Brain Chemistry of EF/ADHD–Dopamine

Have you ever wondered why some days you feel motivated and focused, while on others even simple tasks feel hard?

When we talk about ADHD and executive function, we often focus on behaviors. But underneath those behaviors are chemical messengers in the brain that influence motivation, focus, and follow-through.

I want to explore a few of these—starting with dopamine.

Dopamine is often called the "feel-good" chemical, but that's not quite right. It's really more of a get-started chemical. Dopamine helps our brains decide whether something feels interesting, doable, or worth the effort.

For many people with ADHD or executive function challenges, dopamine works a little differently. Our baseline levels tend to be lower, or our brains don't use dopamine as efficiently—especially for tasks that feel boring, repetitive, or far away in time.

That's why "just push through" or "you'll feel good when it's done" doesn't usually help.

The Exciting New Idea

Think about what happens when you get a new idea. A trip. A project.
A plan.

Suddenly, you're energized. Focused. Motivated. You might spend hours planning, organizing, and preparing. That's dopamine at work. Novelty naturally boosts dopamine, which is why starting feels easier than finishing.

Once the task is no longer new, that dopamine boost fades—and so does the motivation. It's not a character flaw. It's brain chemistry.

Why Pressure Works

Urgency—deadlines, last-minute pressure, someone waiting on us—also increases dopamine (along with adrenaline).

That’s why many of us can suddenly focus the night before something is due. It works, but it often comes with stress, exhaustion, and work that doesn’t reflect our best thinking.

Rewards Don’t Always Motivate Us

Traditional advice assumes we’ll be motivated by a reward at the end: Finish the task, then feel good.

But many ADHD brains need dopamine before or during the task, not after. That’s why buying supplies or setting things up can feel so satisfying—we get a dopamine hit just from planning.

And then… the follow-through stalls.

What Helps

When we talk about strategies like fun, accountability, **chunking**, or **body doubling**, we’re really talking about supporting dopamine.

These strategies:

- Add interest during the task
- Create small moments of success
- Reduce the mental load of getting started

They aren’t tricks or shortcuts. There are ways of working with a brain that needs a little more stimulation to engage.

The Most Important Takeaway

This isn’t a motivation problem.

It’s not laziness.

It’s not a lack of willpower.

It’s a dopamine difference.

And once you understand that, the question changes from

“Why can’t I make myself do this?” to “What does my brain need right now to get started?”

That’s a far more effective place to begin.

In future posts, we'll talk about other important players like norepinephrine (focus and alertness) and serotonin (mood and emotional regulation), and how they show up in everyday life with ADHD.