THE DOPAMINE Rx = GOOD CHOICES OR BAD

READERS SUMMARY:

1. WHAT HAVE I BEEN UP TO LATELY?

2. WHAT CAN FACILITATE CHANGE AND CURIOSITY?

3. DO YOU REALLY LIVE ON YOUR EDGE OF JUST THINK YOU DO?

4. WHAT BELIES THE CHANGE Rx?

5. WHY DO WE MAKE POOR CHOICES CONSISTENTLY THAT SUBJUGATE OUR RESULTS?

Most of you may know that the last two weeks www.jackkruse.com has seen some major changes in our website. Behind the scenes the changes have been greater. I was not going to let the cat out of the bag for several months about the latest biohack but life has a way of changing our plans.

I have been struggling with some big changes that I have to make in my own life. I decided that too prod me along to make a decision to get me to act I was going to do something to facilitate that process. Something happened that changed the complexity of the bio hack. The day after Thanksgiving my father in law, had a stroke that involved 3 separate parts of his cerebral cortex. The deficits he got shocked him and his doctors and he got no answers from his medical team. I could not be with him during this time because I was away completing my own bio hack on change. I just wrote the Change Rx. Many of you might have thought it was “hookey” because the comments were sparse. I think the comments were light because the

transition of the website has been quite painful for us both. That is a story for another day……

My father in law is in the hospital now after suffering a stroke the day after Thanksgiving when I left for my bio hack. He is a former New Orleans chef who has lived a very long and full life. I went to see him this afternoon after I came back and we had a long heart to heart. My wife was concerned about what I was going to say because he is fragile now. If you know me personally, I am pretty cutting to the point regardless of the situation. This is her Dad and she is scared and she loves him. She knows the man she sleeps with too, however. I am truthful to a fault no matter who you are, especially when it comes to your health choices. Pic was in a bed with a deficit because he refused to listen to his son in law for a long time. Did he have to admit it for me to know…….nope. What we spoke about got straight to the point. He and I spoke frankly. He was lacking electrons from his brain. This is why he had the stroke. It also belies why bad choices were made.

I was and am detached from my own family. Pic is now part of my family. What happened to him pisses me off because it was preventable. Pic had all the data from me. He could not listen. He would not listen because of choices he made in his life that were taught to him. The reasons why matter little now. He and I both agree on this. I told him I was going to write about him tonight and he asked me to include his story. The Change Rx was a 30,000 ft view of how I view change. Tonight is his a 30 foot view of how change really happens in the human brain.

My father in law is a great man. He has no idea I how I love him and respect him. I never have told him this before I wrote this tonight. What happened to him makes me angry. I

am angry because he would and could not listen to me. I knew after seeing him in the hospital I had to write this for him, for his kids, my family and for you to understand how choices happen and why change only follows when you choose to change.

Pic said to me today if he had of known what life was like on the other side of a stroke he would have listened to me closer and taken my advice to heart. He is now worried about his kids and his family, because he sees that are headed to his fate too. What has happened to him has now radically altered his thinking. He fears it is too late for him and his kids and their friends. He now realizes he was socialized to be reactive and not proactive with regards to his health. Looking at his numb arm and leg and listening to his slurred speech have brought him closer to an ultimate reality. Do not feel bad for Pic. He is 85 years old and has lived a life more full than most ever will. He is a former chef from New Orleans who has been socialized by beliefs that food is about the experience and taste over the biologic concerns. He comes from a family who routinely lives over 100 years old.

For the first time in his life he now realizes that his genetics is not something he can count on any longer. His choices, and his epigenetics have cast his die.

This blog is about choices and how they are made. They are born based upon our dopamine levels in our brain.

Pic is simple man with a simple education. He does not understand jack shit about biology or epigenetics, but this stroke has given him insight that his behaviors and choices over his life clearly have trumped his genetic lineage now.

I stood at the base of Pic’s bed with tears in my eyes and my voice crackling……..trying to comfort a man I cared a lot about when I was pissed off as one could be. I realized it did not matter how much I knew about keeping him well until he knew how much I cared for him…..It was apparent he did not

know this until today's visit.

The core of Pic's problem was life long choices and procrastination that subjugated his health. He has kids and friends and family who have also fallen prey to this insidous brain disease. Poor choices are all tied to a problem with dopamine signaling. In fact most of us faced with change of any kind have to deal with these type of decisions. Procrastination is a huge hurdle for any change we face in life.

