- 1. www.telegraph.co.uk
- 2. http://www.emfcenter.com/emffaqs.ht m#B1.What are Electromagnetic Fields (EMFs)
- 3. http://www.thesundavtimes.co.uk/sto/n ews/uk news/article147789.ece
- 4. http://www.forbes.com/sites/robertszcz erba/2015/01/13/study-suggests-wi-fiexposure-more-dangerous-to-kidsthan-previouslythought/#6e49cd625fdc
- 5. http://www.telegraph.co.uk/news/ukne ws/1481865/Scientists-serious-aboutelectricity-sickness-claims.html
- 6. http://www.independent.co.uk/lifestyle/health-and-families/healthnews/warning-using-a-mobile-phonewhile-pregnant-can-seriously-damageyour-baby-830352.html
- 7. (Executive Summary California EMF Risk Evaluation June 2002)

16

Our world today is filled with electrical devices. People have televisions in their homes and cars. computers or laptops on their desks, and mobile phones in their pockets. Electrical devices permeate so much of our society, that most people could not imagine life without them. Yet, is this technology a blessing or a curse?

To the Chief Executive of a £500 million chilled food manufacturer, this technology is more of a curse. "Brian Stein cannot use a phone for longer than a few minutes. Modern cars and electrified trains are out of bounds and long distance flights are impossible. He cannot use a computer and colleagues

1

Use the cell phone on speaker phone and set it away from your body.

Eat plenty of antioxidants— Antioxidants help your body to deal with some of the free radicals that EMFs may cause. Vitamins A. C. E. are especially good.

If you must enter an area with high EMFs, wear clothing made with a protective material such as "Naturell" or "Swiss Shield". But watch out! There are many gimmicks selling on the market today.

http://www.lessemf.com/personal.html

14

Some studies also have found that

cordless phones, microwave ovens, Wi-Fi, wireless routers and other devices, *TV/radio/cell towers. etc.* "<sup>2</sup>

A 2005 article in The Sunday Times reported: "A GOVERNMENT agency has acknowledged for the first time that people can suffer nausea, headaches and muscle pains when exposed to electromagnetic fields from mobile phones, electricity pylons and computer screens. The condition known as electrosensitivity, a heightened reaction to electrical energy, will be recognised as a physical impairment."<sup>3</sup>

"Allergies" to EMF sometimes called electromagnetic hypersensitivity (EHS), are on the rise, although the topic is hotly

3

three of the DHS scientists are inclined to believe that EMFs can cause some degree of increased risk of childhood leukemia, adult brain cancer, Lou Gehrig's Disease, and miscarriage."<sup>7</sup>

Although many in science are still skeptical, one must ask, "Is it is better to prevent possible problems before they occur or is it better to wait until all problems have been scientifically proven and we are reaping results we could have prevented?"

## What can I do about EMFs?

Many people are probably wondering at this point, what they can do since EMFs are a part of everyday life. Here are a few tips of what you can do to protect

12

chloroform, gasoline fumes, or the pesticide DDT. The International Agency for Research on Cancer (IRIC), part of the United Nations' World Health Organization (WHO), classifies these and more than 250 other agents as Class 2B Carcinogens – possibly carcinogenic to humans. Another entry on that same list is radiofrequency electromagnetic fields (RF/EMF). The main sources of RF/EMF are radios, televisions, microwave ovens, cell phones, and Wi-Fi devices."<sup>4</sup>

Dr. Neil Cherry of Lincoln University, New Zealand said; "There is a strong evidence that EMFs and radio/microwave frequencies are associated with accelerated aging

5

pregnant women who use cell phones have children with more behavioural issues. "Women who use mobile phones when pregnant are more likely to give birth to children with behavioural problems, according to authoritative research. A giant study, which surveyed more than 13,000 children, found that using the handsets just two or three times a day was enough to raise the risk of their babies developing hyperactivity and difficulties conduct, emotions and relationships by the time they reached school age. ... The results of the study. the first of its kind, have taken the top and scientists who conducted it by surprise. But they follow warnings

associate professor of neuroscience at the Karolinska Institute in Sweden, has been studying EHS for 20 years. He has shown in experiments that there is an increase in the number of mast cells near the surface of skin when exposed to electromagnetic fields, a similar reaction to that when it is exposed to radioactive material "5

The Bioinitiative 2012 Report reported that, "Many EMF frequencies in the environment can and do cause DNA changes." "Bioeffects are clearly established and occur at very low levels of exposure to electromagnetic fields radiofrequency radiation. Bioeffects can occur in the first few minutes at levels associated with cell and cordless phone

with

debated. The Swedish Government recognized EHS as a physical impairment in 2000, and a French court awarded a 39year-old woman around \$900/month in disability benefits because of her electromagnetic hypersensitivity, yet skeptics of the sensitivity are very prevalent.

