

# EMF 5: What are the Biologic Effects of EMF?

## Readers Summary

1. What exactly is EMF?
2. What has been the timeline for human EMF exposure?
3. Has EMF testing been done on humans?
4. What happened to humans in Moscow?
5. What are the documented biologic effects of EMF in the worldwide literature?

Today's blog is not long on science. Consider it my Valentine's day present for you. It is long on observations made on humans and animals and EMF's. Most of the observations have been done by Russians and described in their literature. One human experiment done on US foreign soil will be **eye-opening** to you. What EMF does to cells directly is it causes a massive stress response that simulates leptin resistance, a heart attack or a panic attack.

It can [affect plants too](#). The sensations are present while often the labs are completely normal and your doctor remains stumped as you sit in the ER. As time elapses the labs become trashed because the molecular clock no longer is able to work precisely but by that time you are closer to [Michael Jackson's fate](#) than a reversal of health.

There are many forces at play to keep this information from you. If you were to understand its full power the economy of the world would likely collapse. [This is why this info is systematically kept from you.](#)

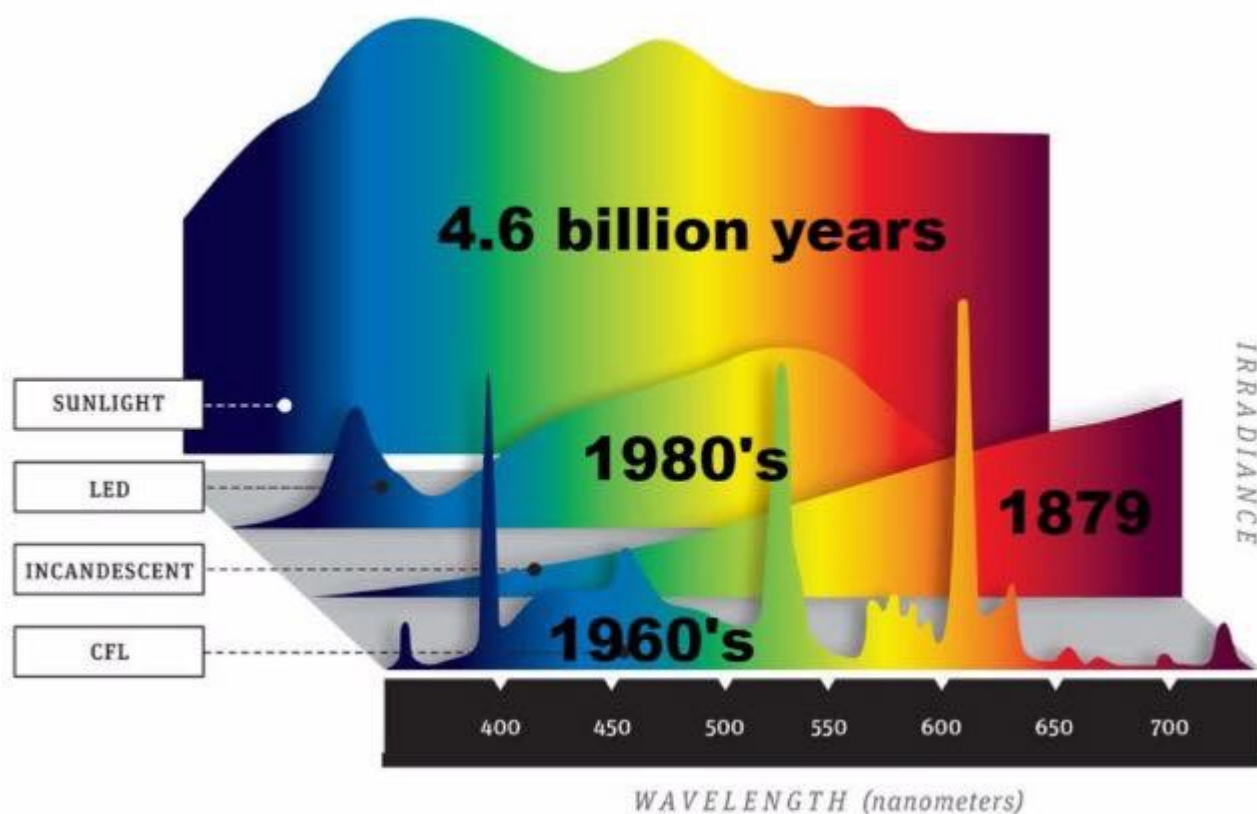
Electromagnetism can be discussed in two ways: #1 in terms of the field and #2 in terms of the radiation. The field is something that exists in space around an object that produces

it. An electric field extends outward from electrically charged objects. Both magnetic and electric fields are static and unvarying. When time is introduced to them, by varying the intensity of the field, like a radio antenna, an electromagnetic field is a result. This kind of field fluctuates often and emits waves of energy that behave as massless and chargeless (photons) energies. Each energy wave consists of an electric and magnetic field at right angles to one another. The energy wave generated is traveling at right angles to both the magnetic and electric field. This gives it a 3-dimensional look when you reconstruct the view in your mind's eye. This is precisely how the brain reconstructs time. The number of waves formed in one second is called the frequency of the EMF wave. The distance the energy travels during one oscillation is the wavelength. The higher the frequency, the shorter the wavelength is, and vice versa.

EMF's span large frequencies. Gamma rays are very small. They are a tenth of a billionth millimeter long and vibrate at sextillions of times a second. They are related to Xrays, shortwave UV radiation is called ionizing radiation. Their photons are so powerful that they can knock out electrons from atoms and cause highly reactive ions to be formed where they should not be. The next band of EMF's are the longer wave UV radiation and then we hit EMF we see in visible light. Infrared radiation comes next and we feel it as heat. Below the infrared spectrum is the area of EMF's is where modern communications frequencies are found. Here, microwaves (Giga or mega Hz), and radio frequencies exist. The RF (radio frequency) spectrum is broken up into many smaller groups with names you know (UHF, VHF, and ELF). Extremely low frequency (ELF) waves are where the Schumann resonance is below 10 Hz. At 10 Hz, one wave is 18,600 miles long. The key point is, except for visible light and infrared EMF, **we can not perceive any of these energies without instruments designed to find them.** The problem is our brain senses them all without sensation being perceived consciously.

