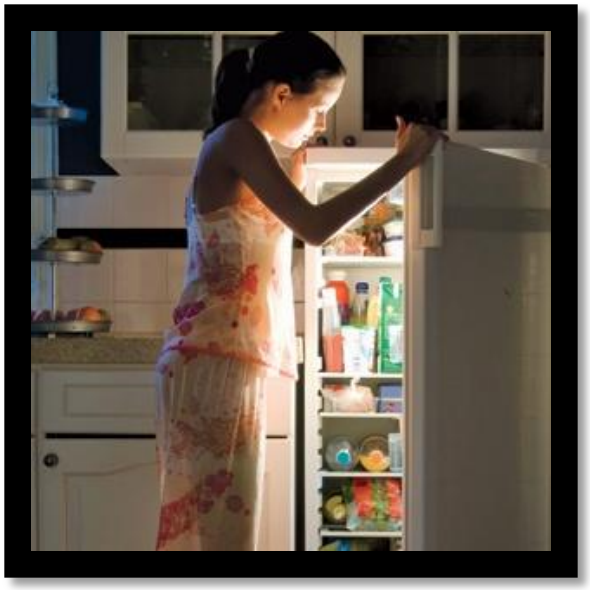
What Your Body is ***Really*** Craving: Sleep

by Ashley Chamberlin



Do you find yourself experiencing strong cravings for sweet and salty foods mid-afternoon or late at night? Do you give into these cravings by overeating and end up feeling even more sluggish? You may think your cravings are due to hunger, but the real culprit of your increased appetite may surprise you; what your body really want may be sleep.

Lack of sleep and sleep deprivation can dramatically increase your appetite, causing you to eat more than you need and not feel as satisfied. Scientific research has shown that there are two important hormones, leptin and ghrelin, that are directly affected by the amount of sleep you get and regulate hunger and fullness. When we don't get enough rest, these chemicals in the body trick our minds into thinking that we are hungry so we eat more when we sleep less.

Leptin is a hormone that is released by fat cells and tells the body when it is full. This hormone signals the brain to decrease hunger and increase fullness and satiety (Crispim *et al.* 2007). When you get adequate amounts of sleep the leptin levels increase normally after eating and remain high until food is needed by the body again. However, when you don't get adequate sleep the levels of leptin will drop and send the signal that the body's energy stores are low or that you are starving. When this happens, leptin doesn't do its job of telling the brain that your stomach is full. This will cause you to eat more before you feel full, which can explain why you may overeat more often when you are tired.

When you get enough sleep the hormone ghrelin acts opposite of leptin. Leptin *decreases* hunger and makes you feel full, whereas ghrelin *increases* appetite and makes you feel hungry. Ghrelin is a chemical released by the stomach, small intestine, and brain when you are hungry or fasting. So when ghrelin is high, your appetite will increase because your body thinks it is starving. Not getting enough shut-eye also causes the hormone to increase in the body, making you feel hungry. Ghrelin works faster than leptin and can increase by 22% after only one night of sleep deprivation (Gutierrez and Wilioughby 2010). This means your hunger, cravings, and appetite increase as well after one night of not getting enough rest.

The effect of sleep on hunger is bad news for Americans because the amount of rest we are getting has dropped significantly. Over the last 40 years, the amount of sleep plummeted from an average of 8 1/2 hours to 6 1/2 hours a night (Hanlon & Cautere 2011). At the same time, the rates of obesity have skyrocketed. Without sleep, our bodies think we are starving and send signals telling us to eat, causing overeating thus leading to weight gain. Getting the recommended 7-9 hours of sleep per night will give your body what it is really craving and improve your health dramatically.