# Dopamine System | Freemason’s Lodge 7/9/2019

\*\*Hello everyone, I've not done much public speaking but I'd like to improve and would like to thank the lodge for giving me this opportunity.\*\*

\*\*My topic today is Obtaining Your Goals with the knowledge of the dopamine system in relation to the 3 of the cardinal virtues of freemasonry\*\*

A year ago I did an experiment that required three of the cardinal virtues of freemasonry. I can best refer to it as a dopamine fast. Here’s a quick refresher of the 3 I used and their definitions so that it is fresh on your mind as I continue my story.

Prudence: the ability to govern and discipline oneself by the use of reason. 2 : sagacity or shrewdness in the management of affairs. 3 : skill and good judgment in the use of resources.

Temperance: defined as moderation or voluntary self-restraint. It is typically described in terms of what an individual voluntarily refrains from doing.

Fortitude: refers to strength in the face of adversity or difficulty.

Around a year ago I decided to do this dopamine fast. I woke up and till around 8pm I did not eat, watch tv, use my phone, the computer, read, talk to anyone, go outside, or lay down. I restricted myself from any action that gave me any fun or released any dopamine. Dopamine is a neurotransmitter in the brain responsible for the reward system and your wants and motivations. That day, If you can think of a monitor of my dopamine level you'd feel a flatline. On a normal day to day basis you'd see a rollercoaster, and for anyone with an addiction you'd see that rollercoaster at an elevated level on average. We are programmed to want the biggest reward, with the least amount of effort. In primal times this meant getting the most amount of food for the least amount of work. Which would be the right thing to do at the time. Today however, it means the thing that sounds the most fun would be sitting down with some ice cream and turning on a sports game. Imagine if your actions toward your goal of motive took the same amount of willpower as that. If it takes cleaning your whole room, to get the same amount of dopamine and reward as a swipe of your thumb, which is your body going to want to do, given the fact that we are built to converse calories and energy? I like to think of our motivation for a task as expected reward divided by amount of effort. By 8 o'clock that day I was bored out of my mind. There was a business email I had been putting off, it was on my to-do list and had stayed on there for a week, I had not mustered up the willpower and the task had been hanging over my head. But by that day at 8pm I decided to LET myself get up and do that email. There is a keyword there, LET. This high effort low reward task of writing a lengthy business email felt like I was sitting down to watch my favorite TV show. You see, on a normal day this small level of dopamine would be shadowed by the other peaks that had released more of the neurotransmitter for less effort. However to me this was the grandest rollercoaster of all, the biggest peak I could imagine and for that reason took no effort and was actually enjoyable and fun. This experience changed my perspective on my work ethic and willpower. If a task is too hard it's probably because you are taking advantage of too many easy dopamine grabs. The task is just not rewarding enough, to make it more rewarding you just need to subject yourself to a lowered rate of dopamine till it is enough to get you moving.

Has there ever been a task in life that although you knew it was the best way to move forward, you lacked motivation to complete it? I think we have all faced this problem. The world we live in today is not the world our brains evolved for. We are beings that were optimized for breeding and for survival. As I said, dopamine is a neurotransmitter in the brain that makes up your reward system. Understanding how this reward system works can help you and me control it and make the actions we want/should be doing, more rewarding and take less willpower of our prefrontal cortex. In today's world of instant gratification we must be prudent at all times. We must use reasoning and discipline to manage our time and affairs.

When we pick an action that is towards a higher level goal, one that requires willpower and is not something we want to do, we are using our prefrontal cortex. When we give in to eating the things we know we shouldn't be eating, drinking booze, watching inappropriate videos online, or using a drug. We are giving in to the portion of our brain that I like to refer to as our monkey brain. Our brain as a whole evolved outwards, on the very exterior, the neocortex, responsible for everything that sets you apart as human and on the interior the medulla oblongata, responsible for heart rate, digestion, sneezing, swallowing and breathing. Closer to the center of the brain is our reward center, evolving in a time without processed sugar, a short-term life span, and more scarce breeding opportunities, it is an outdated machine that requires temperance to act as we should in society today. The sugary berries our animal ancestors used to come across would keep them alive and reproducing was their sole being of existence. They weren't able to access limitless amounts of processed sugar, and female forms just a few clicks away. Our brain knows no difference, and the reward you are being given is from an outdated system that is not made for the type of work and life we have today.

In a study with monkeys they tracked dopamine levels in response to receiving a piece of food. A light would turn on, and a minute later food would be presented. After a few trials the association with the light turning on was linked to the food and dopamine would flood into the brain when the light would turn on. You see, dopamine is not simply to reward an action but is released just as strong in anticipation of the reward. On a similar note dopamine is released in much higher levels when that reward is unexpected, and pathways are made to try and get that unexpected reward. It is speculated that this is so that we are always searching for something new, because another berry bush or source of water could mean the difference between life and death.

\*\*What can you do with this information?\*\*

For me personally my dopamine fast gave me a perspective change. I realized that when I struggled to complete something on my to-do list, it wasn't that I was lazy or wasn't in the right mood. The real reason was that I had been abusing my reward system and in turn the task did not have enough expected value of dopamine to get me up and moving. Changing your reward system requires fortitude .You must refrain from what you know is not best for your life, and let your reward pathway rewire itself. If we wake up and first fulfill our primal wants then how can we expect any motivation to do the tasks we want to. We may be fulfilling the rewards systems goals of procreation and survival. We must enact temperance and restrain ourselves from actions which are solely monkey brain pleasing. These are short-term highs, it feels good in the moment but gets you no closer to what you wish to accomplish. My personal belief is that no action is worthy of our time unless it is in line with our goals or motives. On that note let's be prudent in our actions, understand avoiding forms of instant gratification in our free time will make the actions we want to do in our work time easier, and help us make use of our lifespan for something more than ourselves.