This is why modern people do not realize how we have abruptly added massive manmade EMF's to our environment. For 4 billion years, the energies that surrounded life were simple. There was the Schumann resonance; which essentially was a weak ELF electromagnetic field modulated by the micro-pulsations, sculpted by the solar and lunar cycles. There were random bursts of static electricity from lightning centered at 10,000 Hz and they reverberated over the entire Earth's surface at any time. 3000-5000 of these strikes happen simultaneously. There were weak radio signals from distant stars. A light was present from our sun. UV and infrared was the most abundant form of EMF on the surface of the planet for 4 billion years. We perceive infrared EMF by sensing the heating of tissues. This heating effect is called the Schwan guideline, and it only takes in to account the thermal effects of EMF. The reason Schwan used this method initially is it was the only way to easily quantify EMF's using temperature. That is easy to measure. If you own a microwave oven you know it too when you heat up something in it. But here is where our problem began. The biologic effects from EMF are not from the thermal release of energy. It is from the nonthermal effects. Today our current standards for technology are still based on the thermal standards alone. Schwan set it at 10,000 millivolts. You will soon see why this is the greatest risk to the health you face today.

## **The man-made EMF timeline**



In 1893, life all changed when we began to see how we could use EMF's for modern life. Nikola Tesla demonstrated the first AC power system at the World's Fair. Edison began constructing the first commercial electric company in NY. Two years later, the modern era of electrical engineering began when we harnessed the power of Niagra Falls. In 1901, Marconi sent the first transatlantic radio message. In 1907, the vacuum tube was invented and enabled the first voice transmission by the radio in 1915. In 1920, we had the first commercial radio station. Prior to this, we used candles, campfires, and kerosene. This is not even 100 years ago, folks. Still, think a fake light is related to the current plight of modern humans and neolithic disease? You actually, still believe it is wheat, PUFA's, or fructose?

The greatest assault of the Earth's surface came after WWII. We began to use shorter wavelengths and began to bounce them off the ionosphere for long distance communication. Use of ELF's is incredibly damaging because these RF waves are never de-modulated. What does that mean? It means they last forever.

Einstein's work tells us that EMF waves last for infinity once they are generated. They usually dissipate into space in most places. On Earth, ELF's **can not** go into space because we have an ionosphere. Ask any physicist if Einstein or I am wrong about this. I know it's true because I asked several of them.

WWII brought us microwave radar for warfare. In 1947, Bell Telephone set up the first microwave phone relay between towers in Boston and NYC. The same year, TV was born and they also used microwaves for transmission. The 1980's brought cellular communications. What has happened since 1990 is astounding for the planet and life? The first mile above the Earth is now filled with 2 million times the amount of EMF that we faced in 1900. You heard this in the [EMF 1 video](#) I posted. We can not truly know the problem largeness because the EPA was forced to stop measuring EMF over our country in 1979. In the USA, in 1979 there was no tech boom yet, but today there is. Today, our country leads the world in technology productivity and it is all based upon the quantum effects of electrons over a silicon wafer. It's infrastructure, however, was being built in Stanford University, in California, and by the Dept. Of Defense. The Internet story can be researched elsewhere. It is now common knowledge. The results of its explosion however are going to be your new inconvenient truth. We have not had one survey of EMF since this time in this country.

This timeline is important for you to sense, to hear, and to feel in your current comfort zone of life to understand why this series is the most important factor in neolithic disease generation in your lifetime. It has come on fast and furious, and the results to the biologic system is seen in the epidemiology of disease over the 20th century. We are awash in an ocean of electromagnetic energies that life has never before had to deal with before, ever.

Humans have altered their electromagnetic background more than any other aspect of their environment. It is estimated that in

2012, the radio waves that surround our planet today is one billion times the amount that naturally reaches us from our sun! Since we have added superconducting cables and light cables using photons, these have added the EMF field strength around them by factor of 50 to 100 in the last 15 years. Every time we upgrade bandwidth we cause more cells to lose their ability work in a quantum coherent fashion. We used to believe cells were just bags of fluid and organelles that ran mechanistic pathways. In fact, most in paleo still believe that. I don't and have not for 8 years. I know that the cell cytoarchitecture is based upon an evolutionary fractal design and it does this to specifically move a "special solvent" into a small nanoscopic space (Nanotubes) to extract energy from it in a quantum coherent fashion. Do not worry about what that means. I got a blog for that too later.

This makes energy production with close to a 100% efficiency to drive all the mechanistic biochemical reactions. So we are clear, mitochondria are only 39% energy efficient and thermodynamically can not support the speed, kinetics, and flux we see in a living cell. This is more cell theory biology dogma we will be blowing up shortly.

Think back to E=MC<sup>2</sup> now. This is how life got free energy to master Einstein's prediction. Magnesium ATPases can not thermodynamically support the inner workings of cell and the time space continuum we hold today. Will I show that as the series rolls on? Yep. When cells lose this ability to generate free energy in a coherent state they first become energy inefficient and they eventually activate cell suicide programs. This is the life force in every one of us. It has very little to do with food and a lot to do with the magnetic field we live in. This is where quantum field theory meets biology. So far, the biologic sciences use classical physics to describe biochemistry. That is a serious flawed model.

We used to believe that EMF wavelengths that only interacted with objects comparable to it in size were at risk biologically. We thought that because we only considered the thermal effects of EMF. Now we know we were dead wrong, because science knows it. Specifically, the Russian scientist in the world have been leading that charge. The Schwan guideline for EMF in the USA was set because we could measure and perceive heat from infrared EMF's. But these EMF's are not representative of what we face today. We still have no true idea of the impact, because there is no political clout to study it. We do have some observations from science that are eye opening and I am going to share them with you today. Industry and government, however, want to cloud your current beliefs because they are printing money using non thermal EMF's them to control your life. This happens because the non thermal EMF's effects can limit your ability to choose and decipher, while it slowly and insidously destroys your health. It is frustrating for us doctors because it is not studied or in any biology books, we have no idea why it is happening. I know that sounds grandiose, but no one has told you about the work of Jose Delgado. You might need to inform yourself of things you do not know.

