TIME # 3 : CAN A CHART TELL YOU SOMETHING ABOUT TIME?

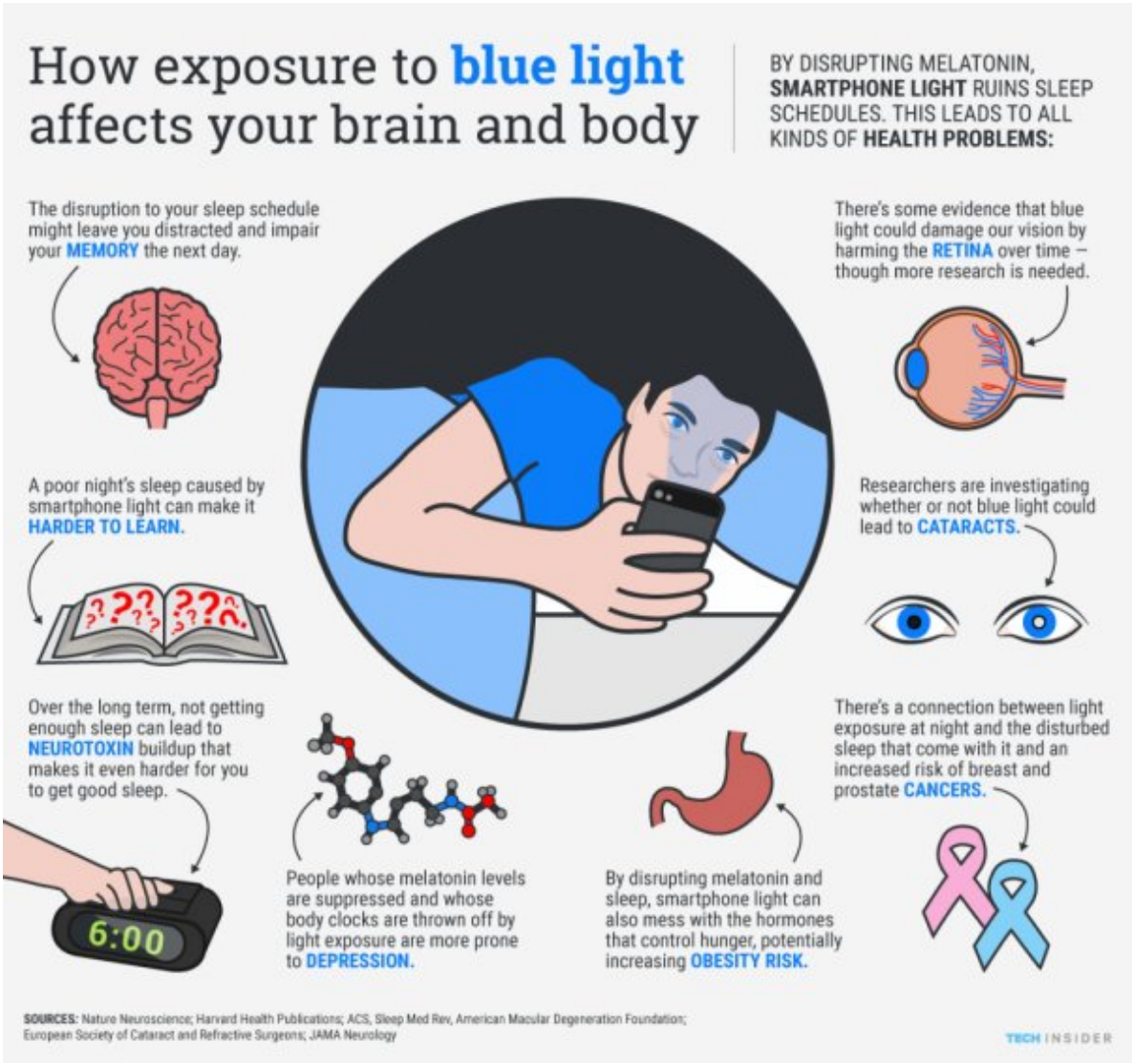
READERS SUMMARY:

WHY DO YOU FOCUS ON BIOCHEMICAL CHANGES WHEN IT IS THE MISSING LIGHT FREQUENCIES THAT EXPLAIN CLINICAL SCENARIO'S BEST?

MIGHT IT BE OUR FOCUS AND PERSPECTIVE DRIVING OUR ***DUNNING KRUGER EFFECT***?

DOES TIME TELL US ABOUT LIGHT/TEMPERATURE OR FOOD?

