

Avoiding Dopamine Addiction and Understanding Serotonin

Guidance for preventing teenage substance abuse

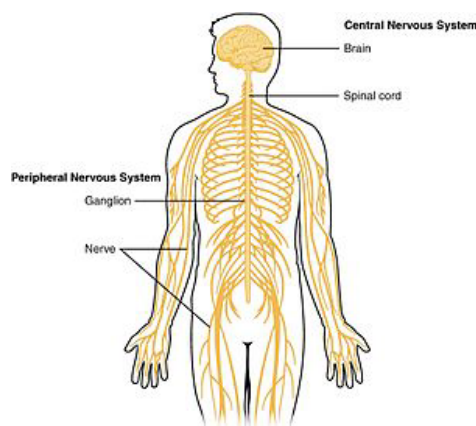
What is Dopamine?

Dopamine is a chemical that communicates between nerve cells in our brain and body. It is known as the “pleasure hormone” because it is released when we are doing something that makes us feel good. This system is designed to reward us when we are doing things to take care of our bodies, like eating, drinking, competing to survive, and reproducing. This rush of excitement can make us feel motivated, yet it is only a temporary feeling of reward. Our bodies want more and more of this feeling: that is why eating cookies or drinking sugary drinks—things that boost our dopamine levels—can be so addictive. Once our bodies feel a rush of dopamine, we crave it again and again.



What is Serotonin?

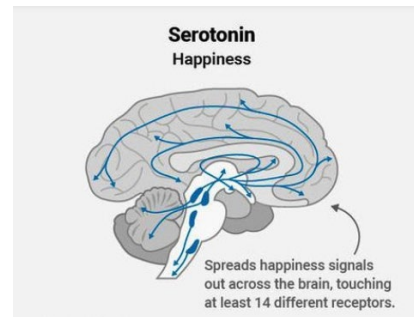
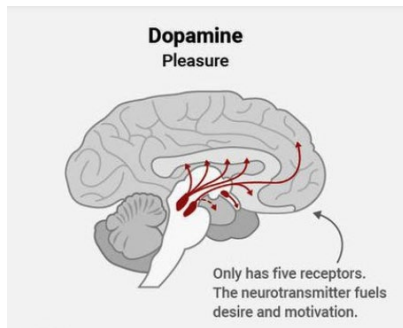
Serotonin is another chemical that sends messages to our bodies. It tells the body how to work and helps control our happiness, memory, sleep, body temperature and hunger. Most serotonin is produced in our guts while some is produced in our brains. When you have average levels of serotonin in your body, you might feel focused, happy or calm. Low levels of this chemical might negatively affect your mood, sleep or digestive tract. If your child is needing to boost their serotonin levels, have them go outside for a walk, get some sunshine, talk with friends or family, or eat foods high in tryptophan (an amino acid that is needed for making serotonin in the body) like milk, oats, cheese, and nuts.



Both dopamine and serotonin are essential for our bodies to function; they impact our mood and can help us live happy and stable lives. While diseases of dopamine or serotonin over or underproduction are rare, if you notice that your child is having trouble regulating their mood, they might have a hormone disorder involving these or other hormones. Endocrinologists at Nationwide Children’s Hospital study hormone imbalance and how it can affect your child’s health and wellbeing.

Dopamine vs. Serotonin





- Addictive – too much can lead to addiction
- Short Term
- Visceral – felt in the body
- Can be achieved alone and through substance use
- Typically experienced alone (social media, sugar, eating, shopping, bingeing)
- Generally associated with pleasure
- Non addictive
- Long term
- Ethereal – felt above the neck
- Achieve through social groups (hanging out with friends, family or colleagues)
- Typically associated with happiness
- Too little can lead to depression
- Inhibitory – cannot overdose on happiness
- Dopamine down regulates your Serotonin levels – the more pleasure you seek, the less happy you will be.

Earn your Dopamine

Earning it looks like

- Exercising regularly
- Learning something new
- Doing something creative
- Setting and achieving goals
- New experiences
- Celebrating the little wins

Settling might look like

- Relying on Social media
- Abusing drugs or alcohol

- Excessive online shopping
- Overusing video games
- Binge eating junk food
- Meaningless scrolling