For 24 months, my blog has been leading up to this inconvenient truth. We know there are primary biologic effects on all life forms at most ELF frequencies, and all other parts of the spectrum that can disrupt life at any level from the subatomic to the entire biosphere we live in. We know this from experiments done world wide, not just in the USA.

American corporations, however, who are making trillions of dollars off this and they are spending a lot money to keep this information from us because they must to keep the spigot open until the physicist come up with a solution. I think the Russian physicists have come up with an answer. Do not blame your politicians or corporations for this. The data has been under your nose since the 1960's and 70's. We were too busy living the Vida loca to notice. Blame yourself for staying in

the dark so long. Most of what they sell is now firmly entrenched as part of your productive modern life. Many people have tried to alert the warning bell for mankind but they get branded as quacks and people stop paying attention to them.

When your medical issues popped up without warning you should have listened to your intuitive self. You may not be able to sense it, taste it, feel it. You may not know why you can not handle the cold and get cold urticaria, but you should have remained curious. Something in our environment is not right and it can't be food based when 100% of the globe is affected by many of the same illnesses. Everyone in the world eats differently, and prior to 1900, we did not see what we are seeing today post 1900 in medicine. Pandemics are not genetic, they are [epigenetically based](#).

The standard answer today from industry and government officials is we need more study, while they entice us with the latest gadgets to make our life more comfortable. It is very similar to what a drug dealer does when they allow you to sample the goods, to make sure the hook is firmly implanted in our insatiable gullets for technology. I have no illusions it will change. When I see all these paleo kids with all these unusual findings even though they eat well it is a big clue something else is amiss. You do not get cold urticaria without a good reason when you eat well.

It has been wildly successful for technology companies and for healthcare companies who take care of the collateral damage.

While you love your modern life, you might have no idea how it is killing you because you can not see, feel, touch, smell, nor taste the poison.

Modern humans have blamed everything, but the correct thing.

It is the non-thermal effects of EMF, and the answers have been buried in physics and in space experiments for the last 50 years. It is time you get off your behinds and read the



things that are published and start connecting dots. You do not need a RCT like the paleo folks think you do. You need to read many observations of scientists all over the world who have been muzzled.

A change in electrical charge at any biologic level triggers changes throughout an organism. This point is really brought home when one understands the effects of quantum mechanics on a biologic system. This is the realm of Einstein and quantum field theory. We use it in my specialty daily every time we order an MRI. Most people in the ancestral world have not a clue about quantum biology affects evolution. Several of my critics have said I have abused evolutionary biology. My reply is simple. What you believe is pure folly. It is all about quantum mechanics and I plan on showing you why I am correct. [If I am wrong, then so is Einstein.](#)

**Present-day Electromagnetic fields destroy quantum signaling of coherence, non locality, and electron tunneling by altering time in our cells.**

Quantum field theory reconciles quantum mechanics and Einstein's special relativity and plays a central role in many areas of physics. It also plays a massive role in biology that prior to now, no one seems to know. My aim is to change just that. It is that simple.

The next 6 months I will show you why this is axiomatically true, because if I am wrong so is Einstein.

Modern electro-technology subjects the whole world to artificially generated electromagnetic fields, at frequencies from the lowest brain-wave rhythm values up into the microwave spectrum. Most of this exposure in Western industrialized countries is linked to domestic use of electrical power for modern technology and communication. This spreads exposure into non-industrial areas by wave of power transmission lines, power transformers, radiation from domestic appliances and

light industrial applications occurring in what are substantially non-industrial areas. In fact, Hugh Carey, the former NY governor when I grew up, made the local electric company, (PSC) buy more land to put their land cables at 765 kilowatts to protect upstate NY residents in the 1970's, or he was going to cancel the project. The reason this became a hot potato in the 1970's will come to light below. I grew up in NYC, so I knew about all this crap as a kid.

We need more politicians to do this today because of how bandwidth for cellular communications has just exploded in the last ten years. If you are below 40 years old, you have never lived in a low EMF world. Further sources of exposure to EMF, even more widespread and potentially dangerous, are the modulated radio signals, cellular bands, and modern WiFi bands. You might be shocked to know that Russia has an off the job safety limit of 1 microwatt in radio and microwaves for its workers and soldiers. If the USA was to adopt these standards

99{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of FM stations could not broadcast their current signals. The data on VHF TV signals is [even worse](#) for Americans. John Osepchuck was an employee of Raytheon, who made microwave oven in the 1980's. He tested many appliances for Raytheon and authored a study that never saw the light of day. Here is an excerpt, "Osepchuck produce a study of microwave broadcast hazards and found that, according to the President's Office of Telecommunications Policy, the thousand-odd television stations in the United States "are located in the centers of population and therefore are of prime concern as sources of biological hazard due to 'electromagnetic pollution.'" He compared the total radiated power and energy of these television transmitters with the total that would be put out by a million microwave ovens operating for half an hour a day and determined that **"the television broadcast industry irradiates the country and its population by a factor of more than 40,000 greater than the radiation due to**

**microwave ovens."**

[Osepchuck's study was never formally published or distributed by Raytheon.](#) How ironic.

These EMF's completely envelope the entire world now, and, even if there is no biological response to the radio-frequency component of such signals, there is no guarantee that de-modulation of such signals cannot occur in a biological circuit. This means our body might absorb and decode the signal by altering our ability to tell the correct molecular time. It does something worse. It pulls apart your cells electrons and protons in this de-coherent man-made magnetic field. It causes a quantum de-coherence like we create when we use MRI's today. Our magnetic field coherence for all life on Earth is set by the Schumann resonance. This implies injecting any EMF signals that alter our cells or brains ability to properly sense it at these damaging low frequencies could lead to an extinction event like Earth has never witnessed before. I believe that is what is happening now in epidemiology data. This is what happened to Mars, and I think this is why the Russian space program path is on a [different path than our own even today.](#)

One thing no one seems to realize is once these EMF's are created by man, these waves exist forever in the atmosphere because they can not escape the ionosphere! A particularly interesting type of modulated radio signal is the kind known as "over-the-horizon radar", in which the repetition frequency of the modulated pulses is very often in the brain-wave frequency range bombards us daily. These low signal EMF's destroy our ability to sense the Schumann resonance and it is the cornerstone of why neolithic diseases are occurring now.