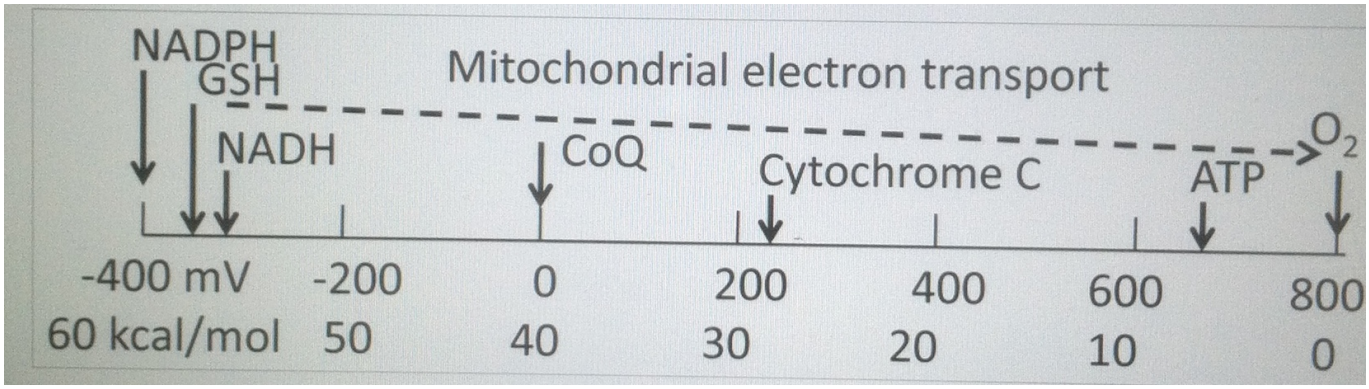
We know that as one develops a blue light hazard in their eyes this causes a massive release of ROS and that ROS cause swelling of our respiratory proteins in our mitochondria. For every 1 Angstrom of increase present on the ECT, there is a ten-fold reduction of the movement of electrons tunneled between the cytochrome proteins. What is the collateral effect on protons?



> Blue Light Hazard destroys the central retinal pathways the control the SCN timing mechanism in all mitochondria of the choroid

This is how blue light destroys energy production. It decreases melatonin and melatonin controls mtDNA and the cytosolic water compartment. This is the water that shrinks the respiratory proteins as it is heated by heat release from the matrix in uncoupled haplotypes. Coupled haplotypes can use the suns power via their blood. UV light increases electron flow throughout that ECT but its delivery of electrons is wholly dependent upon how fast they can flow from NAD^+/NADH to oxygen. NADH is an electron acceptor and carrier of cytochrome 1 and critical in setting the redox potential in a cell. The NAD^+/NADH couple works by getting its H^+ from the

