UBIQUITINATION 8: THE MAMMALIAN BATTERY

READERS SUMMARY

1. What analogy best describes your cellular battery?

2. What is the tibial compression test?

3. What lab test is a crystal ball for a loss of your batteries charge?

4. What disease is always linked with a lowered battery charge?

5. How does light determine how carbon from your foods can be used?

Today's blog begins with the analogy I use with all my patients to make them understand how a battery in them works. How do heal and regenerate any disease? You need a battery with a large charge. One with a low charge can't do anything.
I start with them visualizing a car and its battery. The car is 15 years old and has always started for you. It always starts when you put the key in. Today, you go outside and the key is placed in the ignition and it does not work. You get out and pop the hood and look under the hood and inside the battery. When you pop the top off the battery you notice it has no water. So you think you fixed your problem. You fill it and then retry the key. The car still won't start. So you think it is the other part of the battery, the metal cell soaking in the battery fluid. So you call your spouse to jump you. They come put the jumper cables on it and it still won't start. It means the battery is discharged and can no longer

hold a charge. You need a new battery. So you bring the battery to the mechanic and he puts it on battery charger and tells you the indicator shows it really is dead and needs replacement.

How does analogy work in your cells? If you are dehydrated your battery won't well either. What is the metal cell in your "body battery"? It is not a metal or an ionic fluid like there was between the water and metal in your car battery. There are 3 main types of the currents on Earth, one is used by your car mechanic to fix your car battery…..metallic DC current. Life does not use this one. The second type of current is an ionic one…….life does not use this one either……..it uses the third type of DC current. Semiconducting DC currents act differently than metallic ones in a wire. Cold temperatures block metallic and ionic currents while cold increases semiconducting DC electric currents. So what allows for a semiconducting DC current in you?

The critical component of the mammalian battery is DHA. DHA and water, working together form your battery. That battery is capable of giving your cells its spark of life. If you're low on one or the other in your body, your body can work, but not well. This is called a low redox state. Low redox states are associated with all illnesses and lowered organ function. If both are optimally functioning in you, you can do amazing things because you generate large semiconducting currents from DHA that goes into the water inside of you. From there it gets distributed in many fascinating ways. Anything that is fully charged can do a ton of work. Discharged batteries cannot run things well, like clocks. Clocks that run on a bad battery run slower. Your SCN in your eye is driven by the DC current that forms in melanopsin receptors in your eye. When your battery is bad your SCN cannot run faster than any of your organ clocks. End of analogy.

If your main clock in your eye, called the SCN runs slower you are in trouble in a big way. This series already covered that one for you here.

If you are somewhat exhausted; do you ever wonder how a battery feels when it pours electricity into a non-conductor? You should, because that is what fatigue and stress are fundamentally.
How does a flashlight bulb work? Batteries. First we'd test the battery to see if any juice was left in it. We'd attach two wires to the positive and negative ends and connect them to a bulb. The brighter the bulb, the stronger the battery. Not hard to understand right?
So what jumps life's battery? The sun and the Earth's magnetic field at different times of the day. When it is light, the sun is your cells "jumper cables". At night when you should be in the dark while connected to the Earth or a magnetico pad, this is your jumper cables. What is life's battery charge indicator? What is our light bulb? Your sulfated Vitamin D_3 levels. It tells us how good or bad your DC charge is. There are other tools I use to do this but this one is the easiest to use. I don't even need a blood test. I use a tibial compression test or a patient's MRI (easy when your a spinal neurosurgeon) to tell all I need to know about the status of their batteries charge. There is a direct connection between bone and the DC electric current in the brain by a bone morphogenic protein called noggin. This is why Osteopenia and osteoporosis are the easiest and clinical signs of a bad battery developing in your cranium. I covered that science here. Soft bone is behind the magic of the *tibial compression test*. When the sulfated Vitamin D3 levels are normal, and the DC current stable, tibial compression causes no pain normally. Since the tibia has no soft tissue over it, when I press on it with my reflex hammer, and it hurts you, I know something is importantly disturbed in your environment. It is usually related to the electromagnetic environment (or excessive blue

light exposure) you allow your cells to sense. That environment is siphoning off your DC electric charge. **We should expect the result of this bad electric circuit to show up in the human skeleton first because bone is one of the few tissues humans can still regenerate using the DC current.** It is akin to putting a metal screw driver across the battery terminals on a car and shorting it out with sparks. It will discharge the battery until it dies.

