Understanding Self-Medicating in Teens with ADHD

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Some teens with ADHD turn to caffeine, vaping, cannabis, or even excessive gaming to charge their brain. This article explores why self-medicating happens, what it can look like, and how parents can support their teen toward healthier coping.

What is Self-Medicating and How Does it Differ from Normal Experimenting?

Self-medicating occurs when individuals use substances or behaviours like cannabis, nicotine, energy drinks, or excessive screen time to regulate their brains, not just for peer fun. For teens with ADHD, challenges with focus, anxiety, or restlessness may drive them to seek quick relief or stimulation. Experimenting is often driven more by curiosity and/or peer influence, leading to more casual substance use in many cases. While many teens experiment, self-medicators repeat behaviours that seem to "work" neurologically, even if harm follows.

Common Self-Medicating Behaviours in Teens with ADHD

Teens with ADHD may turn to substances or activities to manage symptoms without realizing they are doing it. For example, drinking energy drinks to boost focus for exams, or using heavy screen time/gaming as a go-to emotional escape to calm overstimulation and anxiety. Food binges or sugary snacks may also provide a quick hit of dopamine (a feel-good chemical in the brain) for comfort.

Why Teens with ADHD Are at Higher Risk

ADHD is linked with impulsivity and sensation-seeking, traits that also raise the risk of developing substance use disorders (SUDs). While many teens instinctively use and experiment with substances that improve focus or calm racing thoughts, an SUD affects a person's brain and behaviour and makes it difficult for the person to control the use of the substance. Current research shows that teens with ADHD are at a substantially increased risk of developing SUDs by adolescence or adulthood by about 1.5 times overall.

This may be because ADHD is characterized by an **underactive dopamine reward pathway**, which can lead to difficulties with finding reward from everyday activities. Why is this? Dopamine is a "feel good chemical", a messenger in your brain that says "this was fun, let's do it again sometime!". When you eat a favourite snack or get a compliment from your boss on your work, the messenger in your brain delivers a "reward message" to make you feel good. The reward pathway is like a highway in your brain that the dopamine messenger drives on. When the highway is working properly, the messenger delivers the messages quickly. However, if someone has an **underactive** dopamine reward pathway, it's like both a traffic jam and construction happening on the highway. The dopamine messenger will still get there on the highway, but it will be stuck or go slowly. That means that the person doesn't get that "happy message" as easily, even when something fun or exciting is happening.

Whether through sensation or hyperactivity, ADHD brains scan the environment for engaging stimulation. In other words, they want stimulation that can increase dopamine more quickly and intensely. This pursuit of pleasurable rewards can become a potent form of self-medication.

The Bigger Picture: Long-Term Health Matters

Emerging research warns that untreated ADHD, especially when paired with substance use and/or impulsivity, is linked to a shortened life expectancy. This is largely due to issues like health complications from smoking and SUD, as well as accidents. This is why addressing self-medicating behaviours early is a critical act of care, not judgement.

Self-medicating isn't a moral failure. It's a signal that your teen's brain is struggling with unmanaged ADHD symptoms. With understanding, curiosity, and evidence-based strategies, parents can help their teens replace risky behaviours with safe, healthy coping tools. Understanding the underlying needs, rather than fighting the symptoms, is the first step.

The Role of Misunderstanding and Shame – Addressing Self-Medication Supportively

Parents may misread self-medicating as rebellion or defiance. Teens often feel ashamed or scared. Dismissive reactions, even some punishment, can worsen these feelings and promote secrecy. Understanding brain-based needs shifts the tone from blame ("why are you choosing this?") to empathy ("I get you're trying to feel less overwhelmed or to focus better.").

When addressing self-medicating, start with curiosity, not confrontation. Ask open-ended questions, such as "When you had that drink or vape, what were you hoping it would help with?" This can open honest dialogue rather than shut it down. Then, teach and encourage replacement tools that are more brain-friendly, such as grounding strategies, movement breaks, and deep breathing.

What Can Parents Do Today?