When these secondary changes occur in living things, the source of the original affect is quite hard to identify scientifically or medically. The only way to understand it well, is to see what it causes. Most American scientists

have disregarded Russian literature for quite sometime.

Russian publication standards are quite different than our own and they use this as their main objection. The Russians are apt to leave out lots of procedural details in experiments and this makes replication of the data tough. Also, they have a lot of troubling contradictions in their own literature too. This is what created the initial doubt from the American scientist. It clouded their curiosity of what the Russians found. American researchers are ultra-mechanistic (think about paleo researchers here) and they tend to believe statistics, while the Russians biologist and biophysicists concentrate on the observations they have made on the animals they have studied. Russian scientists also have assumed, correctly I might add, than any radiation that exists outside of nature will have direct effects on life. The Cold War caused them to study the non thermal EMF effects to a great degree.

American scientists have made the opposite assumptions because they feel we need definite proof of concept before we take \$\$\$ away from industry and the government who pay them their salaries. The recent history of American regulation of EMF's follows a "dead body policy". They have extended no protection to Americans until there is definitive proof of sufficient harm to over come the skepticism. Well [EMF -7](#) will have that definitive proof. This is a page out of the tobacco litigation playbook. This is a huge gamble for all life forms, but mainly for us today.

So what did the Russians do to prove their case to us? Let us look.

In the 1950's the Soviet government carried out extensive testing of workers around microwave EMF and they found definite biologic effects and did not hide it. Their scientist called us for a meeting in the middle of the Cold War because they found something deadly about non thermal EMF.

They immediately set limits of 10 microwatts for workers and soldiers in the USSR. The America military response to this

was to say this was the Soviets way of using propaganda aimed to embarrass Washington during the Cold War. This is a plausible response until you see what happened later as the stakes were raised.

## Analogy Time

Just to put this into perspective, a long haul truck driver who is using a CB radio get 5000 millivolts of microwaves to his head as soon as he uses the CB radio one time. Maybe now you see why they have a severe obesity and sleep apnea problem in truck drivers even today that is recalcitrant to normal dietary and lifestyle changes. It changes calcium signaling in the cell and brain to alter all cell signaling and distort time. As a result, they also have had massive increases in sleep apnea and suffer from low melatonin levels as an occupational hazard. Neither are good things for truck drivers to be afflicted with to work. This is so concerning that the National Transportation and Safety Board (NTSB) is considering [banning cell phone use](#) by truck drivers under the guise of driving while distracted. The real issue is the hidden health dangers of [phase shifting of circadian biology](#) by non thermal EMF. Today there is epidemic of disease in [truck drivers](#) and airline [pilots](#).

Both of these professions get massive amounts of environmental man made EMF exposure. I am sad to say surgeons do too because we work in an artificial environment where things are controlled by devices that run on EMF's surrounded by artificial lights in the operative arena.

As an American surgeon, it is no longer hard for me to distrust our own medical literature and cast it aside, when in our clinics, you see a tsunami of illness and death coming into your office daily and you just can not explain it based upon what we all learned in medical school. The Russians have been systematically studying EMF's since 1933. I do not think

we can afford to ignore what their data has warned us about, considering what has happened to American health just in the last 50 years. It is getting worse as we spend more on healthcare. Something is amiss, and we need to ask better questions. Several American researchers took Russian experiments that were hard to believe, and actually did reproduce the results exactly. When I read this, my heart just stopped. In 1971, in Poland, Zinaida Gordon and Maria Sadchikova of the USSR Institute of Labor Hygiene and Occupational Diseases identified a peculiar syndrome called "microwave sickness". They all described chronic excitation of the sympathetic nervous system. This perfectly correlates with leptin resistance, in case you were wondering how I found out about it. The end result is chronic adrenal fatigue, ischemic heart disease, atherosclerosis, high blood pressure, high triglycerides and poor sleep. Many went on to develop diabetes. This also describes metabolic syndrome as well today. This is also why [adrenal fatigue](#) is a brain disease.

## **The Russian Inconvenient Truth emerges from a human experiment**

Here is the not so funny part for us modern humans of this story. To prove they were right the Russians decided to raise the stakes. They irradiated our embassy in Moscow from 1962 to 1969 with 4-6K millivolts of microwave EMF. Their logic was if the Americans were so sure about the safety of non thermal EMF's as they appeared in the New Mexican desert then this should not worry them one bit. So they began to irradiate our people in Moscow. **The Americans did realize it was happening and did nothing about for a decade.** The Russians were bombarding our embassy with microwaves for 40 years beginning in 1952 during the Cold War to prove a point to the dogmatic American scientist. They decided to do this because American scientists ridiculed the Russians they began beaming microwaves at the embassy employee's below the

American Schwan guideline in America of 10,000 milliwatts. They decided to prove to the Americans how wrong they really were because they felt non thermal EMF's could also hurt the rest of the world because of Einstein's predictions.

This was called the "Moscow signal" in the 1960's and American scientists picked it up in 1962 when looking for it. An American scientist named Milton Zaret was hired to run [Project Pandora](#) to run a secret examination of the effect.

When this was all uncovered by the press in the 1970's in the States, Zaret said they only measured 18 milliwatts of EMF exposure to the ambassadors office. Russian documents, however, showed a different story. They used between 4000-6000 milliwatts, and **used that dose on purpose**. They made sure to use a dose way below American Schwan standards of 10,000 milliwatts to prove they were good scientists. In the mid to later 1960's this is when the microwave syndrome papers became numerous in the Russian literature, I read. The things they described were linkages to eye strain, sympathetic overdrive, headache, blurred vision, and loss of concentration and demolished sleep and cold urticaria. There were also quite a few reports of cancer incidence and prevalence raised.

