

**EMF is killing many of us prematurely and is making many very sick**  
**Everything electrical and wireless emits EMF – electromagnetic fields**  
**and we are now virtually exposed all day and all night, every day**

**Sources include: wi-fi, mobile phones, mobile phone antenna towers,**  
**wireless baby monitors, electricity meters, smart meters, electrical devices**  
**and equipment, substations, powerlines, solar panel technology and other sources**

### **EMFs:**

- Attack our nervous systems including our brains leading to widespread neurological/neuropsychiatric effects and possibly many other effects. This nervous system attack is of great concern.
- Attack our endocrine (that is hormonal) systems. In this context, the main things that make us functionally different from single celled creatures are our nervous system and our endocrine systems – even a simple planaria worm needs both of these. Thus, the consequences of the disruption of these two regulatory systems is immense, such that it is a travesty to ignore these findings.
- Produce oxidative stress and free radical damage, which have central roles in essentially all chronic diseases.
- Attack the DNA of our cells, producing single strand and double strand breaks in cellular DNA and oxidized bases in our cellular DNA. These in turn produce cancer and also mutations in germ line cells which produce mutations in future generations.
- Produce elevated levels of apoptosis (programmed cell death), events especially important in causing both neurodegenerative diseases and infertility.
- Lower male and female fertility, lower sex hormones, lower libido and increased levels of spontaneous abortion and, as already stated, attack the DNA in sperm cells.
- Produce excessive intracellular calcium  $[Ca^{2+}]_i$  and excessive calcium signalling.
- Attack the cells of our bodies to cause cancer. Such attacks are thought to act via 15 different mechanisms during cancer causation.

Pall, Martin L, PhD Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University 5G: Great risk for EU, US and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them, May 17, 2018 – p 1-2.

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**EMF PROTECTION PROJECT**

# EMF

I expect we will see crash in human reproduction almost to zero... which I estimate to occur within about 5 years without any increases in our exposures. Obviously 4G and 5G will make the situation much worse. Similarly, I expect that the deterioration in brain function that we are already seeing will seal our fate if we fail to act rapidly and vigorously. Our collective brain function may become completely incapable of dealing with such a mega-crisis situation.<sup>1</sup>

Who is qualified to come to such an alarming conclusion?

After 18 years of research with a degree in physics and a PhD in biochemistry and genetics, Martin Pall put the pieces of the puzzle together to solve the question as to how EMF influences our biology. Pall explains that the physics and biology are each pointing to the same mechanism of action of EMF: EMF activates the critical VGCCs.

Information from the environment is translated into biological responses via the action of the cell membrane, the plasma membrane that surrounds all our cells which acts as the cell's skin as well as its brain. The cell membrane is more accurately a 'crystal semiconductor with gates and channels'<sup>2</sup> VGCCs are channels in the outer membrane of the cell and each VGCC has a voltage sensor, a structure extraordinarily sensitive to the electrical forces from EMF.

The highest density of VGCCs are found in your nervous system.

The pacemaker cells of your heart have the highest density of VGCCs.

*(The heartbeat is controlled by pacemaker cells)*

The third area with densely populated VGCCs is the reproduction system, particularly the male testes.<sup>3</sup>

*(The sperm cell which is essentially designed as a means of delivering genes, carries only information)<sup>4</sup>*

Dr Martin L Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences, Washington State University, BA degree in Physics, Phi Beta Kappa with honors, Johns Hopkins University PhD in Biochemistry & Genetics, Caltech, USA, is a recipient of a Global Medical Discovery Award in 2013 and noted as worthy of nomination for a Nobel Prize.

1 Pall, Martin L, PhD, 5G: Great risk for EU, US and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them, May 17, 2018 – p 2.

2. Lipton B, *Spontaneous Evolution: A Positive Future (And A Way To Get There From Here)* p 140

3. The Harmful Effects of Electromagnetic Fields Explained September 03, 2017 Dr Joseph Mercola interview with Martin Pall

4 Lipton B, *Spontaneous Evolution: A Positive Future (And A Way To Get There From Here)* p 65

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Because behaviour is created through the interaction of proteins with their complementary signals, there are really only two sources of dis-ease: either the proteins are defective or the signals are distorted.<sup>1</sup>

All wireless communication devices put out polarized EMF that carries information via pulsations. Both the pulsations and the polarization make EMF much more biologically active.<sup>2</sup>

Cells, tissues and organs do not question information sent by the nervous system.<sup>3</sup> Built into the cell membrane are protein switches that respond to the environmental signals by relaying their information to internal protein pathways. Environmental signals acting through membrane switches control cell functions. Altered signals can inhibit or modify normal behaviours and lead to the expression of dis-ease. Health is predicated upon the nervous system's ability to accurately perceive environmental information and selectively engage appropriate, life-sustaining behaviours.

