Both adults and children. Most studies found a significant association between short sleep (<6 hours per night) and increased risk for obesity. A meta-analysis of 18 studies with 604,509 adult subjects demonstrated an increased relative risk for obesity of 1.55 (p <0.0001) for those who slept less than 5 hours of sleep. Buxton & Marcelli\(^1\) conducted a study with 56,507 adults between 18 and 85 years of age who demonstrated a 6% increase in the probability of developing obesity in subjects who had sleep (self-reported) of less than 7 hours per night.

The mechanisms related to sleeping hours and obesity are not yet fully understood, but the researchers point out that the disturbances caused by the decrease in sleeping hours influence appetite, satiety and, consequently, food intake, favoring an increase in obesity.

Studies have shown that ghrelin, an orexigenic hormone (which promotes hunger) is increased after the restriction of sleeping hours, while leptin, an anorexigenic hormone (which contributes to the perception of satiety), is diminished. In addition, the reduction of hours of sleep can affect body energy expenditure, since leptin is a hormone that increases energy expenditure and, therefore, changes in leptin levels after sleep deprivation affect both caloric intake and expenditure energy.

The mechanisms related to sleeping hours and obesity are not yet fully understood, but the researchers point out that the disturbances caused by the decrease in sleeping hours influence appetite, satiety and, consequently, food intake, favoring an increase in obesity.

According to the authors of these studies, sleep is a restorative process of the brain, important for physical and mental health. Decreased sleep duration is quite common in society and raises concerns about the negative impact of sleep disorders on overall health.

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**Conflict of interest**

The author declares there is no conflict of interest.

**References**