Health Effects of Lights at Night and Noise
Provided by Dr. Mary Margaret Gottesman

Please note that there were no publications found identifying light-at-night, noise, or impaired sleep length or quality as having neutral or positive effects on human health. There are only negative effects demonstrated.

Adverse Effects of Light-at-Night

Anisimov, VN et al. (2012). Light-at-night-induced circadian disruption, cancer, and aging. Current Aging Science, 5 (3), 170-177.

Falci , F. et al. (2011). Limiting the impact of light on human health,, the environment environment, and stellar visibility, Journal of Environmental Management, 92 (10), 2714-2722.

Fonken, LK et al. (2010). Light-at-night increases body mass by shifting the time of food intake. Proceedings of the National Academy of Science, 107 (4), 1864-1869.

Haim, A. et al. (2010), Effects of chronobiology on prostate cancer cell growth in vivo. Sleep Science, 3 (11), 32-35.

Kloog et al. (2010). Light at night and breast cancer risk worldwide. Cancer Causes and Control, 21 (12), 2059-2068.

Spivey, A. (2010). Light pollution. Environmental Health Perspectives, 118(12), A525.

Stevens, RG (2009). Light-at-night: Circadian disruption and breast cancer: Assessment of existing evidence. International Journal of Epidemiology, 38 (4), 963-970.

Adverse Effects of Blue Light

Blue light has a dark side. Harvard Health Letter. May 2012.

Holzman, DC (2010). What's in a color? The unique human health effects of blue light. Environmental Health Perspectives, 118 (1), A22-27.

Noise and Impact on Health

Basner et al. (2014.) Auditory and non-auditory effects of noise on health. Lancet, 383, 1325-32.

Evans, GW (2006.) Child development and the physical environment. Annual Review of Psychology, 57, 423-51.

Evans, G & Higge, S. (2010). Noise and performance in adults and children. In Luxon, L & Prasker, D (eds.), Noise and its effects. London: Whurr Publ.

Fritschi et al. (2007). Burden of disease from environmental noise. Bonn: WHO. Dfsdf

Muzet, A. (2007). Environmental noise, sleep, and health. Sleep Medicine Reviews, 11, 135-42.

Melatonin and Health

Jansen et al. (2011). Melatonin for the treatment of dementia. Cochrane Reviews.

Pevet, P (2014). The internal time-giver role of melatonin: A key for our health. Review of Neurology, 170 (10), 1-5.

Sleep and Health

Check JH. (2013). The interrelationship of sleep, biologic clocks, neurotransmitters, gonadotropins and pubertal development. Clinical Experience in Obstetrics and Gynecology, 40(1):7-14.

Lord C, Sekerovic Z, & Carrier J. (2014). Sleep regulation and sex hormones exposure in men and women across adulthood. Pathology and Biology, 62(5):302-10. doi: 10.1016/j.patbio.2014.07.005.

National Institutes of Health/ National Heart, Lung, and Blood institute (NIH/NHLBI). Workshop on pediatric sleep disturbances and their contribution to the developmental pathophysiology of cardio-metabolic risk. http://www.nhlbi.nih.gov/research/reports/2010-dld-ped-sleep-disturbances.html

NIH/ NHLBI Frontiers of knowledge in sleep and sleep disorders: Opportunities to improve health and quality of life. http://www.nhlbi.nih.gov/research/reports/2004-sleep-conference.htmI

Rakshit K, Thomas AP, Matveyenko AV. (2014). Does disruption of circadian rhythms contribute to beta-cell failure in type 2 diabetes? Current Diabetes Reports, 14(4):474. doi: 10.1007/s11892-014-0474-4.

Spiegel K. (2008). Sleep loss as a risk factor for obesity and diabetes. International Journal of Pediatric Obesity, 3 (Suppl 2), 27-8.
.St-Onge MP, & Shechter A. 2014. Sleep disturbances, body fat distribution, food intake and/or energy expenditure: pathophysiological aspects. Hormonal, Molecular, and Biological Clinical Investigations, 17(1):29-37. doi: 10.1515/hmbci-2013-0066.