

What does rest have to do with exercise?

By Pamela Greene, Fitness Programmer/MWR

Weight loss does not only happen in the gym or at the dinner table. It also takes place when we rest. Most of the time when we hear about resting we are thinking of what a person does between sets of exercise reps or a day off from exercise all together. I know both of those methods are beneficial to muscle recovery and developing healthy muscle tissue but there is another component of exercise that compliments weight loss and the body. It's called sleep.

When we allow our body to sleep you must know there are some powerful processes taking place that can't happen if you are not sleeping. Researchers say that how much you sleep and quite possibly the quality of your sleep may work together with your hormonal activity which is tied to your appetite.

There are these two hormones (Leptin and Ghrelin) they work in conjunction with each other to control feelings of hunger and fullness. Ghrelin is produced in the gastrointestinal tract and it stimulates appetite, while Leptin, is produced in fat cells, and sends a signal to the brain when we are full. When you don't get enough sleep, it drives Leptin levels down, which mean you don't feel as satisfied after you eat. Lack of sleep also causes Ghrelin levels to rise, which means your appetite is stimulated, so you want more food. The two combined can set the stage for overeating, which in turn may lead to weight gain.

Most adults need 7 to 8 hours a night for the best amount of sleep, experts say that if you feel drowsy during the day, even during boring activities, you haven't had enough sleep. Just this limited amount of sleep deficit interferes with the ability to process carbohydrates, manage stress, and maintain a proper balance of hormones. In just one sleep restricted week you can experience a significant loss in your ability to process glucose and an accompanying rise in insulin. Weight gain aside, lack of sleep can affect our health on a more serious note; this makes getting that sleep a priority.

Inadequate sleep:

Can lead to weight gain

Interferes with the body's ability to metabolize carbohydrates and causes high blood levels of glucose, which leads to higher insulin levels and greater body fat storage.

Drives down Leptin levels, which causes the body to crave carbohydrates

Reduces levels of growth hormones—a protein that helps regulate the body's proportions of fat and muscle.

Can lead to insulin resistance and contribute to increased risk of diabetes type II

Can increase blood pressure. People who sleep six or fewer hours a night are more likely to have high blood pressure. When we sleep, blood pressure and heart rate go down. People who sleep less tend to have an average 24 hour blood pressure that is somewhat higher than normal. This has been proved by a new report from the National Health and Nutrition Examination Study.

Can increase the risk of heart disease Association that **too little sleep** can promote calcium buildup in the heart arteries, leading to the plaques that can then break apart and cause heart attacks and strokes.

We all know when we can't sleep we eat. Knowing that these hormones exist within and are working against us at night can help you arm yourself better. Sometimes when we know why something is happening we can cope with it better and use healthier forms of prevention. It is so important to do all you can to make the most of your healthy weight and exercise efforts. As you can see there are so many factors that can work against us. That is why it is so necessary to know your health, know hormones, know body fat, know cells, tissue, muscle, etc.

There are 10 main reasons why you may not be sleeping well:

- Stress or anxiety
- Illness
- Noise
- Light
- An over committed schedule
- Caffeine
- Alcohol
- Stimulant medications (diet pills, cold and allergy remedies, asthma medications)
- Depression or anger
- Fear

Although sleep can play a role in weight loss you already know it doesn't play the only role. Below are areas that can help ensure a more successful night sleep, but can also help ensure a more successful fitness program for you and your body. Another mineral that plays a vital role in your weight loss and sleep success is water. Water which is not normally considered for recovery is actually a huge part of recovery. 8 glasses per day is a minimum that the government dictate knowing most will barely get this amount in but you actually should be looking at a liter or more if you are very active. Water carries oxygen into your system which is very important toward muscle growth.

Stretching (get to that yoga class) also helps to bring oxygenated blood through to the muscles again enhancing the results of lean muscle gains.

Body recovery needs proper sleep. Weight loss needs proper sleep. Sleep exist to rejuvenate us; to restore us to get through another day. The rewards gained for honoring that sleep component is a healthier more fit body. Always eating healthy and getting proper exercise can't be stressed enough, but sleep and rest just as equally important. When we have this foundation we are truly on the path to wholeness.