnosis to treatment.

Drivers who require treatment will be fitted for and provided with a CPAP mask, flow generator, and heated humidifier for nightly use.

In order to ensure drivers are using their masks correctly, PPD has partnered with a leading manufacturer of CPAP equipment, masks, and the only provider of a patented wireless compliance monitoring system.

The wireless compliance monitoring system provides daily information of CPAP use, efficacy, and allows real-time troubleshooting of any problems your drivers may be experiencing. With this data, we can enhance your drivers' CPAP acceptance and long-term compliance. In short, our protocols can maximize your results and your return on investment.

Dear Readers,

PPD and your carrier value your safety above all else!

PPD is aware of the issues with cell phones and driving. We also realize that it is difficult to reach a driver on the road when we need to remind you of something or request something of you from our corporate office in Houston and related offices around the United States.

We are happy to leave you a message and you can call us back at your convenience. We only want to talk with you when you are NOT driving – pulled over. Feel free to leave a message and we can call you back. Hour after hour, line has the most commonly asked questions by drivers.

Below are some common requests and the appropriate channels to take:

\*If you need the address to e-mail your CPAP compliance data, please send it to [compliance@ppdsleep.com](mailto:compliance@ppdsleep.com).

\*If you need the address to mail your data via the postal service, please send it by some trackable method to PPD, 8275 El Rio St., Ste. 110, Houston, TX 77054.

The more you communicate with PPD, the more we can help you. Please remember to contact PPD several weeks before your DOT exam so we can pull together the appropriate information for you to take or send to your DOT examiner.

Safe Travels and Sweet Dreams,

*Wendy Sullivan, RN*

VP Project Implementation/DOT Consultation  
Precision Pulmonary Diagnostics LLC

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# Study: OSA damages body after only one month

Middle-age and older men with even mild levels of obstructive sleep apnea were in danger of increased risk of stroke and death, according to a landmark study.

While a link between OSA and stroke is clear, OSA's effect on the cerebral (brain) vessels is not. In an effort to shed light on this relationship, researchers in Texas have developed a novel model that mimics OSA in humans. Their model has found that after just 30 days of OSA exposure cerebral vessel function is altered, which could lead to stroke.

The model and its findings are the result of efforts undertaken by a team of researchers at Baylor College of Medicine, Houston, Texas.

The most common animal model used to study OSA relies solely on exposing animals to a decrease in blood oxygen levels. The new model incorporates all physiological consequences involved in OSA by closing the airway. The revised model creates a more complete picture of the apnea process and one that more accurately mimics how OSA unfolds in humans.

Using their model, the researchers closed the airway of animals 30 times for 10 seconds each for 8 hours during the sleep cycle for up to one month. After one month of apnea, cerebral vessel dilatory function was reduced by up to 22 percent. This finding correlates with studies that show similar cell dysfunction in arteries and an increased risk of stroke in OSA patients. Damage to the vascular wall in brain arteries could be a factor predisposing an individual with OSA to stroke.



Photo credit by Mr Lightman

“There are two important findings in these results,” according to researcher Randy Crossland. “The first is the model itself. The new model allows us to study the complete disease and better understand how repetitive exposure to apnea affects the body. The second is that only one month of moderate OSA produces altered cerebrovascular function which could result in a stroke. A finding that highlights the detrimental impact OSA can have on the body.”

## Former NFL player blames apnea for defunct career

Former Oakland Raiders pick JaMarcus Russell blamed sleep apnea for his failed football career at only 26. In an issue of Sports Illustrated, Russell claimed the disorder was the root cause of his behavior which led to his reputation as one of the worst disappointments in draft history.

Although Russell was the top overall draft pick in 2007, he received criticism for missteps in and out of the game, such as falling asleep during team meetings. Upon quarterback coach John DeFilippo's concern, Russell underwent medical testing, to which his disorder was diagnosed.

And, while discovering an answer to his behavior may not revive his career, Russell's discovery may raise awareness of the condition, which plagues nearly 12 percent of Americans.

Continued from Page 1

Best practice would be to disconnect the hose after each use and hang to drip dry over the door. However, seeing a hose hanging may entice certain critters. So the best recommendation would be to keep your CPAP equipment out of your pet's sight.

Additionally, if your pet is sleeping with you and grabbing at your equipment, not only is this not good sleep hygiene, but it's not a good idea for the integrity of your equipment. Placing the hose under the covers may help, but if it remains a problem, you may want to exclude animals from the bedroom.

Do you have a CPAP pet story? Email me at [katia@ppdsleep.com](mailto:katia@ppdsleep.com).

# Food can help, hinder night-time snoozing

Next time you can't get to sleep, consider what you had for dinner. While some foods serve as natural sleep aids, others keep you awake, so it's important to know what to eat when.

