

# ON TRACK WITH BARIX

Support to Keep You On Track With a Healthful Lifestyle

## Habit #3 Sleep Right

### HOW SLEEP MAY IMPROVE YOUR WEIGHT LOSS SUCCESS

in the bedroom. Combine these in-home activities with abundant social activities and at some point these opportunities overwhelm us, giving way to sleep-robbing anxiety.

If that isn't enough to keep us from getting adequate sleep, a lack of physical activity in both our jobs and our leisure time doesn't allow for the physical fatigue that often initiates a good night's sleep.

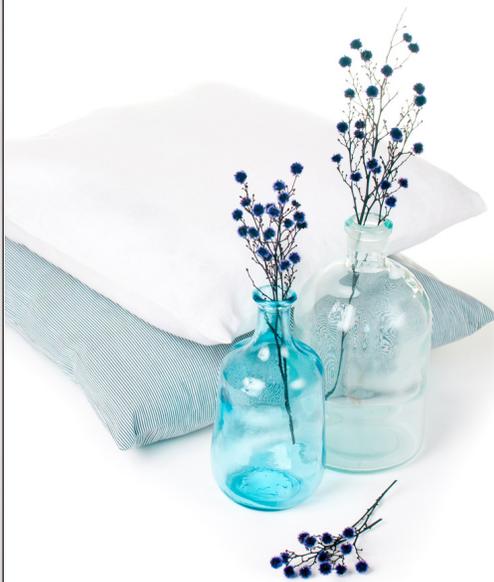
And now, along with other health concerns we face when we don't sleep enough, studies show a likely connection between lack of sleep and obesity. A large population study found that those sleep-deprived souls who sleep for 6 hours are 23% more likely to be obese than those sleeping 7-9 hours a night. The likelihood doubles to 50% for those sleeping 5 hours a night, and it spikes to a mind-numbing 73% for the 4-hour sleeper!

Studies and theories differ on why this is the case. Some theories are based strictly on the obvious math of it all. More hours awake mean more hours for eating throughout the day. And if those hours are spent mostly on sedentary activities

like the computer or the TV, there's no place for the extra calories to go but the waistline.

However, research conducted by Sanjay Patel, MD found that the opposite was true when he looked at 70,000 middle-aged women. Those who slept less actually ate less, exercised the same amount, and still gained more weight. Other studies support these findings, or at least help explain them. Sleep deprivation has been found to change the regulation of appetite and energy expenditure. So without eating one single extra morsel, weight can increase with sleep deprivation.

Hormones apparently factor in as well. Weight-related hormones ghrelin, leptin, cortisol, adiponectin, and perhaps others are found to fluctuate according to sleep patterns. And our appetite and energy levels fluctuate with them.



A hundred years ago, Americans averaged 12 hours of sleep per night. Sixty years ago, we were down to between 8 and 9 hours a night. Today, the average night's sleep has dropped below 7 hours. And in fact about a third of us get by on less than 6 hours.

We're sleeping less, but it's not because we need less sleep. The reason we don't sleep enough is directly related to our ever-evolving lifestyles. It all started with the electric light. Suddenly, we were able to keep daytime going 24/7. We started looking for more to do with our newfound freedom from the dark. Soon we had radio, TV, and record players. Technology and affluence brought us personal computers and increased the number of TVs in our homes—often intruding into our sleeping space. Today, it is smart phones, tablets and social media. It's hard to get away from our electronics, even



The bed is a bundle of paradoxes: we go to it with reluctance, yet we quit it with regret; we make up our minds every night to leave it early, but we make up our bodies every morning to keep it late.

Charles Caleb Colton

Let's take a look at each one of these hormones and the role it plays in weight control.

**Ghrelin** is a hormone responsible for increased appetite, increased desirability of food, decreased fat utilization, and decreased energy expenditure. After just two sleep-deprived nights, ghrelin levels are affected, resulting in a forty-five percent increase in cravings for carbohydrate-rich foods. Ghrelin levels are depressed following gastric bypass and gastric sleeve surgery, giving people a metabolic and behavioral edge in their weight loss efforts.

**Leptin** has the reverse role of ghrelin: it tells your body when to stop eating. Sleep deprivation decreases leptin levels, minimizing its ability to decrease appetite and maximize energy expenditures. Studies show that those who sleep less than 8 hours a night have higher levels of body fat, which decreases sensitivity to leptin. The signals to stop eating can be severely hampered. A food-rich environment with faulty appetite control is a sure recipe for weight gain.

**Cortisol**, the stress hormone, rises during the afternoon and evening hours in those with sleep deprivation. Cortisol affects weight by increasing appetite and fat accumulation and reducing insulin sensitivity. It also impairs glucose tolerance.

**Adiponectin** is a hormone that enables insulin to move from the bloodstream into cells where it is used for fuel or stored. Adiponectin is decreased during periods of sleep deprivation.

**Sleep apnea** is a common disorder among weight loss surgery candidates. Because it disrupts sleep patterns, it can contribute to weight gain. It usually resolves after surgery, but sometimes not right away. Some people stop using their CPAP machines too soon. Discontinued treatment may potentially hinder weight loss efforts after bariatric surgery.



So, with all this information to process, let's get down to the big question: how much sleep do I need to maintain the optimum weight-loss scenario? Most experts recommend a very doable 7-8 hours. As in most things, too much of a good thing is not such a good thing; 9-10 hours of sleep can actually increase your obesity risk almost as much as not enough sleep. If you find after getting 7-8 hours of rest you still feel fatigued, you should ask your doctor about being tested for sleep apnea.

**The American Academy of Sleep has the following tips for getting a good night's sleep:**

- Follow a consistent bedtime routine.
- Establish a relaxing setting at bedtime.
- Get a full night's sleep every night.
- Avoid caffeine or any other stimulants before bedtime.
- Be worry-free at bedtime.
- Don't go to bed hungry, or too full.