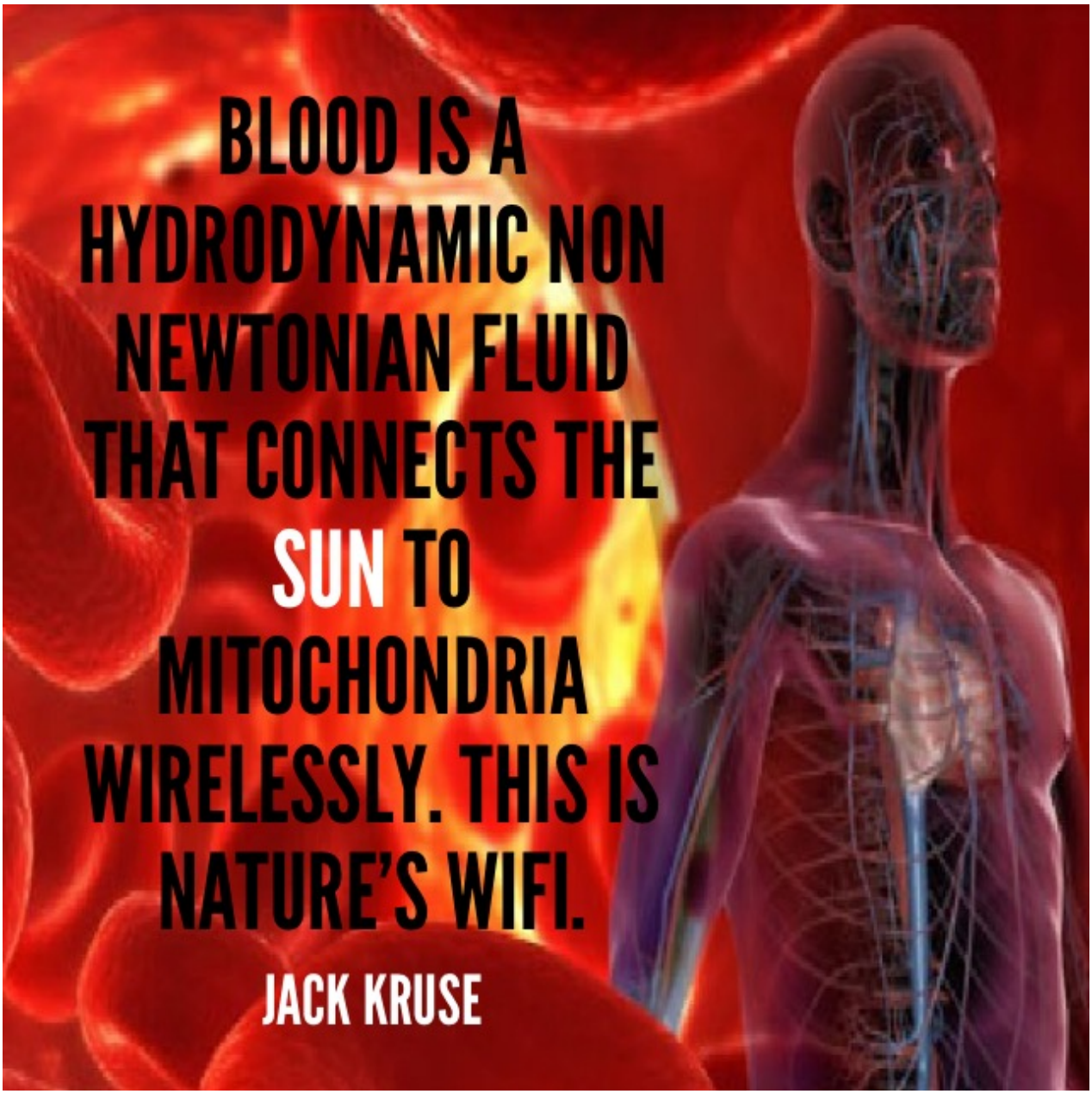
mitochondrial matrix. Red light acts to shrink cytochrome 3 (COX) to improve ECT flow because COX is a heme protein that reacts to red light by improving quantum tunneling of electrons through cytochrome 3, thusly, improving ATP production at cytochrome 5, the ATPase. COX is also linked to cardiolipin and the gate controller for apoptosis and the flow of *isoforms of hydrogen* in the spaces in cells. So what does this all mean?



The control of the redox potential is tied to the most powerful frequency of light stored in a cell. Research data for 100 years has shown that when any cell is stressed it releases ELF-UV light. UV light coherently affects all processes and conditions in the cell. When a cell loses UV light the exclusion zone drops and the pH drops and there is a loss of hydrophilic action in proteins and lipids. When a cell prepares to divide, the main signal is ELF-UV release. When ROS is increased cells are releasing ELF-UV and oxygen must be present. When these things occur autophagy is usually sluggish. At the same time, Dr. Roeland van Wijk has shown in his latest book biochemistry transitions away from the oxidative condition. As the mitochondria continue the process of redox shifting, glutathione cycling is altered, pseudohypoxia develops, and NAD^+ levels drop, while lactate rises and pyruvate falls. Repairing cytosolic water reverses glutathione deficits.

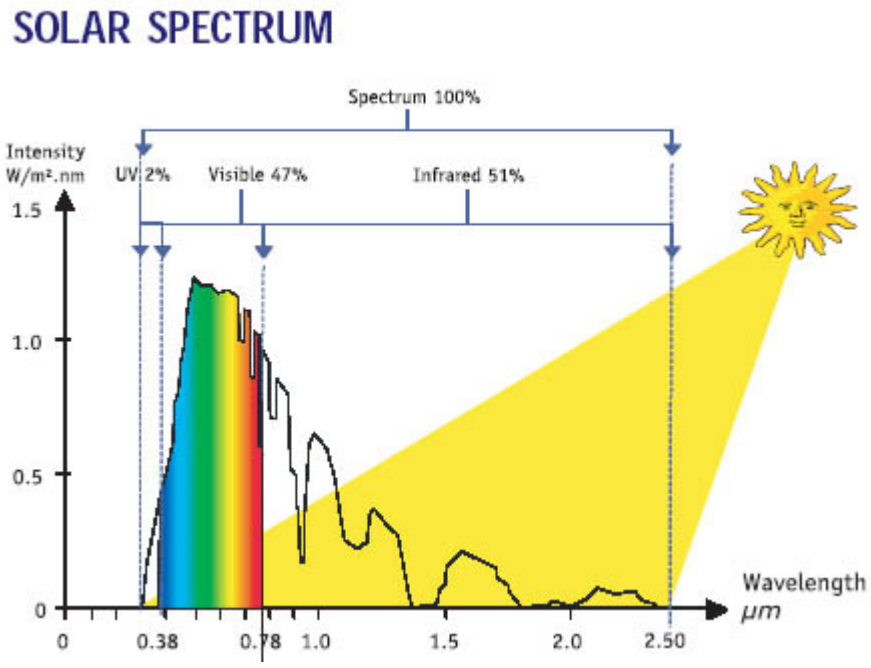
Pyruvate needs NADH (see above) to get used by the

