

THE TILTED QUILT: RANDOM MUSING'S #4

READERS SUMMARY:

1. How discerning are you when “something popular” could be the wrong thing for you?

There was a recent blog and book written by two author's on the net that I felt a few words should be said in random musing's 4.

The writer asserted, “There's no evidence that too many carbs from fruit increase the risk of neurological disease. From sugar, yes, but not fruit or starchy plants like sweet potatoes (that I'm aware of, at least. I'd like to see any if it exists.)” Well there is a quite a bit of evidence that when your mitochondria are redox shifted, sugar from any source will cause you some problems. If you thought that science was “certain” on this effect, well, that is just an error on the author's part. It implies the author might have left a lot of biophysics and circadian biology out of their “certain” answer. Dr. Bill Lagakos has pointed this many times over the last 6 months here. It is clear when circadian biology is off what we expect to happen does not happen.

After reading these writings I was reminded of a wonderful quote from physics that fits perfectly:

“Scientific knowledge is a body of statements of varying degrees of certainty – some most unsure, some nearly sure, none absolutely certain.”

–Richard Feynman

When cytokines like IL-6 are raised in a human gut, plasma or

CSF there is ample data and tons of clinical research that show the damage is probable and expected. These effects all alter cellular architecture and signaling. When life is organized to store energy and information, no part of the system needs to be pushed or pulled into action, nor is it subject to "mechanical regulation" and control. Instead, it is designed to allow for coordinated action of all the parts. These things are subject to circadian timing, and it depends on rapid intercommunication throughout the system. Once again, the environmental context is the missing link from the literary works we are speaking about today.

If you are talking about healthy humans in a relatively normal environment, I think carbohydrates within their season and growth cycles are perfectly fine. Most of these so called healthy people do not realize their environments are altered therefore this topic remains in their blind spot. Today, those two conditions are rarely found anywhere in our world. If these conditions are not found then your assumptions on health turn out to be way off for most people. Carbohydrates are currently viewed as the key to the gates of "paleo heaven." Volkow's recent work shows that non native EMF up-regulates the cellular needs for glucose. This is fundamentally why they think carbs are part of heaven. The irony for some of us, is same key opens the gates of hell we call chronic diseases.

Paracletus had it correct, when he said the dose makes the poison. In this case the season and the environment make the toxin for glucose. Conversely, the treatment dose can be the Rx for wellness too. Physicians in this country generally do not get consulted about wellness. They deal with people, who by definition are sub-optimal, and have a low wellness quotient. We can measure this in their ability to handle stress and measuring their redox potential. To make an accurate statement requires an accurate comparison. Here is where words in a book or a blog can get you in trouble when you do not have the proper context. Truths happen to

individuals and not to crowds in medicine. Medicine however believes that population studies can be generalized to large groups of people. Results in medicine should be viewed like experiments in physics, but they rarely are.

The first principle I use in the clinical science of medicine is that you must not fool yourself, and you should be constantly aware you are the easiest person to fool. RCT's and words they contain tend to get fools in a lot of trouble. The manner in which words are used in RCT, blogs and books to describe aspects of mitochondrial functioning is even more interesting. Words can often be meaningless in the blogosphere, yet most people who read blogs seem to value them without considering their personal context. When these words are used in such a way that no sharp conclusions can be drawn to our observed physiologic function, words often become harmful. I find that this is an epidemic in many places on the net. This is why I wanted to point these things out in this blog.

The other aspect I find fascinating is that the paleo dogma is trying to tell their followers what is or is not a good idea. How do you know if something is good when you do not understand how mitochondria work in people with chronically elevated cytokines? I don't ascribe to the that line of thinking. In science or medicine, there is no authority who gets to decide what is or what is not a good idea. When someone usurps your ability to think, not much good follows, in my opinion.

I found this recent blog post and book interesting because of the critical information they were missing, based upon the words they used. I was not surprised because I understood the context in why the comments were made. I also understood that it supported their way of living. Generally your reality bends to what is paying your bills.

How we evolved and what we ate is of little relevance when you understand how the smallest of things in our universe dictates

biology on the inner mitochondrial membrane. Those things are electrons. In my view, both authors are not aware of this. I found the book was really bad because he gets the right idea, but due to flawed reasoning. This is why I can't advocate the book. Just because the outcome is correct does not mean we should accept the logic.