\*It should be stated that while some people are highly sensitive to all EMFs it is RF radiation that has been found to have the worst effects and affect the most people. RF is often connected to wireless devices and the highest sources of it today are found in Wi-Fi, cellphones, and cordless phones.

An article on Forbes stated: "Most parents would be concerned if their children had significant exposure to lead

4

use. Bioeffects can also occur from just minutes of exposure to mobile phone masts (cell towers), WI-FI, and wireless utility 'smart' meters that produce whole-body exposure. ...Many of these bioeffects can reasonably be presumed to result in adverse health effects if the exposures are prolonged or chronic. This is because they interfere with normal body processes (disrupt homeostasis), prevent the body from healing damaged DNA, produce immune system imbalances, metabolic disruption and lower resilience to disease across multiple pathways."

The Bioinitiative report also speaks about the effect on the Blood Brain Barrier.

yourself. Even if you are not already sensitive it would be best to prevent sensitivity from occurring in the future.

• Limit your exposure as much as is possible—Avoid places of high EMFs. Use wired internet in your home, instead of Wifi. Use wired computer mice. Use a wired phone.

• If you must use a cell phone, do not talk on it while you are traveling, the phone will be constantly searching for signal and its radiation levels will be higher. **DO NOT** carry it on your body.

13

"The BBB {blood brain barrier} is a protective barrier that prevents the flow of toxins into sensitive brain tissue. Increased permeability of the BBB caused by cell phone RFR {radio *frequency radiation} may result in* neuronal damage. ... Summing up the research, it is more probable than unlikely that non-thermal EMF from cell phones and base stations do have effects upon biology. A single 2-hr exposure to cell phone radiation can result in increased leakage of the BBB, and 50 days after exposure, neuronal damage can be seen, and at the later time point also albumin leakage is demonstrated." (Salford, 2012 – Section 10)

have to switch theirs off in his presence."<sup>1</sup> Mr Stein is a sufferer from electromagnetic hypersensitivity and, along with the above mentioned things, can no longer watch television and has to switch the mains off at night. His office only contains lighting and a hands-free speaker phone.

Some may have heard of Electromagnetic fields or EMFs, "a type of low-frequency electromagnetic radiation emitted from virtually everything electrical and electronic in our modern world — power lines, transformers, electrical panels, building wiring, computers, lights, clocks, appliances, televisions, hairdryers, cell phones,

2

(enhanced cell death and cancer) and moods, depression, suicide, anger, rage and violence, primarily through alteration of cellular calcium ions and the melatonin/serotonin balance."

EMFs also appear to have effects on the brain. "While we aggressively investigate the links between autism disorders and wireless technologies, we should minimize wireless and EMF exposures for people with autism disorders, children of all ages, people planning a baby, and during pregnancy," says Martha Herbert, MD, PhD.

One Scientist has shown that some of the effects of EMFs are similar to those of radioactive material. "Olle Johansson, • Buy an EMF meter to test your environment.

http://www.radmeters.com/

• Especially sensitive groups like the elderly, children, babies or pregnant woman *(because of the developing baby)* should take precautions as they are most likely to be negatively affected.

For further info watch the documentary, Invisible Danger, available on YouTube by Citizen of the Realm

15

against both pregnant women and children using mobiles by the official Russian radiation watchdog body, which believes that the peril they pose 'is not much lower than the risk to children's health from tobacco or alcohol."<sup>6</sup>

"On behalf of the California Public Utilities Commission (CPUC), three scientists who work for the California Department of Health Services (DHS) were asked to review the studies about possible health problems from electric and magnetic fields (EMFs) from power lines, wiring in buildings, some jobs, and appliances. The CPUC request for review did not include radio frequency EMFs from cell phones and radio towers." "To one degree or another, all

6