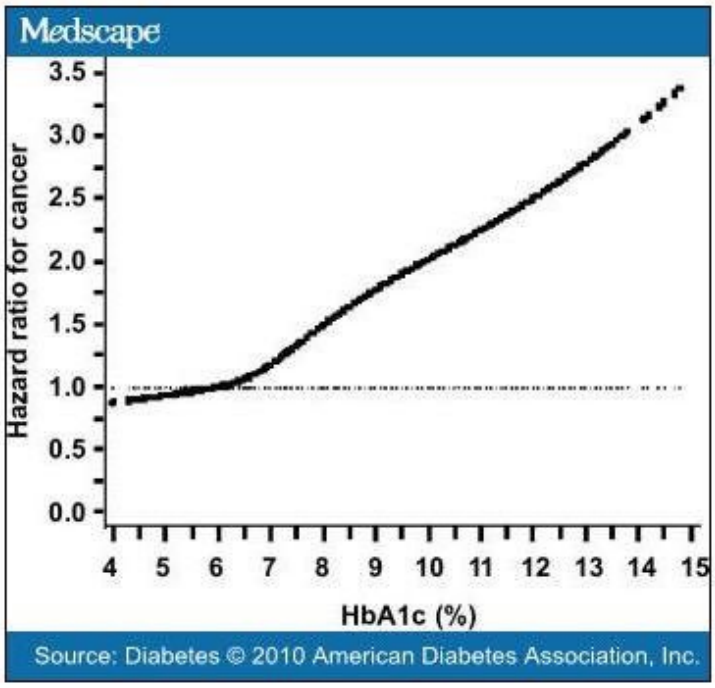
mitochondria. The H^+ in NADH is the key factor broken down because the matrix is a light hydrogen furnace All stressors cause the same systemic reaction to develop in mitochondria because all process leads to apoptosis or autophagy. You must have a ready source of hydrogen to maintain your redox potential because of the link to NADH. People try to make sense of this process by understanding the biochemistry and they fail to pay attention to the light signals (biophysics) missing at our surfaces that define the stress response. Sunlight lowers the stress response via complex chemistry that occurs in the blood plasma.



Nature provides education for our cells with waves from many sources. The dissemination of her wisdom is buried in the energy and information in them. We're built for each cell to absorb this information unless our choices interfere with that wireless download. The yield of the download develops a cell's genius or set a journey of illness. When we are disconnected from nature, our lives become muffled before we're silenced by debt of nature. This should be an education we are all interested in.

Are foods with electrons that contain a lot of purple light the problem, or might the absence of purple light and red light at our surfaces the real problem? Might the remaining blue light, being unopposed be UV and IR light the real culprit? The stress response always drives singlet state ROS when the purple and red light is missing from the sun. When a cell is missing the stored frequencies of UV and IR light we have a relative surge of blue light. Might this be the story of a rising HbA1C in this type of environment?





Carbohydrate use with cancer is clearly not good but is there more to this graph? Yes. HbA1C rises when there is no UV/IR light exposure on retina or skin while someone is eating food with carbohydrates. It raises the question, is it the food electrons/protons from carbs or the lack of full-spectrum light that is the issue, or in cancer's case, might it be both?