In 1969, According to the Boston Globe reports, USSR and American scientists secretly met to discuss the effects of EMF's in New Mexico at the Sandia corporation close to Los Alamos. The Russian scientists always brought the real data they found and the American scientists were all "no effect" guys sent by industry and government contractors. The Americans found in 1969, a serious flaccid paralysis that developed in rats and primates with low EMF exposures. These reports of flaccid paralysis matched what we see in polio victims. The reports I read seemed to resemble what a doctor would also see in an human induced for a general anesthetic prior to surgery. I knew of animal studies done by Dr. Becker in salamanders that he induced general anesthesia alone, using nothing but high frequency EMF's. The link got me thinking

about humans, consciousness, neurosurgery, and medicine even some more.

I found this amazing quote made by Schwan that clearly showed me he knew precisely what he found when he said, " "When I was first approached about biophysics (of EMF), I thought that you couldn't mix physics with biological material. As I became aware of what was happening in electrophysiology and the ionizing radiation field, my ideas changed. I began to believe that we were now at the threshold of more to come... I wanted to do physics of biological objects. This seemed revolutionary to me. In other words, I was not..motivated to study effects of x-rays... I was not interested..in questions raised by medical people or biologists. I wanted to look.. with a physicist's eye... Some of my early colleagues at the medical school at Pennsylvania claimed it to be heresy." **Here was my first evidence that medicine did not understand quantum field theory at all.**

Just so we are all clear here, Schwan guidelines of 10,000 milliwatts is based upon thermal damage from EMF's and nothing else. It does not consider non thermal EMF radiation effects on cells. These standards remain in effect for Americans even today. This is why your cell phone has the warnings in the package insert. All the other syndromes surrounded with EMF's happen are far lesser doses and frequency. Get the picture yet, people? This is when my reading went from leptin to quantum field physics of Einstein, Heisenberg, Alexei Zamolodchikov.

The Russians stopped zapping our embassy in 1979, but the public never got the real implications of non thermal EMF because their world was not yet swimming in it nor where they addicted to it. In 1976, the Boston Globe picked up the scent of this story when Ambassador Walter Stoessel developed a rare blood cancer, lymphoma. He also was suffering from severe headaches and bleeding from his eyes. Two of his predecessors, Charles Bohlen and Llewellyn Thompson, also died of cancer



after their stints in Moscow. The primates used in Project Pandora at Walter Reed and University of Pennsylvania, also soon showed under testing, evidence of cancer and chromosomal abnormalities as well. EMF's pull apart electrons from protons and leave nothing but destruction in its path.

In January of 1977, under severe PR duress from the Boston Globe expose, the State Department ran a series of blood tests on all Moscow staffers and found everyone of them had altered labs.

40{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} had higher WBCs counts like a clinician would see in an incipient leukemia case. The government's official report blamed this on an 'unusual microbe' in the embassy. No results were ever officially released and the files mysteriously were lost and the only way they found out about it was from [the Boston Globe reports done 10 years later](#). This really happened in our country. Russia was trying to help us as a species, from ourselves. Do you still feel good about your microwave, iPad, radio, TV and laptop now? Still think all that stuff I told you about Steve Jobs and [Michael Jackson](#) was the ramblings of a madman?

In 1976, the federal government gave all Moscow employee's a **20{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} hardship raise** for an "unhealthy post" and installed aluminum shielding 100 times weaker than what is found on standard military bases today. In 1967, President Johnson asked Premier Kosygin to stop the bombardment at the Glassboro talks. The problem for the American government was the Russians could have said there was **no risk** because American standards were never breached in this test. After all, that is what they still tell us today? The American government would have had much explaining to do to the public, if they were aware of non thermal EMF damage. They were not in 1976 and they are hoping you still remain blind to it. Considering where the world was headed with the advent of the tech

revolution beginning in California in the 1950's and 60's this was not tenable politically or economically as we transitioned out economy from manufacturing to technology and service industries. The American embassy in Moscow is part of American foreign soil and the Schwan guideline sits at 10,000 milliwatts even today. The Russians proved a big point to us, and to the world, but it happened when we lived in a non tech world so the message fell on deaf ears. Only smart physicists would have gotten the message, not the general public.

Today, **you need to know it because that is your world you live in.** Most of the young paleo's you all respect, never heard about it because they were not born in the mid 70's. There were a few of us around back then, and I think it is our job to tell you what happened. The Americans still have not changed their standards, even today after what transpired in Moscow. This tells you not to expect any changes today in American policy today because the dollars and stakes are way higher in 2013.

All of this is directly linked to the slow destruction of our chronobiologic mechanism that is all linked to quantum mechanics. The EMF series is trying to show you that EMF's block your molecular clock in many ways. You better start connecting the dots folks. It should be awfully clear now what I am showing you. I know I need to show you biologic super computing being disrupted in an organ system, but just give me some time. I said at Paleo Fx in 2012, I had a lot of truth bombs coming, they are coming.

The biologic effect is not the same for every person exposed, but every person is altered in some fashion unbeknownst to them. This slowly kills you on many levels you are unaware of. Sadly, modern medicine is not aware of this danger either as the quote above shows. I never had one EMF lecture in medical school and not one of my neurosurgery textbooks talks about the chronobiologic risks present.

My critics have no idea how quantum mechanics affects the molecular clock. I think I have shown you all a lot of evidence for it. They continue to believe their idea of "evolution biology" is the only way it could work, based upon what is published. Well, today you see how what you did not know might just get you killed.

Why do I care about my critics? Because only 40{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of Americans believe in evolution today. This message is only going to get to those 40{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} because religious dogma might be blocked by any idea that uses evolution to understand a solution. You need to understand evolutionary theory to see where this is all going.

This is why I chose "their world" to drop this in. If you understood the video above, all of us are entangled in this mess "quantum-ly". It means what happens to my critics, happens to me as well. We are all in this together. The Russians tried to warn the Americans for the same reason.

People without a science background may struggle with this info, but no science geek should.

No one cares how much you know until they know you care. The people who have laughed at me need to hear this more than they can imagine. Moreover, these "paleo kids" are the people using modern man made EMF's to get the paleo message out. They are clueless about what they do not know about evolution. It is my job in the tribe to get that message to them. What they do after that becomes their issue. They might be able to help some of those people who I can't reach.