ANOTHER BIO HACK?

Right now for me I am facing huge changes of my own choosing. What have I done to face it……? I forced change on myself. How did facilitate hard change and decision making? How did I grease the skids for a tough decision? I decided to do a biohack to alter my own brain dopamine levels to increase my ability to adapt to tough change. If you re-read the Cold Thermogenesis two blog, and see the video in the beginning of it it speaks of increasing productivity of thought. I decided to put that to the test on me. I went above the 63 degree latitude on our globe and entered a man-made hole in the ground that was 1 mile deep, pitch black, and freezing cold while I scantily clothed, to see if I could adapt to a change I did not want to accept quickly. I have recently decided to make a radical change in my own life that most people would not be able to understand. It was done in a calculated fashion, it was decisive and it was a good decision based upon the variables at hand but I continued to struggle mightily with the choices I had made. It ruined my behavior, my sleep, my persona, and my health. Did I fall back to revert to mean I was already living in the face of abject failure? Nope, but I did want too. I was already at the point of no return. So what did I do? I decided to try an experiment to increase my dopamine levels in my brain to help me overcome the decision and choices I had made. Do you think this sounds bizarre? Watch this video then:

I needed something to help me get past this decision and procrastination to get me to the other side of my fears. So I volunteered to go in a deep dark hole for 24 hours to overcome the inertia of my choices and to avoid procrastination. I did it to raise my brain dopamine levels. Did it work?

HOW DO YOU FIND YOUR INNER MASTERPIECE? YOUR CHOICES DICTATE THAT PATH…….

Nothing EXCELLENT ever happens without EXECUTION. No masterpiece has ever been made by INTENTION alone. EXECUTION takes INITIATIVE and INTELLIGENCE. EXECUTION is the antidote to PROCRASTINATION. Ideation without execution leads to deletion of any idea. A poor idea executed accomplishes more than a great idea that stays locked away in a person's head. We explored small changes and how they affect change in the Change Rx blog. EXECUTION calls off the fence of indecision and put us in the valley of decision; it calls us off the bench and onto the field. It does matter how much talent you have as a player in your life, but that talent is useless with inaction because you can never score a goal while you're on the bench.

HOW DO CHOICES HELP CHANGE?

Solid choices make yourself feel better by acting upon your thoughts for a change. If it was good enough for your brain to think it, it should be a damn good idea to try out, I believed. What stops you? **You do…….. is the short answer.** Begin to examine why that happens? No one else will do it for you. You are awesome. You have a lot to be proud of. Be proud of who you are. Never should never feel empty; never feel useless. Do whatever it takes to pursue your goals. It's YOUR LIFE, after all……do you want to keep wasting it? Pic is asking that question right now……..why are you not doing the same?

WHY DO PEOPLE PROCRASTINATE WHEN FACING CHANGE?

This is the core question one needs to examine for all change. People fall into dogma because they lose their ability to be curious as dopamine falls in the brain. People do this because they learn this behavior from their peers and their parents. They learn it from the people they respect. I realized why I was mad at Pic when I thought about it. I respected him, but I was madder than hell because I realized he laid in that bed because he never listened to my advice and led a life he learned over 80 some odd years. I could not accept his choices so I got angry at him. I should not have gotten angry at all. Procrastination is a learned behavior by socialization……..if we re-train our brain and it goes away as quickly as it comes. When I think I have a great idea now, I just go try it. I just spent two days climbing down a deep hole in freezing cold to see if I could accomplish something that might help me for a bio hack on rapid adaptation of change. 5 years ago I would have never executed on this idea……..today, I could not have bought a plane ticket fast enough to do it and test it out. Some people think the concept of a "reward" system is biased language. A friend, Brian calls it the "action selection system" of behavior in humans. He went on to question what did this mean for the concept of "food reward" that some scientists talk about? We will get to that soon enough.