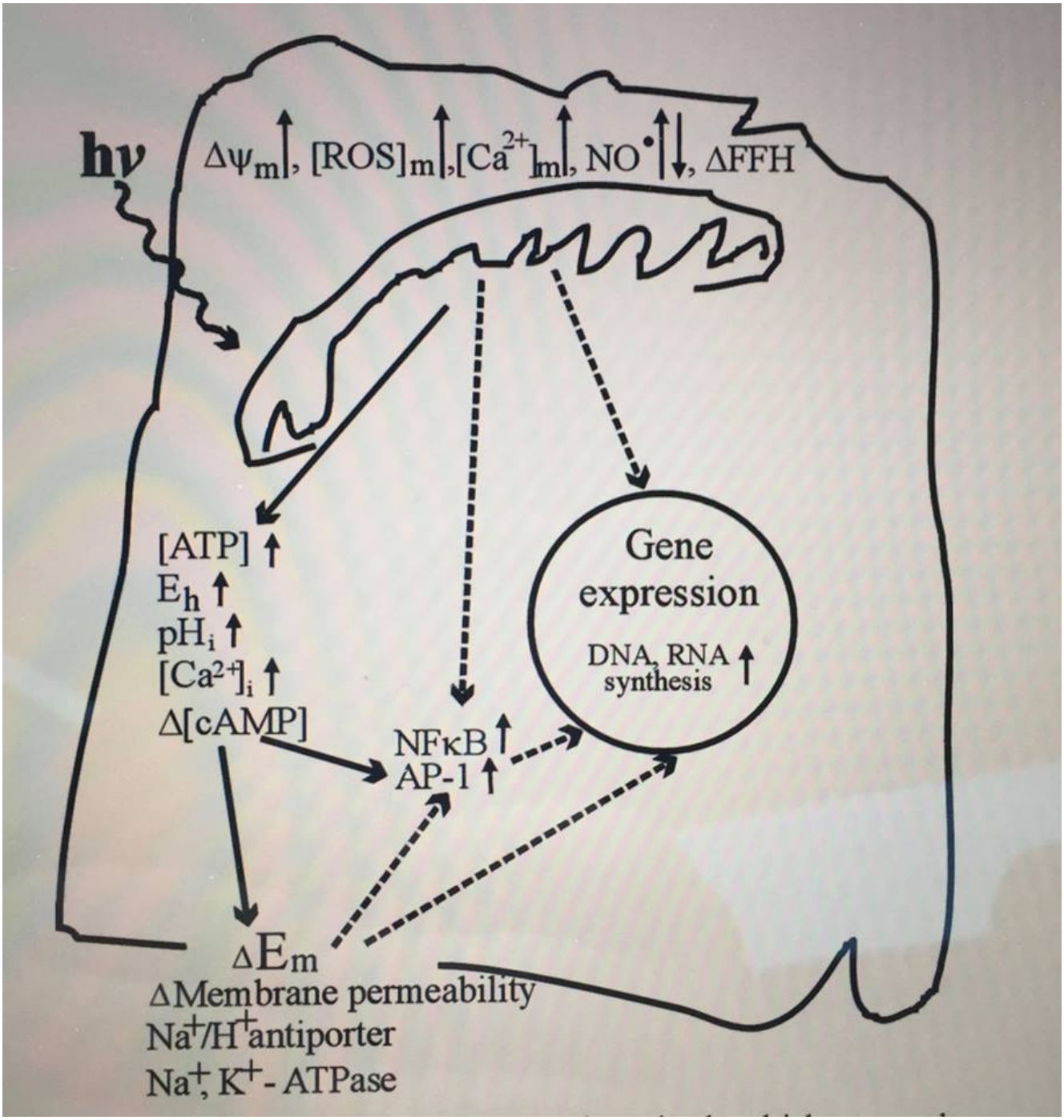
What should the above graph really say to us mitochondriacs? Carbohydrate use at the wrong time of the day/year severely limits your time on this planet when you have most cancers because of light. That should be very clear from the data, but what is not clear is why it is the case? When you layer the research on about how circadian biology effects the clock genes that cause type 2 diabetes and can lead to cancer what should one conclude and what questions should be asked?

It also points out why the "dawning phenomena' in diabetes occurs. The cooler temperatures with the simultaneous exposure of blue light in AM sunlight causes the

glucose spike. The reason it is short lived is because AM sunlight has the exact amount of red light to offset the blue color temperature of the sun.

Modern man thinks they can replace the sun with fake bulbs. You cannot. You can never replace nature's solar light. We can understand her ways, and then we can build things ride her "waves", and not create our own waves that interfere with her waves.

EVERY cell houses 4 genes – cryptochrome, Period, CLOCK and BMAL – that keep time in some fashion. Is there a possibility that some atoms in the mitochondrial matrix operate like an optical switch that helps keep time? When you mess with circadian signaling with things like artificial blue light, BMAL1 causes your mitochondria to swell and you begin to develop insulin resistance as my hyperlinks above show. Restore proper BMAL1 activity and you restore proper cellular function and your HbA1C drops and cancer hazard will also drop. Pretty simple to grasp you'd think huh? It is not for clinical medicine.



