



## To breathe or not to breathe

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When I was asked to write this article, my first thoughts were to dazzle you with statistics and facts about sleep apnea. But then I thought with Google, Yahoo!®, and Bing, those are all very easy numbers to find. What I decided to do is to just put it out there sleep apnea, if left untreated, is dangerous!

I am sure that everyone knows that sleep apnea is “when a person stops breathing while they sleep”, but not many know what actually happens in your body during an episode of apnea. If you have sleep apnea, here is what happens physiologically in your body each time an episode occurs:

- sleep ensues,
- the muscles in your tongue and upper airway relax,
- the upper airway closes completely or partially and air cannot pass or has difficulty passing;
- the alveoli in your lungs do not expand all the way so gas exchange cannot occur,
- this causes oxygen content in your blood to decrease and carbon dioxide levels to increase,
- your heart rate increases and
- your blood pressure goes up (your body goes into a “fight or flight” mode),
- your vital organs starve for oxygen (this includes your brain),
- and the receptors monitoring your blood sense oxygen content is decreasing and are stimulated,
- this leads to frequent arousals from sleep
- which then causes muscle tone to return to your upper airway
- and then the cycle starts again.

All this activity occurs in just seconds EVERY time an apneic episode occurs. Untreated sleep apnea can lead to serious health problems like:

pulmonary hypertension, high blood pressure, diabetes, insulin resistance, heart attack and stroke.



If you already have increased risk of heart attack and stroke, sleep apnea multiplies those risks. Symptoms of sleep apnea include:

daytime sleepiness, moodiness, irritability, fatigue, memory loss, morning head aches, loss of sex drive and many times, an unhappy bed partner!

The first step to treating sleep apnea is a sleep study. A sleep study is a fairly easy test to endure but does take a good amount of time. During a sleep study, many body processes are recorded including the oxygen content in your blood, its change with each apneic event, heart rate, the number of times you stop breathing, the length of time you stop breathing, and snoring. (This list is not all inclusive) As a sleep technologist I have seen people stop breathing well over 120 times per hour and have seen oxygen content drop to below 40% following an apnea. (Normal oxygen saturations range from 90-100%) These are severe cases of sleep apnea; not all are this serious, but all should be treated in some manner. Treatment options include: dental appliances, ENT surgery, positional sleeping, continuous positive airway pressure (CPAP) and weight loss for mild to moderate cases. For more severe cases of sleep apnea CPAP alone or CPAP in combination with treatments listed for mild to moderate sleep apnea can be effective.

The important thing to remember is that sleep apnea can lead to some serious health problems if it is left untreated. Talk with your physician and ask them to order a sleep study for you if they feel it is appropriate.

The REM Center™ sleep lab is available to test patients 7 days a week and we are always available to answer questions for you or your physician. Please feel free to call us at 309/762-2998. We are located in Moline at 4364 7<sup>th</sup> Street, behind Hy-Vee off of John Deere Road. Our testing facility is the most luxurious in the QC area with queen size pillow top mattresses, private baths with showers in every room, and individual climate control in each room. (That's right, you can make it as warm or as cool as you like!) We schedule testing around your normal bedtime so that you stay as close to YOUR routine as possible, not ours. We return results to your doctor in 4 business days and promise you the high quality of care that you deserve. Remember, you have a choice of health care providers! Ask your doctor to send you to The REM Center™ sleep lab, a Division of Braaten Health LLC.

Happy sleeping, everyone!!!