If you carefully read Cold Thermogenesis 6, I said everything in nature is thermoplastic, this includes biochemistry. Carbs are designed to work in our mitochondria during long light cycles. This means SUMMER is the time ideally suited for them from a photoelectric effect point of view. The blogger misses that point time and time again in his writings and advice. When circadian signaling is off carbs have a lot of bad effects for us. This has been made crystal clear in the circadian biology literature but you'd never realize it reading their words. In the blog I am referencing, the author pointed to our evolution to make his point, but he totally disregarded what conditions of existence existed then, and how it compares to today. What happened within the boundaries of the equator in the East African Rift 4-6 million years ago is not what exists in a modern city today. Everything affects everything. In fact, technology has made us contestants in suicidal race according to Volkow and Liboff's recent work. Volkow's and Liboff's work has shown it convincingly. Most of the world no longer lives in the environment he writes about.

Fundamentally, when everything in our environment has changed, it implies the context of what happened in our past has no material benefit. Using hindsight in this fashion is a recipe for disaster. Using foresight might give us new insights about what we should be doing and experimenting with for our modern world. This is what I try to bring to the table. In fact, the ancestral movement themselves lives far outside the boundaries of our evolutionary paradigm. Their use of technology is quite neolithic. They now "paleofy foods" and think this gets the stamp of approval of lady evolution.

Our native electromagnetic force field of has changed dramatically. These changes are so perverse that the current beliefs in ancestral health may be problematic. In leptin sensitive humans, aggressive supplementation of Vitamin D in winter actually may inhibit the cold adaptation process. In winter, Vitamin D is not able to be made outside the tropics. So why do they advocate it? This recommendation is perfectly fine if one lives within the tropics. If they live outside the tropics humans don't use Vitamin D in winter, we use nitric oxide as the environmental signal. We do this because the biochemical pathways we use alter their actions based upon the temperature and light changes in the environment. I spoke about this metabolic trap door in the Cold Thermogenesis 6 blog.

In the energy and epigenetics series, I showed , how nitric oxide plays a critical role in Quantum cell theory. You also might want to re look at the sunshine of your life blog. I mentioned in that blog why Vitamin D does not epigenetically reduce all cancers. It was because Vitamin D does not act in all times of the year because it is yoked to the power of photons in the sun's spectrum. Vitamin D does act in between the Tropic of Cancer and Capricorn but most of us don't live there much any longer. That means biochemistry at the equator is vastly different than it is in Arctic circle or in Antarctica for a deep quantum reason. Since the electromagnetic force in these areas are vastly different, the action on protons and electrons act differently there in mitochondria. In Cold Thermogenesis 6, I used terms and words that most could understand. I did not use subatomic terms because I had not yet spoken about QED effects on the movement of electrons and protons on the blog.

If you eat carbs and do things to raise your Vitamin D artificially, you are effectively trying to out think Mother Nature with your beliefs. Now consider would the simulation of a longer light cycle "confuse" the SCN into not properly

yoking to temperature instead of light and would this hamper full wintertime cold adaptation? Because that is precisely what the author in his blog is saying to his readers. Now let us look back at the experimental work of Dr. Gilbert Ling. Ling's work hinted at and proved experimentally that D glucose acts differently at 0 degrees C than it does at 20 or 25 degrees C. When the organism is cold D glucose is EXCLUDED from a cell 100%. This should suggest to you that the advice in both the blog and book advocates breaking the photoelectric effect because of their neolithic beliefs. Their beliefs scale to the level of biochemical studies not to the quantum scale where Ling's data lies. I cannot let this pass without commenting upon. I advocate paying attention to light cycles carefully. Light enters your eye and is registered on your retina and this signal goes directly to your SCN. Food electrons get processed via your gut and those circadian signals get transmitted to your brain's mitochondria via the vagus nerve. Now think back to my evolutionary foe or friend blog. I told you about a frog in this blog, who is able to raise its glucose level in its plasma during winter to allow itself to freeze mostly to survive the winter with no food. It does this by using D glucose as its antifreeze. Bears use the same trick in winter to hibernate. Bears become diabetic and cold reverses their diabetes. This reversal causes them to awaken in spring minus their diabetes. Why does this happen? Insulin can not work at low temperatures because of its quantum 3 D molecular changes that occur in a cell. So what does this all imply to humans who live outside the tropics? The lower the temp you live in, the more D glucose you can tolerate in your plasma because it can not be used metabolically because insulin is controlled thermo-plastically because of its mode of action as a electron withdrawing drug at its cardinal binding site. But when it is cold you must use a ketotic template that has a lot of DHA and water in it to offset the optical changes that occur in our tissues when this effect occurs outside of winter time signals. When you never face a winter a chronic form of D glucose is deadly. This is