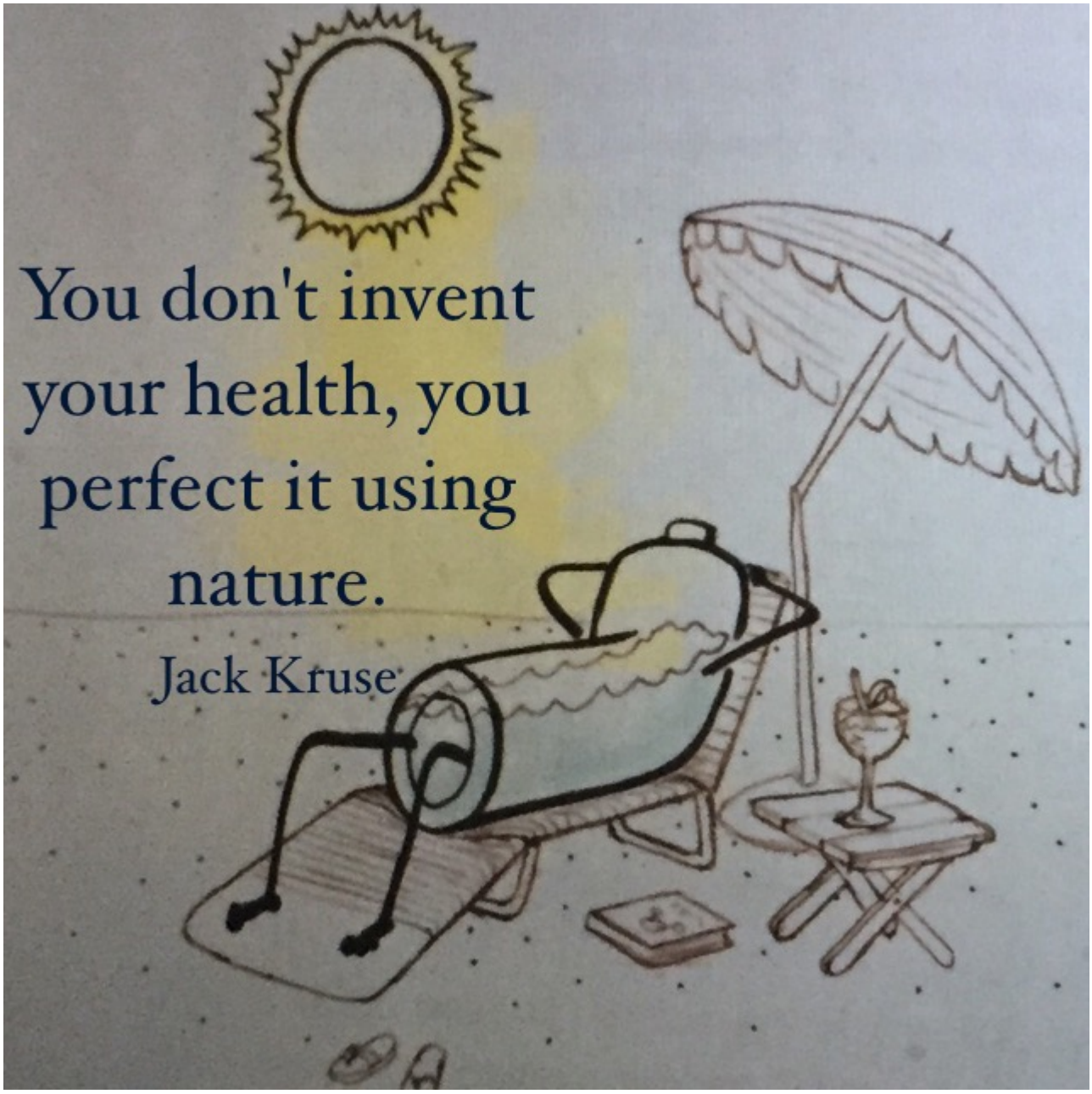
If you do not understand how light works in a mitochondrion or a cell you will never solve the diseases linked to light like T2D, Metabolic Syndrome, obesity, and cancer

THE TAKE HOME FROM THE GRAPH:

*How does one restore **bmal1** activity?*

UV light assimilation and cooling temperatures restore the clock functions best as the hyperlink above shows. Why?……..it is a fluorophore-protein located in our retina's RPE and in

our skin’s mitochondria and all fluorophores work best at lower and not higher temperatures.
If you suffer from diabetes you clearly suffer from a lack purple and red light exposure and assimilation in your cells which lowers your redox. The belief is that diabetes is a carbohydrate disease. That is a precept, not a truth.