LEARNING AND DOPAMINE FOR THE GEEKS:

We learn best when we move through our environment. Moving naturally is how humans learn best. This is why even those stricken with severe Alzheimer's disease tend to improve cognitive performance with even mild exercise. Natural movement stimulates cortisol which increases neuron growth in our hippocampus to increase our ability to learn. Neural science tells us this and it is proven in how humans act and

react to environmental stimuli to learn. But to LEARN things we must follow a certain path that is a series of positive or negative rewards that we code correctly in our brain… How we do it, well that is amazing. Proper dopamine allows us to sense what choices are best and optimal cortisol levels increase our neuronal growth while optimal progesterone allows these neurons to mature and optimal melatonin allows these neurons to forms a proper neural network to work. Thinking and exercise strengthens this network and sleep wires or destroys this new network and tells us how it functions. When the system works as designed by mother nature it is pure magic. When modern life intercedes it prunes the new networks we make and destroys our brain's dopamine levels and eventually leads to an altered hormone panel when we look it. When you expand your action selection options in life you begin to give yourself the chance to learn. If you cannot perceive a proper path or a series of choices to learn how to obtain a glass of water easily, how can you walk to water or pour a drink of water to sustain yourself?

Dopamine codes for repetition of good choices for survival in our species, in case you were wondering. That repetition does not have to be all positive or all negative. It can be both of a combo of both and still help us in many obtuse ways. The better balanced the system is, the better choices we make and the more likely it is we will survive a long time without illness. How we perceive that environmental cues are most critical to learning and survival. The dopamine system is often misstated as the reward system by researchers. When it carries a negative connotation, it's the reward SEEKING action mechanism. For example, could low dopamine levels could be the root cause of procrastination?

So the real question becomes: what are the causes of low dopamine?" Is it bad food, bad ideas? In Brain Gut 11 we examined the cause of low dopamine levels and how they relate to low AM cortisol levels. Here we even talked about how to

treat it with a drug like Cycloset. Is there any other way to raise our dopamine levels naturally to avoid procrastination?

Yes is the short answer, and that is why I took a jet plane plane up past the 63 parallel and climbed into a deep dark cold hole hole to see if I could overcome procrastination and increase my decision making acutely without using drugs like cycloset. Anyone who reads this blog knows that leptin sensitivity is directly tied to dopamine levels on a very basic level. ***If you are LR you, by definition, have an altered dopamine level in your brain, pure and simple. It also means at the core, your mitochondria just flat don't work well when dopamine levels are poor.***

GEEK ALERT: When this chemical effect of low brain dopamine is CHRONICALLY present, the decision in the cell always has to be made between survival or reproduction based upon how the cell signals using its nuclear hormones. When we are oxidized we are using up are hormones. This means that mitochondria cant burn fats well and we are inherently LR. When we are chemically reduced, and dopamine brain levels are optimal, we are resupplying them in the great pharmacy in our brains. This means that all the LDL cholesterol that is normally made into pregnenolone will either go into cortisol OR to the progesterone pathway normally and lead to a solid hormone panel. If all the pregnenolone shunts to cortisol's path, it helps you survive life's oxidation. The shunting signal that determines that choice is the level of cellular inflammation that oxidizes the cell. When we measure cortisol in the plasma, saliva, or urine, it is often low when we are oxidized chronically. That is a sign the PVN nucelus in our brain is working over time, and this is sign you are oxidizing your cells. We covered this in the Adrenal Fatigue blog. It implies you are aging faster than normal, and this can put you at risk for a stroke like my father in law had. We can measure this is clinically in an adrenal stress index test and really accurate in a low salivary melatonin level. My

father in law never got offered this test by his doctors because they never learned about it. The result is all the hormones going the “other way” in the hormone synthesis chain are very low……..that is the “reduction path”. Statins make this worse. Yes, my father in law’s docs put him on statins after his stroke as a sign they have zero clue what they are doing in trying to mitigate his risk of a repeat stroke. It is quite frustrating as a surgeon to watch this madness unfold before your eyes.

Chemical reduction means you are staying younger. Getting off a statin helps this when we are considering a stroke. If you re read Brain Gut 11 you will see what a chronic low cortisol buys us. Low cortisol = low melatonin = epithelial cancers = LR = Stroke. We tend to get cancer and strokes as we age as humans. It follows then that oxidation = Leptin Resistance and LR = aging = CVA risk. Low cortisol is not a good thing for a human long term and a low brain dopamine level is what precludes it all. Bad choices also walk hand and hand with low brain dopamine levels in case you were wondering.

HOW DO WE FIX THIS?