why the glycerol phosphate shuttle exists in the human brain and skeletal muscles. This shuttle allows us to use backbone carbons from sugars and make them act as if they were saturated fats in our cold adapted mitochondria. This is how the environment causes a compliant design change in our mitochondrial machinery. This underscores why diabetes first was an epigenetic adaptation in humans as they moved north and south out of Africa away from the equator towards the poles, where temperature becomes a serious factor. You must consider these issues to understand the context of the question. Generally I am of the belief based upon experience, that a high plasma glucose is not a big deal clinically, if you face a cold environment below 62 degrees. Modern humans avoid the cold in winter on purpose by embracing clothes, heating in their car and homes. Cold Thermogenesis is a way to manufacture winter in our modern world. CT has major effects on magnetism, water's hydrogen bonding network, and microgravity in cells to control the flow of electrons in our body.

When you have a low body temperature, have a fever, leptin/insulin resistance, or you have a lot of inflammatory cytokines for any reason at all, glucose can hurt your cellular architecture with the development of chronic disease. Glucose from food is yoked to light and temperature. Moreover, since carbohydrates are not designed to be present in the chronic cold naturally, it is used as anti freeze and not as fuel source by most life outside the tropics as an adaptation. Here is an example where energy in a system alters the function of matter. Insulin is a protein that undergoes compliant design changes with temperature changes.

70,000 yrs ago having a high blood glucose evolved epigenetically to reduce entropy in a biologic system to give life a chance to live in cold. When those conditions were no longer present, and we never faced a true winter any longer the result was metabolic syndrome. This shows you one environmental issue was different.....temperature. This

alteration changes insulin's physiologic ability to act within a cell. Long light cycles with higher temps are when carbs should be eaten not because of the author's recent advice in their blogs and books.

Ling showed in experiments in frog's the glucose effect begins at 62 F. This effect has been shown in bears and humans as well. You need to realize modern ancestral advice seems to believe we can out think Mother Nature. I do not. That is the point. If you follow advice you better realize whether it is well thought out based upon beliefs or upon nature's laws. That is what makes me a different kinda of person. I don't go for manmade beliefs; I like nature's laws as my backstop to dictate what I should or should not consider for my health.

Let us consider what eating sugar does to us in the winter in our modern world when we live with clothes on in a heated house or heated car? Let me ask you how those factors play a role? When you consider that Volkow has definitively shown that non native EMF makes us up-regulate carbohydrate use in a cell this becomes a real game changer. Any carbs can be considered dangerous in this case. The environment is dictating a big change in our how our cells work. I believe both authors are looking for studies on something no one can even comprehend today. Volkow, Ling, Libroff data supports my assertions. Ancestral health does not understand how modern life ties us to warm adapted biochemistry today because of the world we live in. This introduces a cognitive bias in most of the beliefs. This is why they advocate things as they have. It is as if they just think the carbs are somehow not tied to the photoelectric effect on this planet. The latest data on SIRT 1 and SIRT 6 and circadian shifts says otherwise. I don't think like they do because the scale I work on is the scale where these effects are found. Biochemical research won't find this because their experiments can not and do not look for these effects. When you understand how light and circadian signals work you have to reject a lot of what they

are selling folks in their work.

I am implying the cold adapted one has a different biochemistry. When you make extraordinary claims it requires extraordinary proof. Is there any? Look at what I said about the thermohaline currents in water recently in Energy and Epigenetic 4.....they are coupled to temperature and the cycling happens naturally without any energy added into the system based upon nature's laws as the gulf stream goes up to the poles. It is a natural coupling done by the forces of nature. These actions are the same thing happens in your CSF water surrounding your brain when you are cold adapted not eating carbs. This affects your circadian coupling between the CSF, SCN, and the gut. Remember these subatomic effects of electrons scale to many levels. Electrons change the hydrogen bonding network in blood plasma and in CSF to alter our mitochondrial function in our brain. Here is the real problem: ancestral health and medicine have no idea how these things scale at the physiologic level in modern humans.