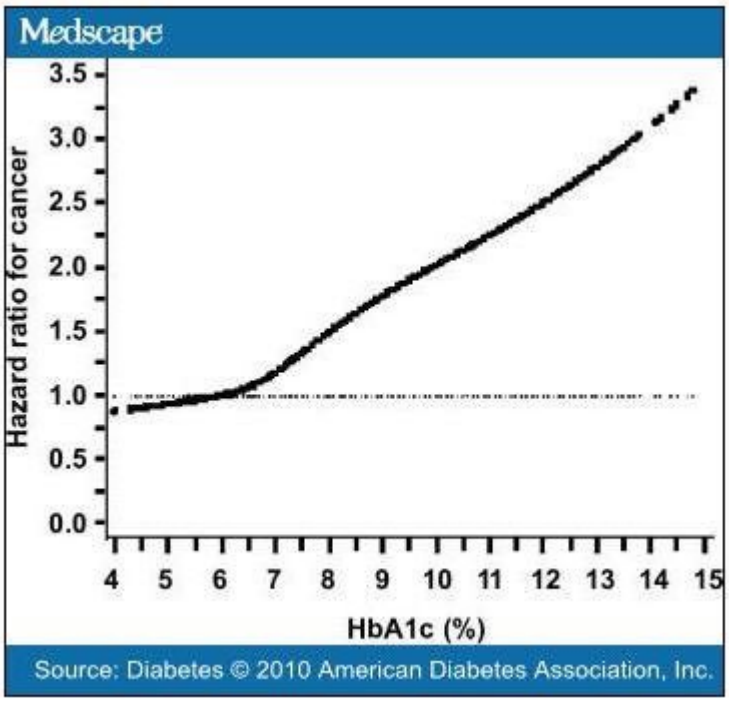
Low UV exposure leads to low levels of Vitamin D3 creation. This is why low Vitamin D3 levels are associated with higher HbA1c’s, insulin resistance, and obesity. If the problem is serious and progresses to a cancerous state you likely ***if you also have a serious overdose of blue light*** in your environment

along with a lack of purple and red light too. The simple mind blames this condition on food solely. There is an awful lot of people doing just that today. That is a half-truth.

Where does food fit into this graph? As the graph above shows, carbohydrates clearly won't help you when you have T2D with cancer, but these foods do not cause the disease, **they just exacerbate it.** Carbohydrates are also not the cause of cancer, but as the graph shows eating them with a blue light hazard causes us all to lose time on this planet because of how our circadian mechanisms were evolved to work with sunlight.

ANALOGY TIME

Think of carbohydrate intake like a physicist thinks about a cat. Instead of "Schrodinger's Cat" experiment, this graph represents "Schrodinger's Cake" experiment – where the cake exists in both states simultaneously – eaten and not eaten. It's only when you open the cake box and the presence or absence of the cake is dependent upon the presence or absence of purple light (UV) hitting the surfaces of our eye, skin, and gut simultaneously. These variables determine how the quantum wave function collapses for the cake so that we can observe the eventual fate of the cake; Ie: will it make you Leptin sensitive or Leptin resistant. The simultaneous presence of purple light in our tissues makes the decision for the electrons from the cake. The main variable is the measurement caused by the presence or absence of UV light. This probably explains why, mysteriously, you suddenly find the cake box empty and the cake inside your stomach when the purple light is missing from your surfaces. It is also why the cake does not bother those people who have tissues filled with purple light frequencies. Perhaps there is a use for the quantum effects after all in biology? Let us re-look at the graph again with this light perspective in mind.



Exposing your surfaces to chronic artificial high color temperature light is why the graph above exists graph. It has very little to do with food. That is just today's precept of the truth.

