

News and Views

Manoharan Renugasundari*

Department of Physiology, JIPMER, Puducherry, INDIA.

Correspondence

Ms. Renugasundari M,

Ph.D Scholar, Department of Physiology,
JIPMER, Puducherry, INDIA.

Email: renu231994@gmail.com

DOI: 10.5530/ijcep.2019.6.3.28

NEWS

Sleep Deprivation is a Risk for Obesity and Cognitive Impairment

Sleep deprivation for a prolonged time has been linked with many chronic conditions such as increased body weight, glucose intolerance, hypertension, cognitive impairment.^[1] Obesity could be a leading reason behind morbidity and mortality in the twenty first century and its pervasiveness has been quickly expanding in the course of recent years. As of late, a comparable development in self-revealed lack of sleep has been seen, parallel to the epidemic of obesity.

The average sleep time in the general population is projected to have dropped by an average of 2 hours per night. People sleeping less than 6.5 hours are at greater risk of gaining weight whereas excessive sleep duration is associated with increased morbidity.^[2,3] Obesity which leads to low-grade systemic inflammation is viewed as the key connection among obesity and obesity-related illness that includes cognitive dysfunction.

Reduced sleep increases the danger of intellectual disability for individuals. Cognitive dysfunction especially in the domains of attention and memory increases the risk of Alzheimer in people getting even 1 hour less than the required sleep affects.^[4] Food reward pathways got activated which led to weight gain when partial sleep restriction provided for six days.^[5]

REFERENCES

1. Kazem YMI, Shebini SME, Moaty MIA, Fouad S, Tapozada ST. Sleep Deficiency is a Modifiable Risk Factor for Obesity and Cognitive Impairment and Associated with Elevated Visfatin. Open Access Maced J Med Sci. 2015;15;3(2):315-21.
2. St-Onge M-P, O'Keeffe M, Roberts AL, RoyChoudhury A, Laferrère B. Short sleep duration, glucose dysregulation and hormonal regulation of appetite in men and women. Sleep. 2012;35(11):1503-10.
3. St-Onge M-P, Shechter A. Sleep disturbances, body fat distribution, food intake and/or energy expenditure: pathophysiological aspects. Horm Mol Biol Clin Investig. 2014;17(1):29-37.
4. Whitney P, Hinson JM. Measurement of cognition in studies of sleep deprivation. Prog Brain Res. 2010;185:37-48.
5. St-Onge M-P, McReynolds A, Trivedi ZB, Roberts AL, Sy M, Hirsch J. Sleep restriction leads to increased activation of brain regions sensitive to food stimuli. Am J Clin Nutr. 2012;95(4):818-24.

VIEWS

Healthy Diet Facilitates Sleep

Are you someone in need of a cup of bed coffee to entice you out of bed? Or maybe you like a jolt in the afternoon from the cola marketing machine? Or even you are additional the candy kind – in any case, you are not alone. How did caffeine become the drug (and food) of choice?

Insufficient sleep results in a perpetual cycle – the more tired you are, the more caffeine you take in the daytime to remain active; however the more caffeine you consume, the tougher it will be to go to sleep at night.

Food also has an appetite and metabolism connection with sleep. Analysis by Dr. Van Cauter shows that individuals with inadequate sleep appear to own larger desire for food because of the fact that concentration of leptin (leptin is an appetite regulating hormone) falls, which facilitates the increase in appetite. This connection between the desire for food and sleep offers additional proof that sleep and obesity are connected. Moreover, psychological manifestations of tiredness, sleep and hunger are also similar. Thus, one may feel like need to go to the refrigerator instead of going to bed when he feels sleepy.