We need to begin to think of our food as hormone information, not just as a metabolic fuel. Think of the Epi-paleo template as human jet fuel for the human nervous system. Seafood helps heal a brain that has stroked. When you eat Epi-paleo Rx and you avoid artificial light and EMF from modern technology, guess what happens in the human frontal lobes where dopamine is made and acts? ***You begin to increase brain dopamine levels and you fix your cortisol circadian cycle…….without anything fancy to avoid illness*** like caught my father in law by surprise.

What does low brain dopamine really mean? Lets recap some

data previously discussed in the Brain Gut series. In the USA today 20{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of women and 15{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of men are iron deficient when MD's, like me, check their ferritin levels. Globally, iron deficiency is the major cause of neuro-developmental delay in malnourished children (Pollitt, 1993) Moreover, iron is also a co factor in the receptor of two major brain neurotransmitters, **dopamine** and GABA and this leads to cognitive decline in all humans when it is sustained. Is a stroke a form of cognitive decline? ***You bet your ass it is***. It also lowers voltages on an EEG too.

We went in depth what a low dopamine brain level meant in BG 11. It can lead to cancer in epithelial cells. Can it lead to a stroke too? Yes, It is bigger than that too!!! ***When dopamine falls in the brain it means we have lost the ability to properly signal the environmental cues from the outside world to our brain……In other words, we are losing the ability to translate information from our environment. This is a failure in the human ability to sense circadian signals. This is how illness manifests.***

When this occurs chronically over time illness results. As an analogy, disease/illness in humans is comparable to cars in a junkyard. Only about 10{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of them are there due to mechanical failure (genetics) while the other 90{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} are there due to driver/operator error which is akin to epigenetics. We are a product of what we do…….and what are choices in life our. Choices our dictated by our dopamine level in our brain. Our dopamine levels are directly tied to what we do to our epigenetic switches in our body.

Let us see what wikipedia says about dopamine: "Dopamine may

also have a role in the salience of potentially important stimuli, such as sources of reward or of danger,[1] although its role in experiencing pleasure (distinct from appreciating salience) has been questioned by several researchers. This hypothesis argues that dopamine assists decision-making by influencing the priority, or level of desire, of such stimuli to the person concerned." http://en.wikipedia.org/wiki/Incentive_salience

TRUTH BOMB ALERT: Optimal dopamine balance allows for the proper choices in life…….bad choices for survival are born of alterations in dopamine levels in our brain and specifically in our frontal lobes. If you really want to know why your family and your friends or even you keep making errors than constantly subjugate your epigenome and genome, the answer is here: Here ya go……..check your dopamine level. I tell you how to do just that in Brain gut 11.https://jackkruse.com/brain-gut-11-is-technology-your-achilles-heel/

Long term investing success is found in the stock market requires an "against the herd" mentality in the face of chaos, in order to make money so does optimal health. You must do the things opposite that the modern world is headed to because it will cost you time in lifespan over convience……..that is the ultimate modern truth bomb of biology. Our ideas were born of good intentions but they are killing us quicker because they allow our brain not to decipher the signals the world gives us to keep us well. The things we covet today are what lower dopamine levels fastest in our life. When you go the opposite way and act like a crazy man and fly to the Arctic circle and crawl in a deep dark cold hole you can increase your dopamine level and begin to become productive and intuitive to make better choices for your life right away.

What does a low brain dopamine really mean?

It means we have lost the ability to properly signal the

environmental cues from the outside world to our brain……we are losing the ability to translate information.

You may now perceive why neural scientists and obesity researchers are clueless about food reward? Read what I wrote in Brain gut 9 again…….

GEEKS AND NON GEEKS UNITE: The gut bacteria become starved, FIAF rises, and this makes the human host burn its own fat for fuel and fat stores are depleted. This is precisely how the dance between our gut bacteria and our own adipose tissues is supposed to work in normal conditions. As amazing as this sounds it gets more bizarre. Since our gut flora controls our ability to make and store fat what if I told you they also might control our desires for the foods that they really want, namely fiber and carbohydrates? Well, this is precisely what happens. The gut flora control the levels of neurotransmitters, agouti, ghrelin, and NPY in the peripheral and central nervous system and this drives us to want to eat things. I have covered this numerous times already in many past blogs. The type of gut flora we employ actually is tied to the appetite, desires, and to the reward of the food with respect to the brain's frontal lobes. (central dopamine levels)

RADICAL THOUGHT: Food reward should not be thought of a concept intrinsic to foods, but of the type of gut flora we have living in our own gut!

