

Why does the Brain Crave Sugar?

Stress is a part of life. Stress can be good, as it helps protect us from danger and motivates us. Stress is problematic when it is ongoing, as the constant state of alertness can impair cognitive function, making it hard to focus and control emotions. Since the brain's primary source of energy is glucose (simple form of sugar), the stress response and sugar cravings create a cycle.

Stage 1: Feeling stressed

Dwyane, a shift supervisor at Magna, just arrived at work and learned a customer moved up a shipment deadline.

Stage 2: Sugar craving

Dwyane enters fight or flight mode, and the brain releases cortisol (stress hormone). Dwyane starts craving sweets because his brain is on high alert in response to stress and wants more energy.

Stage 3: Blood sugar spike

Dwyane eats a chocolate bar from the vending machine. The sugar in the chocolate causes his brain to release dopamine (happy hormone) which gives him temporary relief from stress. Since the body processes the chocolate bar fast, the sugar enters his blood stream quickly. This spikes his blood sugar levels and helps him feel energized temporarily.

Stage 4: Blood sugar crash

Shortly after eating the chocolate bar, Dwyane experiences a blood sugar crash. This is because the blood sugar spike from the chocolate bar results in a rapid blood sugar drop. This drop leaves Dwyane feeling stressed, tired, and craving more sweets. Dwyane is now in the repetitive cycle of stress → sugar craving → sugar intake → crash → more stress → more cravings.

The issue with this dopamine hit from eating sugar is that the brain connects sugar with feeling good. So, the brain seeks more sugar to feel pleasure again. It is recommended that adults do not consume more than 25g of sugar a day. So, what can you do when the brain craves sugar?

- Listen to your body. Ask yourself why you are reaching for sugar. Are you feeling stressed or bored?
- Drink a big glass of water. We often confuse hunger with feeling thirsty.
- Practice mindfulness (deep breathing, stretches, meditation) to stop focusing on sugar cravings.
- Pair a sweet snack with fibre (i.e., peanut butter with apples or dark chocolate with almonds).
- Avoid artificial sweeteners. While they have less calories, they can still cause sugar cravings.
- Talk to a trusted person or professional instead of searching for sweets. Try Magna's Employee Family Assistance Program ([EFAP](#) – code: magna) for free counselling.

One of the best ways to reduce stress and sugar cravings is to exercise. Exercise releases beta-endorphins which reduce stress and increase feelings of happiness. Exercise also reduces blood sugar because your muscles use glucose (sugar) in your blood stream as energy. Lastly, exercise can help you clear your mind and give you something to focus on rather than focusing on your stress or eating sweets from boredom.