The people using EMF's in industry are printing money, so do not expect them to stop doing what they are doing. Only the few, who get this message loud and clear will understand precisely what it means. This is not an easy pill to swallow for any of us. You must do all that you can to protect you and your family. What we have done to our ionosphere is

unprecedented in human evolution. We have altered our magnetic field and it is causing massive quantum effects (decoherence) on our cells and DNA to sense proper molecular time.

EMF impacts at any frequency is related to its power density. The biologic effects are measured in microwatts per square centimeter. There is no dose response curve like we see in drug toxicity studies. It appears any dose can cause some biologic effect. EMF's that have low power density do some strange things to biology. Because of how the Schumann resonance and our ionosphere work in unison these waves never end or disperse in our atmosphere. They continue to propagate and cause damage to us as time elapses. This is why J.S. Stanton and Seth Roberts are asking good questions after J.S. AHS 2012 talk. The answer is in this blog.

It gets worse. Doctors can not tell how much energy is absorbed by the cells or by what part of the body gets the most EMF. This holds true for both electric and magnetic fields. Different species of animals also distort these fields differently too. Fur feathers, fat content, skin thickness, inflammation status, body type and shape complicate the quantification of EMF's biologic effects. This implies what we find in one species is not what will happen in others, and this will allow them to confuse non geeks and the media easily. For humans, this means we must study the EMF effect on us directly to get the answers we need. Little humans are at greater risks than adults. Think about that when you buy your next iPad or iPhone for you children or when you give someone a baby monitor for a shower gift. Since 1990, **the entire population of the globe is the subject of this giant experiment.** [So far in 22 years, the results should be scaring the bejesus out of us, but ironically that is not the case.](#)

We love when our phone company comes out with a new generation of EMF power (3G to 4G and now to 5G). Without consciously realizing we just put more bullets in a gun that is killing

us. Few people regularly engage in Russian roulette daily with a 45 caliber gun, but in today's world most people do it 20-40 times a day to their own head with their cell phone.

Howard Friedman, Robert Becker, and Charlie Bachman all great U.S. scientists, found in the middle of the 20th century that "abnormal natural" electromagnetic fields were affecting the human mind and causing a direct increase in psychiatric hospital admissions. They went a step further. They took human volunteers and exposed their brains to magnetic fields placed so that the lines of force passed through their brain ear to ear, cutting across the brain stem- frontal electric current that is present in the human brain normally. This is very similar to what one does every time they talk on a cell phone today. The fields they used were from 5-11 gauss in strength. This was 10-20 times the Earth's background magnetic field and well above the strength of most of the solar or lunar storms humans normally faced in the last 4 million years. They found that steady fields produced **no** biologic affect, but when they modulated the field ever 5 seconds (pulsed it) or so people's cognition and reaction times slowed dramatically. This is very similar to what happens to a salamander when it is induced for general anesthesia and made unconscious **using EMF alone** as a general anesthetic. It seems humans are very sensitive to a pulsed EMF over steady state EMF quickly. **Today most of the man made EMF's we face are pulsed in our world.** They were not in 1976. This explains a lot.

Then Yuri Kholodov decided to hit rabbits with 100-200 gauss in their heads and it caused direct cell death in their brains at autopsy. This report stopped most US scientists from doing further testing on humans once they read it. Friedman repeated the Russians work and did detailed anatomic assessments and found that the rabbits had a protozoal infection that was additive in killing them with the EMF. He found that the the resistance of the brain's immune system was

radically altered in half the rabbits, while the other half had control of the infection. When EMF's are highly pulsed immune alterations and infection result. Do you think is related at all to autoimmunity in humans? Care to guess why an ICU might really be the last place you want to be?

Friedman later work found that the rabbits all had large amounts of cortisol in their blood and in their brain caused by these pulsed magnetic fields. This was like a prolonged chronic stressor found in a life long disease. The elevated cortisol would alter glucose metabolism in these animals.

**Geeks:** A pulsed magnetic field re creates an electromagnetic field environment that things have to adapt to. Life is coherent in the Schumann resonance when this is the **only magnetic field** on Earth. This electromagnetic field sets the standard that all biology has to reacts too and it dictates how biochemical reactions, fluxes, and kinetics really occur and our explained in textbooks. Not one biology book currently in print realizes that the rules of biochemistry reaction times has changed as our electromagnetic field has also changed. I did 8 years ago. It explained every last thing about medicine that confused me. It explained why our literature is close to worthless and why science today is a shell game. Classical physics can not explain the current biochemical fluxes, because it does not. This is a real problem for an organic chemist in our modern world is his current beliefs. A person of scientist who understands quantum field theory dynamics will never make this error. The problem is no doctor, organic chemist, or biologist ever learns these things. **If you change the electromagnetic field you change the coherence of the system of life.**

If you think this is bullshit, this is precisely how an MRI works today in hospitals. Its magnet creates a new stronger artificial field and all our protons and electrons are force to oscillate at a new electric phase of this field. We measure that phase and then we stop the magnetic field and measure the

changes when they go back to the one that is normally present on Earth. The difference in relaxation states tells a neurosurgeon what is happens in the molecular framework of the body. This is how I knew everyone in my clinic had inflammation and positive charges when I looked for them.

When everyone has medical issues it is not a diet causing it, then you should remain curious. I realized the Earth's magnetic field has also been shifted by technology and our cells were reacting to it very quickly to lose electrons, with the result being a signal showing molecular chaos. We call that a stress response or inflammation in terms non geeks would understand. In physics, we call that a total loss of coherence and energy efficiency. From [EMF 2](#) we learned life is energy and energy is life. If you are constantly losing electrons to the environment because your electromagnetic field has changed you are speeding to death. These are Einstein's laws.

This experiment I mentioned above, was just replicated in humans using cell phones that I linked to earlier in the EMF series. [Cell phones increase permeability of the gut barrier and the brain blood barrier to alter physiologic function directly.](#)

Dr. Frey then showed the blood brain barrier in humans gets more permeable to glucose and glucose metabolism is up regulated by the non thermal EMF effects. This causes massive **decreases in ATP** production and causes mitochondrial inefficiency to develop quickly. Think about what you just learned in [EMF -4](#) about why you have never personally seen the PPP now. **You don't see it because your timing is so off you can access it.** This is why it is in paleo's blind spot. Here is the new correlate I will make for you soon: Loss of ATP correlates with quantum de-coherence in the cells cytoarchitecture by altering one thing.

