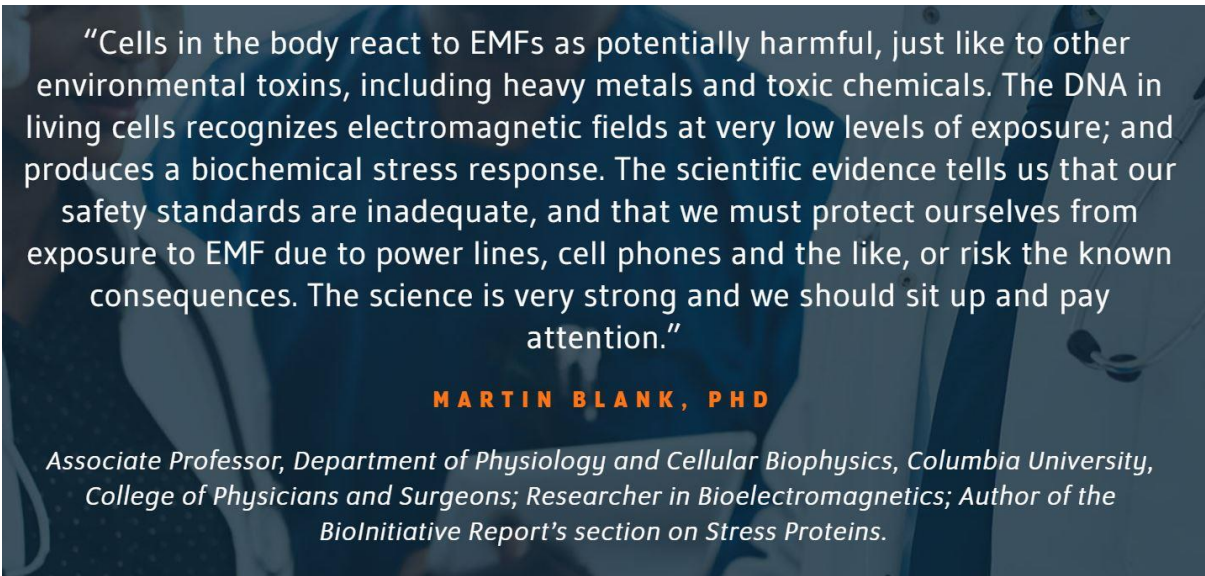


Pay attention to EMR health risks

The telecommunications industry worldwide is in denial about the compelling evidence of harm to human health, and growing evidence of environmental risks, from ever increasing amounts of- and higher frequencies of microwaves and radio frequency electromagnetic radiation (RF EMR) used to power wireless devices. Dr Cindy Russel (Russel, 2018) has written a thought provoking paper on the public health and environmental implications of RF EMR, which are significant not only for people who are already electrosensitive. She reviews the

- evidence of existing health risks and potential exacerbation of adverse health outcomes as 5G is further developed and implemented;
- government and World Health Organisation (WHO) policies and guidelines; and
- all the telecommunication radio frequency theory and proposed additional frequencies to be incorporated into the new 5G standard;

and points out that it will be years or decades before the true health consequences are known, and because everyone is exposed and because many other toxic exposures and factors also affect us, it will be next to impossible to prove cause and effect.



“Cells in the body react to EMFs as potentially harmful, just like to other environmental toxins, including heavy metals and toxic chemicals. The DNA in living cells recognizes electromagnetic fields at very low levels of exposure; and produces a biochemical stress response. The scientific evidence tells us that our safety standards are inadequate, and that we must protect ourselves from exposure to EMF due to power lines, cell phones and the like, or risk the known consequences. The science is very strong and we should sit up and pay attention.”

MARTIN BLANK, PHD

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Here's a list of the major adverse biological health effects from non-ionising radiation detailed by Russel (2018) and Pall (2020), backed up with supporting references:

- Addiction (digital dementia) – leading to a dysfunctional society
- Neurodegeneration – caused by free radicals creating oxidative stress that underlies inflammation and disruption of cellular energy production (in mitochondria)
- Cataracts – caused by oxidative damage and leading to blindness
- Brain and other cancers – developing from cellular oxidative damage
- More people becoming electrosensitive – increasing risks of adverse neurological, cardiovascular and respiratory effects
- Immune suppression – by suppressing white blood cell production and hence immune mediated inflammatory responses, which we need for infection control
- Increasing allergies – from proliferation of mast cells that release histamine and inflammatory chemicals (cytokines)
- Increasing autoimmune disease – due to microwaves dysregulating calcium signalling that controls the autoimmune response

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- Chronic fatigue – due to mitochondrial dysfunction caused by oxidative damage
- Infertility – mainly attributed to sperm damage in males
- Developmental defects – because of cellular DNA damage
- Potential antibiotic resistance – because of effects on our microbiome.

Some of these effects (nervous system, heart and immune system) are thought to be mediated by receptors in our skin exposed to microwaves. These receptors activate biochemical reactions that affect the whole body (vitamin D production is just one example). Another potential mechanism of harm is the theory of electrical interference with the passage of calcium ions (Ca²⁺) through cell walls (which is controlled by potential difference between inside and outside of cells), leading to excessive intracellular calcium i.e. too much inside cells, and which leads of damage – including mitochondrial dysfunction – caused by a chain of oxidising reactions. Professor Martin Pall (Professor Emeritus of Biochemistry and Basic Medical Services at Washington State University) has been researching this and writes extensively about this voltage gated calcium channel dysfunction (Pall, nd).

There are many web-based resources that are compilations of the research providing evidence of harm and explanations of mechanisms of harm, by collaborations of scientific and medical professional calling for a halt to this unsafe telecommunications technology roll out. Three of the best resources I've come across and use for my research are:

- Physicians for Safe Technology <https://mdsafetech.org/> - providing a body of scientific literature addressing adverse health effects in great detail
- Environmental Health Trust <https://ehtrust.org/>
- Bioinitiative Report 2012 <https://bioinitiative.org/>

Some people will choose to want to understand more, or to not want to be informed or to have to think critically about these issues. Reading through these information resources may be enough to motivate some to want more caution, more safety assessments, more alternative safer technology options and ways to mitigate harm, and to understand the reasonableness of advocating for a moratorium on this rapid technological roll-out until the safety issues of existing exposures and additional exposures with the planned technology have been properly investigated and resolved as a public health issue.

There ARE safer technology innovations happening, but which are less well known about with current marketing narratives, industry standards and government policies. I want safer options for keeping connected and living and working efficiently in a modern world. Don't you?

References

Pall M, 2020, "How wireless causes harm", 5G Summit 2020 Worldwide Call to Action.

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Russel C, 2018, "5G wireless telecommunications expansion: Public health and environmental implications", in Environmental Research, <https://www.sciencedirect.com/science/article/abs/pii/S0013935118300161?via%3Dihub>