- Avoid rigorous exercise within six hours of your bedtime.
- Make your bedroom quiet, dark, and a little cool.
- Get up at the same time every morning.

You've probably noticed that some of these tips are easier said than done. But by no means are they impossible. And remember, those little switches designed to turn gadgetry on will also turn them off. Give your sleep schedule the priority it deserves. And see if you don't start feeling progressively better.

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## RECONSTRUCTIVE SURGERY

To receive a **FREE RECONSTRUCTIVE SURGERY** guide, call 800-282-0066 or send us an email at [rc@barixclinics.com](mailto:rc@barixclinics.com) with your name and contact information. Our reconstructive surgery program is currently performed at our centers in Michigan, Ohio, and Pennsylvania. **Call us today for more information!**

## SHARE YOUR SUCCESS

Tell us about how your life has changed as a result of your weight loss surgery. Your story may be printed in this publication or on one of our websites and can serve as an inspiration to others.

Submit your story online ([http://www.barixclinicsstore.com/share\\_your\\_story.html](http://www.barixclinicsstore.com/share_your_story.html)).

We'd love to hear from you.

## QUESTIONS ABOUT FINANCING YOUR SURGERY?

Call a Barix Patient Service Representative at 800-282-0066

## It Worked for Me

The Barix Forums are about people supporting each other through tough times and WOW moments. No one can quite understand what you are going through like someone who has walked in your shoes. This month, a post-surgery patient posted about the moment that she realized bariatric surgery was the best decision she had ever made. Her post and the responses (edited below) highlight how impacting weight loss surgery can be.

**Post:** What was that moment when you realized that your WLS was the best decision you have ever made in your life? For me, it was the day I was able to fit into a size 12 pants. Going from a size 22, that was a tremendous

accomplishment for me and made me realize how lucky I was and how WLS was the best decision for me. Anyone else have an "a-ha" moment?



**Response 1:** When I could sit on the couch and my stomach wasn't at my chin and when standing I could see my knees. A-ha!

**Response 2:** When I got off all my meds. I feel 100% better and getting healthy!!!!

**Response 3:** When I could cross my legs.

**Response 4:** The day I was able to go hunting all day over hill and dale.

**Response 5:** Many aha's - but I guess the day I had to fly on an airplane and the coach seat was actually TOO big for my butt!

Without enough sleep, we all become tall two-year-olds.

JoJo Jensen, Dirt Farmer Wisdom



## REWARD YOURSELF

This month, you could earn a SPECIAL GIFT for your "It Worked For Me" tips or recipes! Just submit as many recipes and "It Worked For Me" tips as you like. The most original and creative will be awarded a special gift from our online store. Include your name and contact info with your entry—make sure your recipes follow Barix nutritional guidelines.

Tips must be submitted by April 30, 2013. Please send comments, ideas, recipes and "It Worked For Me" tips to Deb Hart, RD, LD at [dhart@foresthealth.com](mailto:dhart@foresthealth.com).

## Marinated Shrimp

- 1 medium red onion, chopped
- 1/2 cup fresh lime juice
- 2 tablespoons capers
- 2 tablespoons Dijon mustard
- 1/2 teaspoon hot sauce
- 1 cup water
- 1/2 cup rice vinegar
- 3 whole cloves
- 1 bay leaf
- 1 pound uncooked shrimp, peeled and deveined
- lime zest as garnish

Combine the onion, lime juice, capers, mustard and hot sauce. Set aside.

Bring water, vinegar, cloves and bay leaf to a boil in a large sauce pan. Add shrimp. Cook for 1 minute, stirring constantly. Discard cloves and bay leaf. Remove shrimp and marinate in a shallow pan with the onion mixture in the refrigerator for an hour.

Garnish with lime zest and serve chilled. Makes 8 servings.

**NUTRITION INFORMATION PER SERVING:** 69 calories, 12 grams protein, 3 grams carbohydrate, 200 mg sodium.

## Greek Yogurt Shake

Submitted by Sharon F.

- 1/2 banana, very ripe
- 1 container of flavored Dannon Light and Fit Greek Yogurt
- 1/2 scoop of Any Whey Protein ice cubes (optional)

Put all ingredients in blender and blend until smooth. Makes 1 serving.

**NUTRITION INFORMATION PER SERVING:** 174 calories, 21 grams protein, 0 grams fat, 22 grams carbohydrate, 70 mg sodium.

## In the News

Using technology to help us move more is the topic of a recent Wall Street Journal article. Even those who exercise regularly may not be getting enough exercise if they sit for the rest of the day. The average person takes 5,117 steps a day—a far cry from the 10,000 steps recommended by the American Heart Association.

The idea is to move more throughout the day, and every movement counts – walking in place during TV commercials, taking the stairs instead of the elevator, and parking at the far end of the parking lot. But, how do you know how much your efforts are adding up?

Some pretty cool little gadgets are here to help. Starting with a simple pedometer, track steps and log them to help you set goals and become aware of how much, or how little, you actually do move during the day. Just this awareness can motivate you to move more. Then there's the Jawbone UP, Fitbit Flex, Fitbit One and Nike Fuelband. These wristlets not only track your activity, they convert it into calories burned and then add features like sleep tracking, mood tracking, and food tracking. Some of them even include a feature that lets you to share your



data and compete with others – great for the competitive among us.

We all need regular exercise, but we also need to find ways to increase our activity throughout the day. Maybe one of these gadgets will help you. Let us know your experiences by posting them on the Barix Forums ([forums.barixclinics.com](http://forums.barixclinics.com)).

Reference: <http://online.wsj.com/article/SB10001424127887324096404578354590581579014.html>

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