

## Should we sleep more to lose weight?

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Research to be presented at the Annual Meeting of the Society for the Study of Ingestive Behavior (SSIB), the foremost society for research into all aspects of eating and drinking behavior, suggests that sleep behavior affects body weight control and that sleep loss has ramifications not only for how many calories we consume but also for how much energy we burn off.

In recent years an increasing number of <u>epidemiological studies</u> have found a relationship between how long we sleep for and obesity as well as <u>type 2 diabetes</u>, suggesting that insufficient sleep increases the risk of <u>gaining weight</u> and developing diabetes.

Work carried out by researchers from the German Universities Tubingen and Lubeck and Uppsala University in Sweden has investigated the effect of short term sleep deprivation on hunger as well as on physical activity and energy used by the body. Physical activity was measured by special devices worn on the wrist that detect acceleration. Energy used by the body was assessed by indirect calorimetry, a method which estimates how much heat is produced by a person as they use oxygen.

Sleep deprivation increased how hungry participants felt and also raised the amount of the "hunger hormone" ghrelin detected in their blood. In fact, the shorter the amount of sleep a person had experienced the hungrier they were. After just one night of disrupted sleep volunteers moved around less although this was not surprising considering they also felt more tired. In addition, staying awake for one complete night reduced the amount of energy used by the body when resting. This



research tells us when we are sleep deprived we are likely to eat more calories because we are hungrier. This alone might cause us to gain weight over time. However <u>sleep loss</u> also means we burn off fewer calories which adds to the risk of gaining weight.

Ongoing studies aim to find out if increasing <u>sleep time</u> might help with weight control efforts. While there is still some way to go before sleep improvement is used to treat obesity and diabetes, the available research results clearly supports the notion that sleep is involved in the balance between the amount of calories we eat and the amount we use up through activity and metabolism.

Provided by Society for the Study of Ingestive Behavior

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