Friedman repeated his work in primates to see the effects. He found the effect occurred in **6 days** in them using a 200 gauss

magnet. He also found the primates were able to adapt to the field after a period of time. This seemed to parallel what Hans Selye had found on chronic stress responses in humans.

Selye had shown in humans if a chronic stressor remained in place, it would cause stress decompensation and this would make the person more susceptible to other stressors, like infectious disease and cancers. This is how neolithic diseases are generated in humans today. Our life is lived in the stress zone

100{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6} of the time. Think about why PTSD is so common in young soldiers in war. They walk into war already stressed by the EMF and they get hammered there. I find it ironic, that the military was behind the use of EMF and yet this is precisely what will take them out eventually. Soon there will be no troops to train because they wont be able to find anyone fit for duty because of their EMF exposure. The parallels are nothing short of remarkable when you examine them for yourself and erase you beliefs of the static world of physics, biology, and chemistry. **None of them can explain these effects, because they are all electromagnetic effects, and those effects are only adequately examined by quantum field theory.**

This is where Heisenberg, Einstein and Max Born all live. There are no biologist there in that group until now.

In the 1970's two Russian groups found stress hormones released in rats exposed to microwaves, even when they were briefly irradiated. Polish work revealed the same reaction to 50 Hz electric fields used in home wiring. In fact they pushed their experiments and found clinic syndromes that resembled what we would call [adrenal fatigue](#) today with ASI testing. They also reported brain hemorrhage with a **ONE MONTH EXPOSURE** to a 50 HZ, 130 gauss magnetic field. Dr. Udintsev, a Russian biophysicist, used ELF fields to show activation of a flight or flight response in rats in one day. The unusual part of the experiment was that the rats showed the flight or flight response clinically, but the humans and rabbits did



not. This ambiguity was explained by JJ Noval at NAMRL in Pensacola, when he showed that magnetic fields that vibrated in the ELF range would increase the levels of acetylcholine in the rat brainstem directly. We now know this happens routinely in modern humans because of MEG and fMRI data in all life forms. The thing that caught my attention was that the fields that Noval used in his work was one's that we would find in any office in 1976. This shocked me when I thought about an office in the 21 st century.

It is clear that EMF is not going away in our life time because both industry, DOD, the State Dept., along with you, because modern humans clearly desire it in large quantities for their productivity and modern lifestyles. I no longer feel that way, I abhor technology. Most people who know me realize it quickly. Maybe now they are beginning to understand why I do. If you have been a forum member long enough you have heard my commentary on technology many times. People laugh when they hear it, I doubt they will any longer. It pains me to blog this. I have a 19 year old and a 12 year old and they world they inherent is on a collision course with death. I think it could happen in their life time or their children's life time considering what the data for modern disease is telling us since 1900. When I hear all these reports of soldiers coming home from Iraq and Afghanistan with PTSD I know what the cause is implicitly. I told Randy Brummit this over a year ago at Paleo Fx and it was why I changed my opening remarks there to address my concerns. After the speech, I think it also fell on deaf paleo ears. There was no way they were going to listen to a doctor to tell them to put their ipad down. That was their weapon of choice in changing the world. Little did they know it would be the thing that is taking them down regardless of their paleo solution.

ELF signals are low frequency but they penetrate seawater well. This allowed the Navy in 1969 to begin to use them to

track nuclear subs in 120 feet of water so they would not have to surface. There are numerous reports now that these waves destroy the navigation systems of whales and dolphins when they are used. Read some NOAA reports and you will get sick to your stomach what really really have known and for how long.

We learned about the seawater experiment in Wisconsin because in 1973 the newly passed EPA act covered this military use.

The act was used first to stop the Navy in Wisconsin. Once the military saw what the act could do they began a new method to keep this information away from us. They used an antenna that made a weak EMF, 1 million times weaker than a 765 kilovolt power line. They broadcast at 45-70 Hz. These waves were very close to the Schumann resonance frequency. Similar frequencies had already been shown to increase triglyceride levels, blood pressure, and alter brain waves in Russian experimental animals. We see all these effects daily in our clinic as physicians. Your doctor still has no idea why when you take your meds and eat like they tell you it makes little difference. Now you do. The EPA also wanted to know about the effects on surrounding life from the antenna in Wisconsin and in the ocean because of the Russian data and observations they made.

The scientists mentioned above, knew that these ELF EMF waves would **last forever** because they could not escape the ionosphere of Earth. This effect needed to be studied in human before it was used. The scientists on the committee wanted the project scrapped because of the serious health issues it raised, based upon the Russian data. In fact, these scientist were the **first ever U.S. scientists** to say in public testimony that EMF had many dangerous biologic effects that we were unaware of. This happened on Dec 6 and 7th of 1973. The Navy classified their recommendations at the end of the hearing so no one else could view the reports publicly.

Soon thereafter, electric companies became aware of the risks of 765 kilowatt power lines in animals and were shocked at the experiments when they were made aware of them. Most asked the

Navy for copies of this report and never got them. The Russians were generating more data on EMF's than any other scientific community at the time and still do, but you do not know this. Now you do. This was in the pre internet days so information sharing was slow and required translation. They found that lower fields that blocked the natural Schumann resonance and as a result, would cause mice to gain weight. Here was the linkage to leptin resistance for my own obesity. They saw massive evidence of the stress response I mention in the [Hormone 101 blog](#). They showed evidence of brain and bone tumors, early onset heart disease, and atherosclerosis in young animals after very small exposures to EMF. The period of cell life became an important variable in considering non thermal EMF effects. This is still not accepted by 'our' highly compensated US scientists who rarely publish. Ironic , no how they can make lots of cash but not yet publish a thing. I need to get a job like that.

This data was remarkable and not being made available to the world. Sadly, it is still not. Most people still believe it is not a problem because of Schwan's guidelines and the lack of protection from Washington D.C. Most people in the government and in industry who are paid scientists today say we need more study of the topic. In my view, if we waste anymore time doing that more people will first get sick, and then eventually die faster. That proof can be found on any epidemiologic charts you care to muster off the internet. People will cry correlation, not causation. They say it because they do not understand quantum field theory. I did not then, but I learned it. So if I am wrong, I have some good company.