**The real secret to life:  
perceptions control behaviour at both the cellular and human level<sup>4</sup>**

## Cells perceive EMF as a Threat

Cells only make stress proteins when they have come into contact with something that they feel is harmful. EMF stimulates stress proteins (indicating an assault on the cell).<sup>5</sup> Activating the VGCCs produces a chain of events that ultimately decimate mitochondrial and nuclear DNA, their membranes and proteins.<sup>6</sup> DNA contains the genetic information and is constantly at work making proteins required for life. The more fear or stress an organism perceives, the more energy it diverts for protection. A cell cannot be in a state of growth and protection at the same time. Ideally, energy is expended for growth and reproduction with as little as possible spent on defense.

Nature designed protection systems with the hope that they would never be used or, at worst, used sporadically to help organisms escape the occasional clutches of life-threatening predators. If an organism's need for protection is out of balance and plagued by chronic ongoing fears and threats, the excessive energy resources required for protection directly compromises energy reserves needed to sustain health. The body's defense mechanisms were never intended nor designed to be used all day and all night. In severe situations, an organism will fight or flee until all of its accessible energy reserves are depleted and it falls victim to the predator.

## Organisms that failed to properly manage their life energy reserves are extinct

1 Lipton B, *Spontaneous Evolution: A Positive Future (And A Way To Get There From Here)* p 23

2 Pall, Martin L, PhD 5G: Great risk for EU, US and International Health! Compelling Evidence for Eight Distinct Types of Great Harm Caused by Electromagnetic Field (EMF) Exposures and the Mechanism that Causes Them, May 17, 2018 – p 2

3 Lipton B, *Spontaneous Evolution: A Positive Future (And A Way To Get There From Here)* p 25

4 Lipton B, *Spontaneous Evolution: A Positive Future (And A Way To Get There From Here)* p 23

5 The BioInitiative Report 2012, Conclusions Table 1-1 (Genetics and Neurological Effects Updated March 2014), Stress Proteins and DNA as a Fractal Antenna for RFR, Blank, 2012, Section 7.

6 The Harmful Effects of Electromagnetic Fields Explained September 03, 2017 Dr Joseph Mercola interview with Martin Pall

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### **EMF is taking us out prematurely...**

If you have any of these conditions, EMF exposure is a major contributing factor. Take immediate and aggressive steps to remediate your exposure: Anxiety; Depression; Autism; Alzheimer's; Cardiac arrhythmias (associated with sudden cardiac death); Atrial fibrillation / atrial flutter; Premature atrial contractions (PACs) and premature ventricular contractions (PVCs), also known as heart palpitations; Tachycardia (fast heartbeat) and bradycardia (slow heartbeat).

Professor Emeritus Martin Pall PhD and Mercola J Dr, *The Harmful Effects of Electromagnetic Fields Explained* September 3, 2017

### **EMF and rising cancer rates...**

Radiation from our telecommunication and powerline technology is damaging the DNA in our cells. It is clear to many biologists that this can account for the rising cancer rates. EMF damages and causes mutations in DNA. A variety of forces, both internal and external, affects the rate at which DNA damage occurs. EMF is one of these forces.

Associate Professor Martin Blank PhD on behalf of the International Scientist Appeal - [emfscientist.org](http://emfscientist.org) and *Overpowered: What Science Tells Us About the Dangers of Cell Phones and Other WiFi-Age Devices*, 2014

### **EMF and Diabetes 3...**

EMF has been shown to raise blood glucose levels and changes insulin requirement in diabetics. In 2008, 'type 3' diabetes was determined - influenced by environmental exposure to electromagnetic pollutants.

Havas, M, Stetzer D, *Dirty electricity and electrical hypersensitivity: Five case studies*, World Health Organization Workshop on Electricity Hypersensitivity, Prague, Czech Republic, 2004.

### **EMF and mitochondrial dysfunction and accelerated ageing...**

In a nutshell, it dramatically accelerates the aging process. EMF activates the VGCCs in the outer cell membrane, which triggers a chain reaction of devastating events that, ultimately, decimates your mitochondrial function and causes severe cellular damage and DNA breaks. Activating the VGCCs produces excessive amounts of ... hydroxyl free radicals which decimate mitochondrial and nuclear DNA ... The end result is mitochondrial dysfunction, which we now know is at the heart of most chronic disease.

Mercola J Dr, *The Harmful Effects of Electromagnetic Fields Explained* September 3, 2017 and *The Real Dangers of Electronic Devices and EMFs* September 24, 2017.

### **Eliminate EMF as much as possible from your life to gain a clearer picture of your health**

Very recently, new research is suggesting that nearly all of the human plagues which emerged in the twentieth century, like common acute lymphoblastic leukemia in children, female breast cancer, malignant melanoma and asthma, can be tied to some facet of our use of electricity.

Rees C and Havas M, *Public Health SOS The Shadow Side of the Wireless Revolution - 110 Questions on Electromagnetic Pollution*, 2009

The inescapable conclusion of these findings is that the twentieth century epidemic of the so-called diseases of civilization, including cardiovascular disease, cancer, diabetes and also suicide, was caused by electrification and the unique biological responses we have to it. A large proportion of these diseases may therefore be preventable.

Professor of Medicine, Samuel Milham, MD MPH *Dirty Electricity and the Diseases of Civilization* 2010

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