Proteins are the stage that biochemistry occurs upon. The electromagnetic force is the building where the stage is located. If electromagnetic energies are varied for any reason at all, you get a response in the structural changes in proteins to change what biochemistry is capable of. This means life adapts by compliant design of its proteins by the addition and subtraction of electrons. This means the very same protein can have the same chemical and molecular structure (think rhodopsin, melanopsin, actin or myosin) but it will act differently based upon the environment it finds itself in. This is why muscles work differently in cold versus warm temperatures. It is also why we do not use Vitamin D in winter. We use eNOS. eNOS directly inactivates the function of hypothalamic NPY! NPY is stimulated by carbohydrates in the hypothalamus and it drives carbohydrates cravings and food seeking behaviors. Why would mammals and humans have this hardwired into their DNA and in their brains? Your

biochemistry varies based upon your environment 100% of the time. Your tissues are made of proteins that exchange energy and information from electrons and protons, neutrons and interact with the electromagnetic force. These changes act as gauges to change the action upon every aspect of these particles in you and food whether you perceive it or not. Moreover, other interaction with neighboring protons and electrons and the electromagnetic forces act locally with the matter in us with our subatomic particles to lead to a compliant design global change on the organism ability to adapt to its local or global environment. What we fail to realize, in all these interactions, what we are made up of, must respond to the electromagnetic force. It is the strongest force in the universe because it has infinite range and power for all charged particles.

Many have begun to realize that electromagnetism is at the heart of all life, and drives it. It is safe to say biology and DNA is manipulated by nature as a set of 'guides' that acts like a software program to monitor alter and control the hardware in our nuclear DNA.

This is why I toil in places of science where the blogosphere ignores at your peril. I strongly believe all our problems might be solved if we begin to think differently about biology. All matter interacts with the electromagnetic spectrum and those interactions lead to our conditions of existence. The electromagnetic force has some unique properties. It is very strong, and it has infinite range. This aspect of infinite range is what make those with out a biology back ground blind to the power of this force.

To put it in a physics perspective consider the following:

The electromagnetic force holds atoms and molecules together. That tells you just how powerful it is. In fact, the forces of electric attraction and repulsion of electric charges are so dominant over the other three fundamental forces (gravity,

weak and strong forces) that they can be considered to be negligible as determiners of atomic and molecular structure. This implies that the electromagnetic force is the force that determines how all matter interacts. This is why what I wrote in CT 6 long ago should have hit people in a big way but did not. My blog is read by those with a biologic bent not a biophysics back ground. In fact, when I wrote CT 6, I had not even mentioned QED except for one blog. In that blog, I asked a question of a paleo leader and realized with his answer, the paleo movement was not looking to evolutionary laws or the laws of nature. It was being developed by leaders who believed in flawed old biologic dogma. Their advice was based upon the wrong scale. They have wanted the "movement" accepted by medicine, even though they had few good answers for my patients with neurodegenerative disorders. Evolution is done via nature's laws and fractal math. This means we should look to use the science that has the best track history of experimental proofs for nature laws. That is quantum mechanics. Fundamentally, this is why I am an outcast. My brand of innovation is a very difficult thing in the ancestral world. I have put myself there by design. I think biophysics is a better model than biochemistry is for today's modern environment. We need to sink to its scale.

Electric effects occur in cell membranes. We will soon tackle this topic.

Magnetic effects are usually apparent only at high resolutions, and as small corrections. Soon I am going to show you how these high resolution magnetic effects perfectly account for something else ancestral leaders cannot explain, memory, redox chemistry, and mitochondrial function. Nothing is more complicated than the emergent physics of how life works.....nothing. I'd rather solve some clinical problems and not look for acceptance of a group with some flawed assumptions. I learned this being in medicine for 25 years.

On my forum, Randy just explained how the quantum physics

plays its roll of the dice on DNA: He said, "And don't forget, all of these interactions are quantum and therefore probabilistic and not predictable. It just depends. So the outcomes may be different—that is, one person may be healthy and another contracts cancer. We are all different because of our quantum nature."

That captures the essence of the physics and yet explains why biology might never get it, because they think life is concrete when at its core, it is quantum and it is ever changing. It always reads and reacts to the environment it can sense. If it cannot sense it, chaos ensues.

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