In the late 1970's the Dept. of Energy replicated some of the Russian experiments and found similar results. Work in Ohio showed growth retardation in 3 generations, then it was repeated and then found three generations of obesity in the animals. The exact same fields produced a different disease

in animals from the same litter. It appeared males were more affected than females in these experiments. This gave me insight about how epigenetic information maybe passed in men to their offspring. The animals all had enlarged adrenal glands and pituitary glands when studied. Most of the animals developed glaucoma early. This was considered a disease of aging in 1975, today, we see it in all age groups. When all this was coming to light, power companies went out and hired scientists to criticize this science on methodologic grounds to buy themselves time. This is where they got the idea to fight the truth using other well paid scientist to obfuscate and confuse the data and observations. This would buy them time to ask for further studies that they in turn agreed to fund. By controlling the experiments they deigned experiments that would never show the real non thermal effects of EMF's on biologic systems. The government also has little interest in finding out these inconvenient truths either, they would rather shift the meme to carbon emissions instead (Al Gore alert). This is where we are today.

This has continued to be how they skirt the issue, even until today. Knowledge can help you when you understand the timeline and the things we do know now. This was a play out of the tobacco companies who also went through the same issue with cigarettes for 50 years. They were quite successful and so the EMF industry followed suit. While this went on, **NHANES charts have shifted in medicine.**

**Neolithic disease in humans is now explosive by anyone's standards and no one seems to know why. I think Einstein's science is a good starting point in this discussion.**

Everything we have originally observed in lab animals is now present in our species today on Earth. Yet, you all remain in the dark over it because you have not read the Russian, Polish, and American reports of their real scientific observations they made in the 50's, 60's and 70's. We have human evidence from the Moscow embassy experiment that is

nothing short of amazing. The linkage was not made in the 1970's because the commercialization of EMF was not yet begun in our country. Have you ever wondered why Russia has not developed their own tech revolution since they too were privy to all the physics of quantum semi computing that corporations in California were? Do you still think Steve Jobs is a great guy or did he live and die by his own sword? The biology linkage to physics is being done today in labs around the world for you to examine. You do not know this well either yet, but I am going to show you this info too. Scientists who are physics based (not biologist or chemists) know it is all tied to quantum field effects and they are betting that its quirkiness, will keep you blinded for more time as the cash rolls in and your addiction to technology grows. For every 10 percent rise in what a country spends on information and communications technology, [there's a 1 percent increase in obesity rates](#). This is what made me obese.

This is precisely how big tobacco kept the money train working for a long time before science caught up. How does the smoking risk differ from the EMF risk? The smoking kill radius is your body and the environment directly around you. Technology kill radius is the entire planet because the low frequency ELF EMF never ends when they are created according to Einstein. They can not escape the ionosphere so they live on disrupting your SCN forever. Whether you are scientist or not, don't you think this is a good enough reason to study it? Do you really think this is good for any living cells? After I describe the new paradigm of cellular biology and truly how it works you will be better able to answer that question for you and your family. It is time you educate yourself if you want to be a survivor.

The communications industry and the Department of Defense began to ask for committees all over our nation to study the effects of ELF EMF in the late 1990's and early 2000's. When they did act, they put "their" scientists on these

committees. You can draw your own conclusions. This is why today you live in a world swimming in massive EMF.

**This is why your molecular clock is ruined today and your brain can not tell time well.**

[The EPA has not surveyed the USA since 1979 for EMF levels.](#)

Wonder why? I think it is because they already know the answer.

## **Biologic effects shown hundreds of times over from ELF EMF's**

1. Altered chronobiology leading to stress response
2. CNS direct effects showing slowing of molecular actions and reaction speeds.
3. Poor short term memory, headaches, and altered sleep
4. Poor exploration of the local environment, motivation waning
5. Altered EEG readings consistent with a general anesthesia pattern
6. Permeable BBB and gut, with increased glucose metabolism
7. Increase in tumorigenesis due to fragility of RNA and DNA directly
8. Russians repeated showed low dose microwaves directly caused hypothalamic damage.
9. Increase excitability at neuronal synapses
10. Microwaves disrupt electron chain transport in mitochondria of rat brain. (Duke University)
11. Pulsed EMF's at lower frequencies directly inhibit firing rates of neurons (UCLA)
12. Depression and suicide rate correlating with EMF power lines above and below ground (magnetic fields avg  $22\{a7b724a0454d92c70890dedf5ec22a026af4df067c7b55aa6009b4d34d5da3c6\}$  higher suicide rates)
13. Raised RBC's WBC's, Platelets, Hemoglobin, and HCT
14. Leptin resistance and altered hormone panels. Sex

steroids, Vitamin D, melatonin, IGF and PRL levels altered.

15. Immune disruption leading to over active, under active, and autoimmune conditions.

So I ask you once again, watch [the video](#) after the first four EMF blogs and tell me are we really wrong; and is [CTIA](#) really correct?

- [EMF 1: Does Your Rolex Work?](#)
- [EMF 2: Einstein, Meet Leptin](#)
- [EMF 3: The Origin of Life](#)
- [EMF 4: Why Might You Need Carbs for Performance?](#)

If your success is defined as being well adjusted to injustice and well adapted to indifference, then we may not want successful people as leaders. We want great leaders who love the people enough and respect the people enough to be unbought, unbound, unafraid, and untimidated to tell the truth. – Cornell West

[Houston, we have a problem.](#)

We really need better leaders in D.C. to solve this. In lieu of this, you need to [protect yourself as best you can](#). For that, watch the [March 2013 webinar: EMF Rx](#).

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- [EMF Bootcamp REPLAY](#)
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## Additional Resources

- [Brain Gut 9: What Really Killed Michael Jackson](#)
- [Brain Gut 16: Adrenal Fatigue Rx](#)
- [EMF 1: Does Your Rolex Work?](#)
- [EMF 2: Einstein, Meet Leptin](#)
- [EMF 3: The Origin of Life](#)
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- [EMF 7: Quantum Prometheus](#)
- [Hormones 101: Clinical thoughts revealed](#)

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