

Sleep and Weight Loss Steven T. Devor, Ph.D., FACSM Exercise Physiology, Upper Arlington Preventative Primary Care

Is it possible that not getting enough quality restful sleep every night can have a negative influence on your waistline? Or if you are trying to lose weight with an appropriate combination of healthful eating and exercise, can a lack of quality sleep at night make your efforts far less effective?

Conversely, could it be that if you are a consistent restful sleeper it becomes far easier to either maintain your weight or more easily lose weight? In spite of how easy this weight maintenance or weight loss strategy might seem (really, just sleeping!) there is an increasingly large amount of data from well controlled studies that support a strong connection between restful sleep and weight maintenance and weight loss.

A recent large scale study published in the International Journal of Obesity, indicated that those individuals on a portion controlled food intake plan lost the greatest amount of weight when their sleep at night fell between six and eight hours over a six week period. Lower stress at work and at home also has an influence as well on your waistline. In another study, overweight and obese study subjects eating a calorie restricted diet were more successful with body fat loss, and kept more lean tissue, when they slept about eight hours versus five hours a night. The tie-in with stress in both of these studies is that, generally speaking, those who obtain enough restful sleep every night have lower levels of stress hormones during the day.

Still other research has drawn an association between a lack of sleep and increased abdominal fat and greater daily caloric intake. It has been proposed that a lack of quality restful sleep influences hormones that regulate appetite (for example, leptin and ghrelin) in a negative way. This leads to a negative cascade of evets: 1.) heightened hunger; 2.) increased caloric intake; 3.) decreased caloric burning; and, 4.) greater fat storage.

When reviewing studies over the past decade that have been published in the journal Sleep, it is clear that a lack of quality restful sleep is linked to a host of negative health outcomes, not just overweight and obesity. An increased risk for diabetes, colon cancer, strokes, and even heart attacks is present when nightly sleep is inadequate. Indeed, sleeping too little (less than five hours a night), was found to be an independent risk factor for cardiovascular disease.

These statistical relationships do not prove a cause and an effect. A lack of sleep might be a warning sign for other known health maladies that can in and of themselves increase wellness risks – things like anxiety, depression, or personal problems - although in most studies the scientists do their best to control for confounding factors.

In conclusion, obtaining enough quality restful sleep most nights of the week will carry with it many health benefits. For example, it is well known that to perform your best at work, sleep increases your ability to concentrate, have your best coordination, and fully utilize your mental processing abilities.

If your habits have become such that you are up quite late every night for social or other reasons, it is time to make a commitment to yourself and reclaim your sleeping hours, and increase your overall health and wellness.