Vitamin A and Vitamin D_3 are not food based vitamins for humans. They are 100 {a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} related to solar frequency transduction and signaling. Very few people really discuss this topic in any detail. They are designed to be made by the brain naturally via light and dark signals daily and by seasonal photoperiodicity. Vitamin A is done by the total photoperiod of a day and it changes as the seasons change. Sulfated Vitamin D_3 is made by UVB photon power as was discussed in Tensegrity 7. This is why the frequencies of seasonal sunlight are the first coupled cycle in biology. That cycle is linked to ubiquitin marking of proteins. All proteins are linked to atomic nitrogen. The second cycle coupled to ubiquitin is the cell cycle, and metabolism and food come in 3rd position.

Summertime and daylight provides fewer electrons that highly powered. The frequency of this light is skewed to blue dominant frequencies compared to other times. The matter in us, proteins, is uncondensed or unfolds by more highly powered light, and sulfated vitamin D3 levels and Vitamin A levels are highest in neuro-ectodermal tissues. The delta psi in our inner mitochondrial membrane is higher during sun lit periods. Insulin levels are designed to be sensitive and chemistry within cells is more oxidized at these times. In the winter time or at night time the reverse is true of all of these

features.

The story gets more interesting when you consider latitude relationships with current and voltage development within cells, as I mentioned above. Current is measured by amperes and the push in that current is also known by the electromotive force, is measured by volts. This is what the delta psi is in our mitochondrial membrane. It is directly links to the DC electric current's electromotive force to do work. The higher you go in latitude on Earth the more DHA one needs to sustain a high DC current since one is losing solar radiation power. This is likely the main reason many with autoimmune disease are associated with lowered sulfated vitamin D3 levels and low redox potentials in cells. The further these people move from the equator or the more disconnected life they live; the worse their disease becomes if they are not recharging themselves with massive quantities of DHA. No other way is possible. The DC current is critically related to the ability to generate growth and regeneration in all living tissues in the plant and animal kingdom. Becker and many other researcher have definitively proved this in their experiments in animals and plants. Sunlight is critical in this relationship with animals, because it works specifically with DHA to increase the DC current using Einstein's photoelectric effect. We lose solar power toward the poles so DHA becomes the more critical part of the mammalian battery in these environments. This is why penguins, polar bears and Inuit Eskimo's eat the natural diets they do. The Eskimo's no longer do and this is why they are getting the same illness as those in the western world. It is also why MS patients show the latititude discrepancies they do in epidemiology studies.

The closer you live to the equator, the stronger solar power is, therefore, the more the sun drives the battery creation in water. DHA is not as critical. It is also why fish are not plentiful in warm water around the equator. They are far more plentiful in colder waters above the tropics. The equator

also has little seasonal variation of the photoperiod because there is almost always 12 hours of sunlight and night time constantly, so water and sun are the key determinant for how plants and humans use carbon cycle in food in these regions. This is why inside the tropics fruit and carbohydrates present few problems. Carbohydrates are part of the carbon cycle of life. Sunlight control how we use carbon. We have a power broker in this coupling called nitrogen. This atom is what ubiquitin rates are tied to in both plants and animals. Sunlight is coupled to nitrogen atoms in plants via the RuBisCo enzyme and in humans and animals it is coupled to NAD^+ levels in cytochrome one in mitochondria. RuBisCO and NAD^+ enzymes key atomic component is NITROGEN.

Why is light the driver for ubiquitin? Light and nitrogen interactions determine how carbon is used and this fully explains why food can never trump light and dark cycles in any biologic or nutrition study. This is why medicine and the literature in nutrition are broken. They do not realize that this linkage is in every single kingdom of life. **The further you go away from the equator the more important DHA becomes in the equation because light can only drive the carbon cycle well inside the tropics.** The Carbon cycle is how mitochondria handle foods. Animals that are equatorial are more reliant on water and the sun than animals in the polar regions. In this way, they tend to share many characteristics that are seen in plant based photosynthesis. I covered this here already. Equatorial animals can go 30 days without food but no longer than 7 days without water. Plants make sugars directly from photosynthesis. This is why plants and trees have no need to eat food, but animals must eat to survive and thrive. They need to eat, mainly to find DHA, to add to their battery to extend the time they can remain disconnected from the sun or Earth. In polar regions they are less connected to the sun and more connected to the magnetic field via the cold

environments. Remember that DHA provides semiconducting currents that work best in colder environments.

LOOK AT THIS TABLE

Trees can make wood out of thin air. Sunlight takes an oxygen out of CO_2, like a golf club, from thin air of the atmosphere to make wood and sugar. It can do this just by using a cellular battery that uses sunlight to develop a battery in water. Sunlight is capable of charge separating water into a positive and negative charge to make a battery. This battery is what drives photosynthesis in plants. This battery is able to generate the DC electric current from water and light only because plants are connected to the Earth's magnetic field via their roots and the photonic power via their leaves, 100{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of the time on a circadian basis.

