

Blood Sugar Regulation

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The primary fuel source for the brain is sugar. However, most of the population overconsumes sugar and experiences its negative effects. During stressful and sad times reaching for that pint of ice cream might make us feel better immediately; however, nutrition and well-being have more of an effect on behavior than previously thought.

PQ

PQ focuses on a psycho-medical approach to improve professional life and our nutrition choices can either negatively or positively impact behavior. *Mental Activity* element of PQ pertains to the brain's stability in work performance and how sleep and eating habits independently affect it. However, there may be evidence to suggest sleep and eating habits are interactive and lead to improvement in quality of life. Day to day factors can distract us and create fluctuations in our performance. Awareness to these psycho-medical factors in the workplace related to both nutrition and sleep may pose individual and organizational benefits.

Blood Sugar

During stressful events, food becomes emotionally comforting to many. People may turn to comfort foods, which generally are high carbohydrate options with little nutritional value. The digestive system breaks down carbohydrates into sugar which then enters the bloodstream. As blood sugar rises, the pancreas releases insulin to absorb the sugar and use it for energy or storage. As cells absorb the sugar, the blood sugar levels decrease in the bloodstream. Consequently, eating refined carbohydrates will cause a faster spike and a sudden dip in blood sugar. Recent studies have shown a relationship between mood and blood-sugar fluctuations.¹ These highs and lows may



cause feelings of anxiety, worry, irritability, and difficulty concentrating. The effects of blood sugar fluctuations may cause higher stress and decreased productivity at work. Populations with diabetes are not the only ones at risk; a healthy adult who eats a diet high in refined carbohydrates can wreak havoc on their mood and daily functioning.¹ Working from home, you may feel less inclined to pre-pack lunch or have food readily prepared. Another result is you may be working more and get so immersed in it that you forget to eat, which leads to ravenous hunger in the evening. At this point, it is easy to grab whatever is the

fastest and most convenient. Unfortunately, lacking preparation and mindfulness results in poor nutritional choices leading to an unfavorable cycle.

To ensure blood sugar stabilization, it is imperative to pair carbohydrates with protein and healthy fats. Both fat and protein assist in the absorption of sugar in your bloodstream. Ideally, carbohydrates should be unrefined, and meals should include fibrous vegetables. **Fiber blunts the blood sugar spike and helps improve blood sugar levels. Whole grains, legumes, and vegetables are great sources of fiber to include in each meal.**

Inversely to blood sugar fluctuations causing stress, stress can also cause blood sugar fluctuations. **Stressful events turn on our fight or flight mode, where cortisol and adrenaline are released. In turn, blood sugar increases.** Chronic stress can result in energy levels dropping, mood instability, and increased cravings. **Letting stress overcome you will reduce productivity and limit your ability to work.**

Sleep

Similarly, studies show that a lack of quality sleep is related to an increase in the consumption of added sugars and calorie-dense foods.² This result is due to an increase in hunger cues and suppression of satiety signals. **Ghrelin** is the hormone that stimulates your appetite, which increases with inadequate sleep. **Leptin**, the hormone that suppresses hunger, is decreased, leaving you feeling hungry and tired. **A lack of sleep also increases the craving for high carbohydrate and high-fat snacks.** This is due to raised levels of endocannabinoid, a lipid-based molecule, in your blood making the act of eating more pleasurable and euphoric.³ According to Harvard University, REM sleep, the period when people dream, is associated with learning, memory, and emotional health. Therefore, sleep disruption may have an impact on levels of neurotransmitter and emotional regulation.⁴ Research has shown night-shift workers are more likely to develop depression than daytime workers.⁴ This increase in depression is associated with circadian rhythm misalignment. **Getting sunlight in the morning and sleeping 7 to 9 hours can thus create stability in mood and take control of your cravings.**



References

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