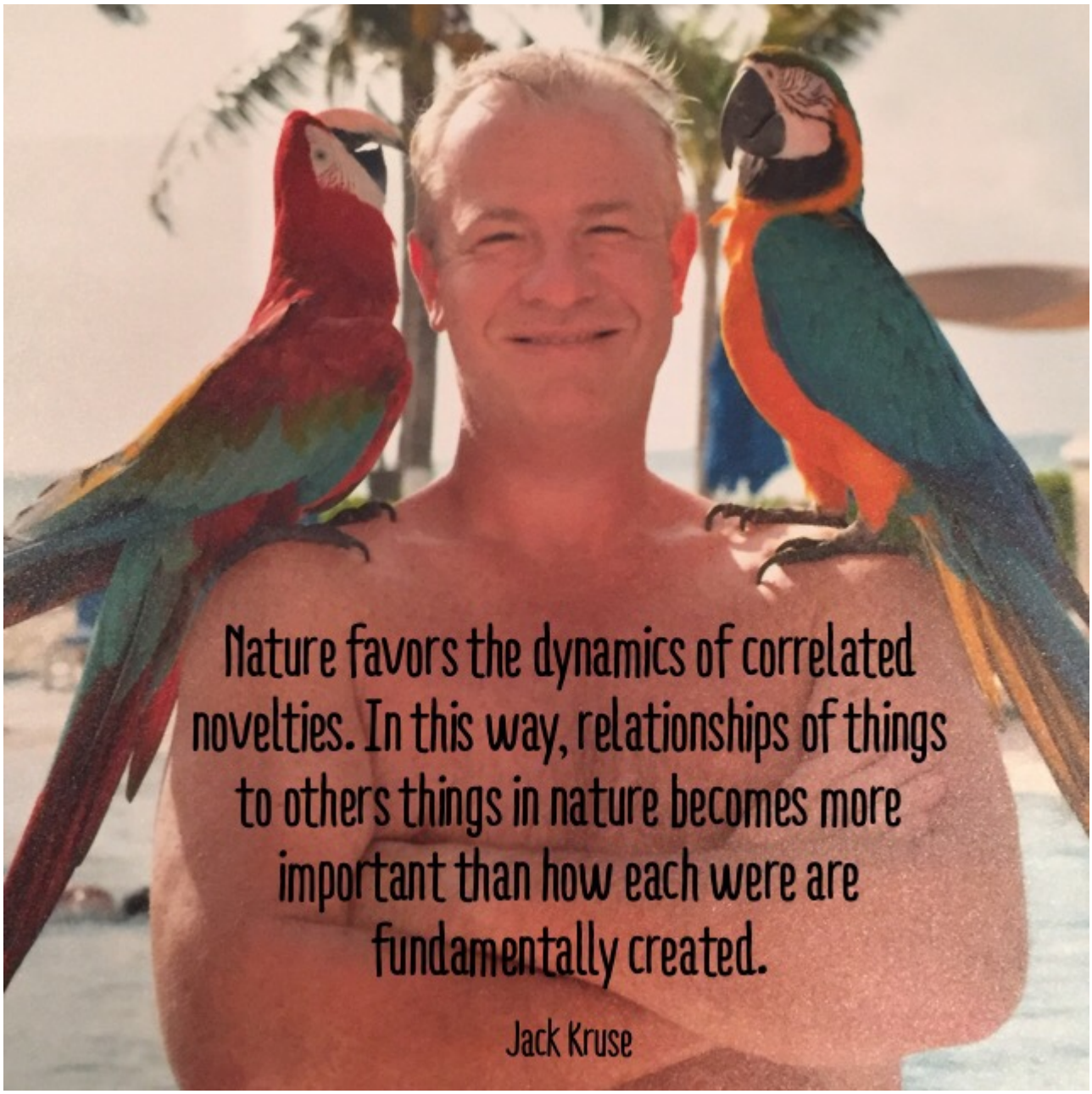
SUMMARY

Evidence-based medicine is based on "hard scientific evidence." How many of us have heard that very same phrase throughout our careers in medicine? Most of us have used it many times. And when we did, we really had no idea what it implies. At the beginning of my career, I had just naturally regarded "hard scientific evidence" as if it were more or less a tangible object we could handle physically or mentally. Tangible like the Statue of Liberty, Central Park, the Mona Lisa, and "hard scientific evidence." It had never occurred to me that recognizing "hard scientific evidence" would be any more difficult than recognizing the statue, the park, or the

painting. Only much later did I realize that “hard scientific evidence” was only an amorphous concept, not a concrete precept. After that realization, the debate about health risks from environmental non-native EMF’s, like blue light, began to make a lot more sense to me.
Sooner or later, I think the principle will be accepted that knowledge regarding the link between blue light and non-native EMF’s and disease is imperfect, now and forever. Really it’s only common sense. The consequences of everything we do, or that is done to us, are imperfectly predictable, and the consequences of EMFs are no exception. “Hard scientific evidence” is not in the world ever, it only exists in the world’s mind as a core belief of fact, when in reality it’s just an opinion of a set of facts.

EVERY cell houses 4 genes – cryptochrome, Period, CLOCK and BMAL – that keep time and that clock always must be slower than the SCN that is fed by light through the retina. If the SCN clock is slower you get the diseases mentioned above because heteroplasmy rates rise in the mitochondria in those tissues and you shed time on this planet.

It is not that hard to understand when you focus on light and not food.



CITES:

1. Hepatic Bmal1 Regulates Rhythmic Mitochondrial Dynamics and Promotes Metabolic Fitness in Cell Metabolism Volume 22, Issue 4, p709–720, 6 October 2015 David Jacobi2, Sihao Liu23, Kristopher Burkewitz, Nora Kory, Nelson H. Knudsen, Ryan K. Alexander, Ugur Unluturk4, Xiaobo Li5, Xiaohui Kong, Alexander L. Hyde, Matthew R. Gangl, William B. Mair, Chih-Hao
2. www.ncbi.nlm.nih.gov/pubmed/15797866

3. http://www.health.harvard.edu/staying-healthy/blue-light-has-a-dark-side
4. http://onlinelibrary.wiley.com/enhanced/doi/10.1002/14651858.CD011269.pub2