Perfectly balanced dopamine levels in the brain allow humans to accomplish a favorite cliche: **when dopamine is right you begin to reflexively pick your battles carefully, and make sure you win the ones you pick**……and you begin to learn well to adapt well to your environment as you move naturally across it. You begin to embrace the *zoo human you were born to be* and avoid the socialization you have collected that leads to procrastination. ***Those behaviors are born of poor choices caused by altered dopamine levels and altered signaling in the***

brain.

NON GEEKS: These food signals from the outside world get codified by the gut flora eventually get hard wired into the brain over time by Hebbian learning by altering our dopamine level and other neurotransmitters. This is how the brain works. It does not work the way obesity researchers perceive it to work. Their point of reference is on the dopamine pathway. The correct point of view, in my opinion, to focus on the human clinical response in a person to better understand it. Observation is foundational in all science. How a biochemical pathway works is a myopic approach in understanding how it fits into the human animals machinery in the brain to allow us to adapt and evolve. This is a very dynamic process, and nothing in the gut or the brain is fixed in this process. This is why it is so hard to get a handle on clinically. I think is where modern medicine will be revolutionized in the next 100 years. The knowledge we are unaware of might just change everything we think is true today. The key factor for humans maybe that the human gut flora seems to be very susceptible to the environment it finds itself in before puberty and before total brain maturation occurs at 25 years old. It appears that the local environment we live in in our early life is quite critical to this dynamic duo. This implies that where we live, the sources of food we eat, and the light conditions required to grow the food are provided under are all encoded in our food and this is directly transmitted to our brain via our vagus nerve by these neurotransmitters in the gut.

TRUTH BOMB ALERT: You do not need to discover something new to make an impact today. You need to create how things fit together to solve modern problems…There is some profound yet simple truths being laid here on the blog today……I wonder which brains will perceive it and act upon it……..and how many others will convince themselves that practicality is more important? Sadly, my father in law was in that group for

too long. At Thanksgiving I had some of them tell me that pasta was not made of wheat and it was safe to eat for someone with organ failure? Really? Are you really believing this or are your wants an desires overpowering your ability to reason rationally? Sadly, I now know they really don't believe that pasta is made from wheat and it is the same wheat they should not eat on the diet they were prescribed. A cursory Google search would reveal it but instead I am jackass for caring about their welfare. Choices can totally screw a brains ability to reason when its dopamine level is off. My wife asked me not to argue with my family to save the peace in the house. I relented and retreated to a cold dark man room seething. 24 hours later my father in law's life changed forever after this debacle. Do you think any of those people really get how badly they are sensing a perceiving their environmental signals? Moreover, even perceive that their bad decision making is caused by a low dopamine level? Hell no……

Some of our family and our family friends who live in New Orleans are still suffering the same fate, even tonight, despite my tirades for years. Why do I continue to try to get through to them? When I visited with Pic today is the reason why I persist to care about them. If I remain silent it is as if I become an accomplis to their demise. You remain silent when you do not care. You speak up when you do…….even if you are a pain in the ass……..

Well if they say the tears in my eyes and those of my father in law today at his bed side maybe they would get it. Pic wishes he knew yesterday what he knows tonight. After speaking to Pic tonight he wanted to me to write this treatise to help them avoid his current predicament. His experience has now given him new wisdom. Will they listen to his warning or continue to make bad decisions because of their low dopamine levels? Will their low brain dopamine levels continue to subjugate their ability to reason well to defeat their demons and illnesses?

GIVE ME AN EXAMPLE OF THIS IN ACTION? A THOUGHT EXPERIMENT:

If a women finds she has a low Progesterone to E2 (estradiol) ratio on a lab test, or a man finds out he has low free testoterone level what does this mean about their current epigenetic signaling of their brain? What does it mean about their current dopamine level in their brain?

How might the brain account for these things? How is the photoelectric effect codified in food and deciphered in the brain at the hypothalamus by the leptin receptor? The leptin receptor is the accountant of photons and electrons.

Well, the brain looks at micronutrients coming in through the gut and translates these chemical signals into neurotransmitters that the brain circuits can understand and decipher. For example, when we eat a diet high in fructose (found at the equator with high natural light levels) the gut and body respond in kind by causing an increase in absorption of iron, while causing a relative copper deficiency in cells. A copper deficiency is handled differently in both sexes. Women need more copper than men do. The reason is simple. Copper is required for the production of the enzymes which convert progesterone into estrogen. However, in men, more zinc is required to form the enzymatic machinery needed to convert progesterone into testosterone. There is another reason too……women are less myelinated than men in the cerebrum. Having less myelin means they are more sensitive to environmental changes. The reason this is done by evolutionary design? Because women pass on the environmental signals to the next generation in utero. We call this trans generational epigenetics today.