## AVOID



**Protein.** Protein takes longer to digest and contains an amino acid, which promotes brain activity.



**Spicy Foods.** Spicy foods, like Mexican cuisine, can be taxing on your system right before bed, especially if you struggle with indigestion or heartburn.



**Caffeine.** While a cup of coffee before bed is obviously not wise, also consider hidden sources of caffeine like chocolate cake, hot cocoa, Coca-Cola, iced tea and even some medications.



**Nightcaps.** Alcohol causes you to wake more, sleep more restlessly, experience night sweats and develop headaches. Avoid it 4-6 hours before bed.



**Ginseng Tea.** Ginseng tea has been known to act as a stimulant, which can trigger insomnia and even hypertension.



**Gassy Vegetables.** It's no secret that these veggies can produce a lot of gas, and a stomach full of painful gas will keep anyone awake.



Photo credit by chainat

## PROMOTE



**Cherries.** Cherries are one of the only natural foods that contain melatonin – a chemical that controls the body's internal clock to regulate sleep.



**Bananas.** Potassium and magnesium found in bananas are natural muscle relaxants and also contain tryptophan, which gets converted to serotonin and melatonin in the brain – all of which help promote sleep.



**Cereal.** Foods rich in carbohydrates trigger insulin production, which induce sleep by speeding up the release of tryptophan and serotonin.



**Warm Milk.** Milk contains tryptophan, which causes the brain to release serotonin. Other foods that are high in tryptophan include honey, nuts and seeds, and eggs.

# Reports: Apnea tied to cancer risk and death

Obstructive sleep apnea may be tied to cancer risk and death, according to two recent studies.

In one, researchers led by F. Javier Nieto, MD, PhD, of the University of Wisconsin Madison, discovered interrupted sleep and hypoxemia (which means the proportion of sleep time spent with an oxygen saturation of less than 90 percent) associated with OSA were linked to an increased risk of dying from cancer. In the other, investigators led by Miguel Martinez-Garcia, MD, of the Hospital General de Requena in Valencia, Spain, found hypoxemia was associated with an increased incidence of cancer.

Both studies were sparked by the recent observation of mice living in low-oxygen conditions, whose transplanted tumors grew more rapidly than in mice getting normal air.

To see if the same held true for humans, Nieto and colleagues studied data from the Wisconsin Sleep Cohort Study, which began observations in 1988 and currently has data on 1,522 participants.



Photo credit by Arvind Balaraman

Over the lifetime of the study, there have been 50 deaths from cancer with risk increasing in step with the severity of sleep apnea, as measured by the apnea-hypopnea index (AHI) – or the number of times people wake because of low oxygen.

Specifically, compared with participants without sleep apnea (those with AHI less

than 5), the relative hazard for cancer death was:

- 1.1 for those with mild apnea (AHI between 5 and 14.9)
- 2.0 for those with moderate disease (AHI of 15 to 29.9)
- And 4.8 for those with severe apnea (defined as AHI 30 or higher or use of a CPAP machine)

The Spanish researchers analyzed a database of 5,246 people who had presented to sleep centers with a suspicion of sleep apnea between December 2000 and December 2007, Martinez-Garcia said.

There were 302 incidents, he reported.

In an unadjusted analysis, he and colleagues found the same pattern for AHI as the U.S. investigators, only this time for cancer incidence rather than mortality.

“The key thing for me is the amount of oxygen people are getting” rather than how often they wake in the night, commented Mary Morrell, PhD, of Imperial College London.

## OSA overlooked in treatment for eating disorders

Eating disorder sufferers are often also afflicted with sleep disorders, compounding the toll disordered eating takes on their bodies, according to Caring Online, a website offering comprehensive information and resources on eating disorders.

The most common sleep disturbance among those with eating disorders is sleep apnea, according to Dr. Gregory Jantz, an eating disorder specialist.

For people whose bodies are under stress due to poor nutrition caused by an eating disorder, the medical consequences of disturbed sleep can

be serious, he said. Apnea deprives the body of the deepest, most restful sleep, resulting in impaired brain function, fatigue and possibly depression.

Sleep apnea is also associated with high blood pressure, cardiovascular problems and stroke. That’s dangerous for those with eating disorders, whose hearts are often dangerously weakened by a lack of proper nutrients and the chemical imbalances that food deprivation causes.

“It’s no exaggeration to say that sleep apnea puts the eating disorder victim at increased risk for death,” Jantz said.

### Know the facts:

- Almost 50% of people with eating disorders meet the criteria for depression.
- Only 1 in 10 with eating disorders receive treatment.
- Up to 24 million people of all ages and genders suffer from an eating disorder in the U.S.
- Eating disorders have the highest mortality rate of any mental illness.

Source: National Association of Anorexia Nervosa and Associated Disorders Inc.