

# How to Avoid Unnecessary Dopamine Peaks With "Dopamine Stacking" | Dr. Andrew Huberman

I love to exercise I know to some people uh this might seem foreign but I love to exercise I love to do resistance training I love to run I am not one of those people that doesn't like the experience of exercising but likes the feeling afterwards Quote unquote I hear that a lot I don't like to exercise but I love the way I feel afterwards I love physical training and I love the way I feel afterwards But I mostly love the feeling during I don't know why I'm wired that way I can't say that I'm somebody who likes to do hard things across the board There are plenty of difficult things in life that I dread or that I'm sort of meh about But for me hard exercise intense exercise of a particular kind resistance training and running in particular Both give me a yum yes I love this kind of feeling and yes it persists for me quite a long while afterwards Both for sake of the way that it changes my neurochemistry but also my sense of satisfaction But I just simply love it Now years ago I discovered that if I drink a cup of black coffee or an Americano or a double espresso or some Yoruba mate that my workouts can be quite a bit more intense I can run further And then I also discovered that if I were to take a pre workout energy drink or I took say 300 mg of alpha G PC and 500 mg of phenylethylamine and perhaps even 500 mg of tyrosine and perhaps did that alongside the caffeine in the Monte then Yes absolutely I really liked those workouts I could be like a laser in terms of focus I could exert even more effort put on some music and I could achieve even better performance And then I also discovered that I could export that protocol of caffeine or bamate and various supplements to my cognitive work So I was when I was studying or writing papers or writing grants or in the laboratory when I was doing experiments with my hands in those days when you know cutting brain tissue and staining it and working really long hours And I discovered that all of those things all of those behaviors compounded with my love of exercise and my love of doing science and gave me these big peaks in what to me felt like even important experiences They felt that you know unlike anything else they were just so so peak in their nature which was great and it did indeed enhance my performance However while it did not create a dependency for those different substances caffeine supplements et cetera What I noticed was that in the days and sometimes weekends afterwards even though for much of my career I confess I've worked weekends as well but I would notice that

I'd experienced a real trough in energy I just would not feel that good And then if I kept up those behaviors consistently and I was consistently adding in these other let's just call them what they are dopamine releasing or stimulating behaviors and substances that my enthusiasm for physical training or running or for doing experiments actually started to diminish And this was really discouraging to me at the time because I started to think OK maybe I'm burnt out Maybe I have adrenal burnout which by the way doesn't exist folks your adrenals don't burn out There is something called adrenal insufficiency syndrome You can overstimulate your system by way of too much adrenaline epinephrine and norepinephrine But that's a separate thing There's no such thing as adrenal burnout per se but I didn't know that So I thought gosh I'm really burnt out when in fact it's now obvious to me what I was doing I was combining too many dopamine releasing or stimulating behaviors and substances for things that I already enjoy doing as behaviors namely exercise and doing experiments anything related to science actually So what this means is not to avoid taking things or doing things that amplify your amount of dopamine but to be very cautious about how often one does that and how many different dopamine stimulating behaviors or compounds one stacks especially in terms of taking those things or stacking those things in and around behaviors that you already really enjoy doing I was essentially just creating another version of the kids in nursery school or first grade with the Gold Star experiment I was basically just doing the exact same thing And when I realized that and I changed my relationship to those compounds I didn't eliminate them all together But I started realizing for instance that I didn't need to double up on Yerba mate and coffee Every workout Sometimes I would do one Sometimes I would do the other Frankly I always do one or the other It's rare that I ever do any kind of physical training without some caffeine first And I do my physical training typically in the early part of the day So that's fine Doesn't interfere with my sleep I might do a hike without caffeine But if I'm in a weight trainer I'm gonna run I tend to drink coffee beforehand or have your m or if I occasionally meaning about once every third sometimes every other but usually about every third workout I'll take 300 mg of alpha G PC maybe occasionally maybe every third or fourth workout And these are resistance workouts Mind you not running I'll take 500 mg of tyrosine or more typically 500 mg of py ey laine and very very rarely maybe once every two or three months I might stack all of those things together prior to a workout But of course I'm always mindful to also include workouts or runs or bouts of cognitive work So that could be

grant writing prepping for a podcast et cetera where I don't do anything prior maybe just my caffeine because I have a baseline level of caffeine that I use each day to function like many people There's a baseline level of caffeine that just allows us to function If we're a perpetual user of caffeine I talked a lot about this on the episode in caffeine But the key here is be cautious I would say be very cautious about stacking and layering in too many dopamine peak inducing behaviors all at once on a regular basis The key point here is if you are somebody that can engage in these intrinsically joyful activities for you these activities that you're really motivated to do whether or not it's skiing or playing music or dancing et cetera without the need to layer in additional dopamine releasing mechanisms or compounds or activities Well then I highly recommend you do that because then you are essentially making yourself one of those fortunate few that does not require additional stimuli and therefore can hold on to that pleasure can hold on to that intrinsic pleasure and motivation to engage in these behaviors over time which frankly there is no replacement for there is no pill or bottle or potion or motivational speech or podcast or book that can replace intrinsic motivation Intrinsic motivation is perhaps the holy grail of all human endeavors and behaviors because it encompasses so much of what brought us to this point in our species evolution And also what brings each and every one of us closer and closer to our goals And if it's happening with enjoyment without the need to layer in additional tools well then you have really tapped into the source Uh And when I say the source I don't mean it in any kind of mystical way I think it's quite clear by now that when we hear about from Eastern medicine or we talk about motivation drive and pursuit in on Western neurobiological languages that relates to dopamine or we hear about the source maybe in my podcast episode with um the one and only Rick Rubin incredibly productive music producer who's as an just an unbelievable track record in terms of creative endeavors And he talks about the source We're really talking about the same thing which is this set of circuits within us that allow us to identify what we want and then lean into effort and then to do that in a persistent way that allows us to reach our goals And if we can do that with an intrinsic sense of pleasure well that is nothing short of magic