When we eat a diet high in fructose, this will also lower zinc levels in cells. This lowers testosterone in men. Higher fructose levels also cause a transient magnesium deficiency in

all cells in both sexes when this occurs chronically. Acutely, magnesium levels drop as the cells also lose intracellular water; this changes the physiology at the intestinal brush border due to an environmental change. I mentioned here in the Gnoll's blog post that is precisely how diabetes actually begins. This lowers the magnesium available to make ATP (energy) if it goes on too long. Remember, Mg is hydrophillic, so low sex steroids imply we are dehydrated and Mg depleted. This is why magnesium deficiency is so common in people who eat carbohydrates in a mismatched environment (T2D). It also explains why we have an epidemic in low Vitamin D levels with lower sex steroid levels in people in the USA. If this goes on long enough, we get metabolic syndrome and T2D. This is also why most diabetics suffer from low magnesium stores and over time this will destroy their sleep and cause peripheral neuropathy too.

This is precisely why Pic, my father in law sustained a stroke. He asked his doctors in the ER to explain to him what happened. Do you know what they told him? They had no idea how it happened. I showed them how it happened just by using his labs. They revealed exactly what I said would happen in the above two paragraphs.

The reason these things happen is because in a high light environments (think tropics or equator) humans can compensate for the higher fructose loads in their diet because higher levels of sunshine simultaneously increase vitamin D levels in our body. The higher sugar consumption in this diet, will drive up LDL levels and the free T3 levels in the thyroid which allows the LDL to convert to pregnenolone, DHEA, and testosterone because of the higher than normal environmental exposures to the sun. We can compensate for these dietary fructose changes because our immune systems are simultaneously up regulated by the higher levels of DHEA and Vitamin D levels. We can tolerate more inflammation from this type of

diet because our immune system is in better shape! This is the giant circle of life I laid out in the Hormone 101 blog post over a year ago. Post stroke the hospital fed him a diet of carbs and low fat foods designed to keep him sick. I wish it was not this way but it is Sad but true……..the system is broken. The nurse came in and woke him up from a dead sleep at midnight last night to give him a xanax to help him sleep……..When he scolded the nurse about waking him for a sleeping pill when he was already asleep she responded well that is what the orders said to do……..Even Pic is beginning to see the disconnect in the system of delivery.

SUMMARY:

This blog is about choices and how they are made. They are born based upon our dopamine levels in our brain.

Choices are ultimately tied to how many electrons you gain from your environment. Why does a ketogenic diet work to increase your electrons? Ketosis helps dopamine/serotonin imbalance by the injection of electron infusion into your to overall redox sink. In illness situations stopping the rate of electron loss back to our environment is the first step. Then being able to re-collect them in your cells is step two. Being able to move them to your brain to use them to make the correct decisions are step three. Patients who are losing electrons to their environments have poor redox potentials in their cells and tissues. Just knowing you are suffering an electron loss is not the key to solving the problem; in our modern world it is the rate of loss of electrons, what causes us to make good or bad decisions about what we should do.

Ketogenic diets depletes serotonin and raise dopamine in the frontal lobes quickly helping people make better choices.

All this……can be explained from understand how dopamine fits into epigenetics……..some say it's complicated……Well, I value my life so I will love chaos and complexity. Complexity is born around excessive electrons. Optimal dopamine balace allows for the proper choices and ultimate survival for humans. This truth is hard wired into our central nervous system via our frontal lobes. Bad choices that limit our

survival are also born of lowering our brain dopamine levels. ***Never forget…….when we know better we do better period end of report.*** **Dopamine is how we chose and make choice correctly for wellness.**

I hope this Rx can help you save your loved ones……maybe it could even save you. ***A narrow mind will be your most harmful thing you'll ever own.***…….My father in law had tears in his eyes when he agreed with this statement tonight……..do not make that error in choices he did. Learn from him. He asked me to to write this to help you avoid his fate tonight. Become a starfish and save somebody who suffers from chronic poor decision making.