If your teen with ADHD is showing signs of self-medicating, whether it's through caffeine, cannabis, vaping, or compulsive gaming, it's not too late to shift the path. The goal isn't just to remove the behaviour, but to meet the need the behaviour is trying to serve. Below are some practical strategies organized by *why* the behaviour might be happening:

- 1. **Support Impulsivity and In-the-Moment Decision-Making.** ADHD is a disorder of self-regulation, not just attention. Teens with ADHD often struggle with pausing, especially under stress or boredom.
 - a. **Practice Pause Strategies.** Teach your teen to "hit the pause button": "I will wait for 10 seconds and ask myself again" or "If I'm unsure, I wait until I've asked someone". Roleplay this at home regularly.
 - b. Create Delayed Gratification Practice. Set up a rewards or point system where your teen earns points or rewards for delaying something tempting. For example, set up simple rewards for your teenager after completing tasks, such as earning an extra 10 minutes of their favourite activity after a week of consistent effort. To make this more visual, you could put a marble in a jar for every task they complete that week. Once they reach a certain number of marbles (or fill the jar), they receive a reward (ice cream, a favourite treat, etc—just make sure that the reward is something your teen will like and find rewarding). You could also have a short-term rewards jar (e.g., for a favourite sweet treat) and a long-term rewards jar (e.g., for a new game). These side-by-side jars can provide a more visual understanding of the difference between immediate and delayed rewards.
- 2. Offer Safe, Purposeful Replacement Behaviours. Self-medicating isn't random—it usually meets a real need: to focus, to relax, or to escape. Your teen can think of their brain like a cell phone with only 20% battery: when we put it on airplane mode (like when using cannabis, nicotine, gaming, etc), it doesn't charge the battery. While our battery may not run out as quickly when it is on airplane mode, once it is turned off, those messages (i.e., needing a break or healthy coping strategy) come flooding back in, often making the battery drain quicker when they

do. This is why it is important that your teen chooses something to "charge" their brain. Here are some examples of replacement behaviours that address the function of the behaviours:

- a. **Calming the brain.** Instead of using a vape or cannabis, use a weighted blanket, deep pressure input, gum, or mindfulness activities.
- b. **Boosting focus.** Instead of an energy drink or caffeine, take a cold shower, eat sour candy, use body doubling during tasks, or take movement breaks.
- c. **Emotional escape/dopamine hit.** Instead of screen binging, engage in structured game time and transitions, journalling, or a "dopamine menu" (Create a visual list of 10-15 things your teen finds enjoyable or energizing that don't involve harm. Include options like dancing, listening to a playlist, eating spicy snacks, creating art, or calling a friend.).

Final Note to Parents

You're not alone—and neither is your teen. Navigating ADHD and the impulse to self-medicate is hard, but every step you take to understand and support them matters. The path forward isn't perfect, but it is possible. Together, with compassion, consistency, and the right help, you and your teen can write a different story—one rooted in connection, trust, and growth.

If you see any of the following signs, we would encourage you to seek out professional support:

- 1. Increased frequency or quantity of vaping, cannabis, or risky behaviours
- 2. Declining grades, sleep, mood, or relationships alongside substance use
- Withdrawal from existing treatment (e.g., counselling, ADHD coaching) or stopping prescribed medication suddenly

If you or your teen is struggling with self-medicating, resources are available. If you are struggling with addiction, please call for help.

1. Addiction Helpline: 1-866-332-2322

2. Mental Health Helpline: 1-877-303-2642

3. Calgary Connecteen: 403-226-1601

4. Alberta Adolescent Recovery Centre: 403-253-5250

For further reading to help charge your ADHD teen's battery:

- Smart but Scattered Teens: The "Executive Skills" Program for Helping Teens Reach Their Potential by Colin Guare, Peg Dawson, and Richard Guare
- Taking Charge of ADHD, the Complete Authoritative Guide for Parents by Russell A. Barkley

• CADDAC (Centre for ADHD Awareness, Canada) Parent Courses and Support Groups (full listing can be found at:

www.caddac.ca/programsand-events/#parenting-courses)