

## Obesity and Sleep Apnea

*“Sleep Apnea is highly prevalent in morbidly obese patients & associated with an increased risk of cardiac arrhythmias”*

More than two-thirds of American adults are overweight or obese. These rates have been increasing for decades.

The CDC indicates that the U.S. adult obesity rate has risen sharply in the past few years, despite a push to eat healthier. The age-adjusted adult obesity rate climbed to nearly 38 percent in 2013-2014, up from 35 percent in 2011-2012. The rate of extreme or “morbid” obesity is also rising. More than six percent of adults now have a BMI

of at least 40. This represents an excess weight of roughly 100 pounds or more.

One of the major health risks linked with obesity is obstructive sleep apnea. Thin people can have sleep apnea, however, a major risk factor for OSA is excess body weight. Data suggest that the rate of OSA has increased greatly over the last two decades. The most likely cause is the rise in obesity.

An estimated 12 to 18 million adults

in the U.S. have untreated OSA. More emphasis should be placed on not only addressing the sleep apnea, but treating obesity in this population and it is also important to find better ways to enhance compliance with CPAP therapy and weight loss interventions.

Therefore, **encourage thorough sleep evaluations focused on identifying and treating sleep disorders in this patient population.**

<http://www.sleepeducation.com>

## Economic Impact of Undiagnosed Sleep Apnea

- OSA afflicts 29.4 million American men & women, which represents 12% of the US adult population.
- Annual economic burden of undiagnosed sleep apnea among US adults is approximately \$149.6 billion
- Estimated costs include \$86.9 billion in lost productivity, \$26.2 billion in motor vehicle accidents, & \$6.5 billion in workplace accidents
- The solution to improving the nation’s health may lie in helping it sleep better

<http://www.aasmnet.org> & <http://www.sleepreviewmag.com>

## Sugary Caffeinated Drinks & Poor Sleep

In this issue:

Obesity & Sleep Apnea	1
Sugary Caffeinated Drinks & Poor Sleep	1
CPAP & Weight Loss: Lowers Blood Pressure	2
Benefits of CPAP Desensitization	2

**Adults who sleep no more than five hours a night are more likely to be heavy soda drinkers than people who get more rest,** according to a recent study published in the journal *Sleep Health*.

Soda is the main source of added sugar in the American diet. **Soda and lack of sleep are both independently associated with obesity, and sugar-sweetened beverages are also linked to rising rates of heart disease and diabetes.**

Researchers examined survey data on almost 19,000 adults and found about 13 percent of participants slept five hours or less a night.

What set these poor sleepers apart is they consumed 21 percent more sugar-sweetened drinks than adults who got a healthy seven to eight hours a night. Further analysis of the results by type of drink found the main association was with caffeinated non-diet sodas.

"The most likely way in which soda consumption can negatively affect sleep is through ingesting the caffeine typically found in soda because caffeine blocks the binding of a particular chemical in the brain responsible for us feeling tired," said lead study author Aric Prather of the University of California, San Francisco.

"With respect to sugar, it is

probably more likely that a lack of sleep increases one's drive for consuming sugar than it is that sugar is negatively affecting our ability to sleep."

Those who slept no more than five hours a night consumed 26 percent more regular soda than the seven-to-eight-hour sleepers, and 33 percent more caffeinated drinks, researchers found.

Compared to heavier sleepers, people reporting no more than five hours a night were more likely to smoke and be sedentary. Poor sleepers were also more likely to have chronic health problems or diagnosed sleep disorders.

<http://www.foxnews.com/health/2016/>

## CPAP & Weight Loss: Lowers Blood Pressure

Obesity and OSA tend to co-exist and are associated with high blood pressure. Research from the Perelman School of Medicine at the University of Pennsylvania has shown that the combination of these two therapies for patients with OSA can help lower blood pressure.

According to lead study author Julio Chirinos, MD, PhD, “we found that the combination of weight loss and CPAP therapy is a better strategy to reduce blood pressure than either therapy alone.”

They randomized 181 patients meeting the inclusion criteria of obesity, moderate-to severe OSA, and high levels of C-reactive protein (an inflammatory marker

associated with heart disease) for a trial into one of 3 groups, for 24 weeks: [1] CPAP therapy; [2] a weight loss intervention (involving dietary & lifestyle intervention), or; [3] a combination of the two interventions. The authors analyzed changes in blood pressure in all groups.

As expected, patients on CPAP alone did not experience weight loss, whereas those randomized to weight loss or combination therapy experienced a significant reduction in body weight and body mass index. Reductions in brachial systolic pressure were observed in all 3 groups, however reduction in brachial pulse pressure reached statistical

significance only in the combination therapy group. Among compliant patients, the reduction in brachial systolic blood pressure was significantly larger in the combination therapy group (14.1 mmHg) compared to either CPAP alone (3 mmHg) or weight loss alone (6.8 mmHg).

**“More emphasis should be placed on not only addressing the sleep apnea, but treating obesity in this population and it is also important to find better ways to enhance compliance with CPAP therapy and weight loss interventions, according to Chirinos.”**

<http://www.sciencedaily.com/releases/2013/03/130311090708.htm>



*“CPAP is effective for lowering blood pressure in patients with moderate to severe sleep apnea.”*

*—New England Journal of Medicine*

## The Benefits of CPAP Desensitization

Is your patient having difficulty adjusting to CPAP treatment despite having the proper fitting mask and adequate humidification? Is the mask or air pressure causing a claustrophobic or anxious feeling? Breathing with a CPAP machine does take some time to adjust to. Remind the patient—being in control of the process and taking steps to feel more comfortable will help during the acclimation period.

If CPAP Therapy is causing anxiety, try this **step-by-step desensitization process**.

Spend up to 5 days completing each step (or until the anxiety no longer occurs) before moving to the next step.

**STEP 1:** Attach the mask to the machine and turn the power on. Wear the CPAP mask at home while awake for 10-15 minutes and gradually increase up to an hour each day. Practice breathing through the mask while watching TV, reading, or performing another sedentary activity that keeps the mind occupied. Use the ramp and EPR or C-Flex feature for comfort.

**STEP 2:** Use the CPAP during scheduled short naps at home.

**STEP 3:** Use the CPAP during the initial 3-4 hours of nocturnal sleep.

**STEP 4:** Use CPAP through the entire night of sleep.

If this doesn't work, have the patient return for a follow up visit. Consider Bi-level therapy, sleep medications, and/or pressure desensitization.

## Make 2017 Your Best Year Yet

**Get More Sleep:** What can help increase energy, improve mood, and even help with weight loss? Sleep! It's a well kept secret to good health.

**Change Your Health Outlook.** Instead of seeing it as all-or-nothing, look at health as a continuum. Move closer and closer to good health by making small, positive decisions.

**Integrate Exercise.** For most, exercise is an add-on, something done if time permits. It's much

easier to incorporate exercise if it becomes a part of the daily routine.

**Say Goodbye to Fad Diets.** Losing weight is a staple resolution, which could explain why so many diets fail. Instead of following the latest diet craze, focus on healthy eating.

**Head Back to the Kitchen.** This will allow more control over the nutritional quality of meals. Preparing food at home will save

calories, money, and will be healthier.

**Unplug Daily.** Thanks to modern electronics, we're tuned in 24/7—and more stressed than ever. A growing body of research finds that media overload can increase the risk for depression, social anxiety, and job burn-out. Spend an hour, 10 hours, or a full day without electronics.

Make this your best year yet!