Animals have the ability to alter their times of connection to Earth and the sun because they can move across the tectonic plates and out of direct sunlight. This ability to disconnect from electrons and photons from the Earth and sun means animal batteries need to have another way to harvest an electric current to generate their DC current to live and regenerate.

The semiconducting DC electric current in mammals is due to the use of DHA in their nervous systems. DHA is a semiconductor that has a 600 million year history on earth where it began as a by product of algae in the ocean when oxygen showed up in the atmosphere. Fish have to eat to process DHA so animal can use it. When you sample tissues with DHA in it and attempt to put a current through it something unusual shows up. The current from a battery of a constant

voltage is much greater in one direction than another. Current flowing up hill against the gradient is called a reverse bias current. This is commonly looked for to find photoelectric effects in materials. It turns out many semiconductors have the ability to absorb energy directly from light waves. DHA also has this capability. It can turn light into a DC electric current and vice versa.

What is not well known, is that when you find a semiconductor capable of doing this, any current flowing through it will also get a massive boost in energy. This is how the sun and the magnetic field of Earth recharge us when we allow it. This boost is given to the entire system in a cell. It is distributed electrically in day time and optically at night time. DHA is required for growth and development; it is an irreplaceable lipid of cell membranes but especially the heart and brain. *If DHA is lacking in a mammal system when specialist proteins (from ubiquitin signaling) arrive to a cell membrane, they seek a quantized coherent matched lipid like DHA.* If the DHA match in the cell membrane is not found, and there is an omega 6 or DPA we lose proper electrical, chemical, and optical signaling. If DHA is absent from mammalian cells then the entire system suffers electrochemical failure at some level. That is how your battery discharges over time.

Becker found that human bone a direct photoelectric effect that was very sensitive to the current's direction from nerves in periosteum. The same is true for DHA in cell membranes. DHA, like bone is a light emitting diode (LED). Most technology like ipads, iphones, and TV's have blue LED's in their screens. Most LED materials require an outside light source to facilitate release of their own light. Your tech gadgets get this from the electric power grid they are plugged into or from a solar charger, if you have one. This is why human skin developed as the solar battery for DHA in your brain case. It works best for this purpose 8-11 AM and during the late afternoon sun because the solar frequencies are more ideal at that time for human biology. This is why skin and

brain are derived from neuro-ectoderm. It is also very likely why humans had to lose their hair as their brains developed.

DHA’s presence is what generates the massive positive electric charge found in and around the central nervous systems of every animal every tested when they are awake. That signal disappears when they sleep or when they are anesthetized based upon Becker’s experiments. This is exactly what one would expect of a material that is a semiconductor that uses a reverse bias current. This is solid state physics 101. You as the lay person may not get it, but you can fact check it.

Humans happen to be the one animal that has the most DHA requirements in their cells because we have the most mitochondria to support using DHA in cell membranes when we are disconnected from the energy the sun or Earth provide. Our mitochondrial density is in our heart, brain, and immune system. This is why heart disease remains the number one killer in humans today. It also points out why neuro-degeneration is quickly catching up to heart disease in our modern world. This also explains why autoimmune diseases are now growing exponentially too!!!

It took a long time in evolution for primates to concentrate enough DHA in their brains to get to humans. Every single animal created by evolution since the Cambrian explosion puts DHA in their central nervous system. The degree of assimilation of DHA in their tissues, is the main thing that separate species complexity. DHA is the back up system, that animals have developed to separate themselves, from being quite plant like, using a water and sunlight battery. DHA allows all animals use this extra power to gain the ability to disconnect from Earth or the sun for a period of time to live. Animals use grounding extensively when they are in nature.

DHA is the evolutionary addition to our power grid system which upgraded life's photosynthetic battery. It points our why DHA has never been replaced one time in 600 million years of evolutionary history!! This is why health metrics in humans are always tied to high tissue DHA status. The more DHA you have in your tissues the more back up power source you have to generate a larger electromotive force in your mitochondria to generate the DC electric current. If your battery cannot hold the charge from the Earth of sun, for any reason, you get ill.

The major source of battery discharge in life

How do human batteries discharge their energy? Anything that pulls energy from this battery, will diminish the solid state DC charge in living tissues.

When you stop chasing the wrong things you give the right things a chance to catch you. Now you might have a better idea why people with Multiple Sclerosis all have low vitamin D_3 levels. The story contained in the last blog was that frequencies of light really matter deeply in biology. The wrong light frequencies also can discharge your cellular batteries. The series is now going to explain why this "frequency deal" is critical to understand.

CITES:

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