

# Frequently Asked Questions

## 1. What is the WaveRider ?

The WaveRider is an anti-radiation device that protects us from the harmful effects of electromagnetic radiation (EMR).

The scientist who invented it, Dr. Igor Smirnov, was awarded two US patents for this technology.

## 2. What are the sources of electromagnetic radiation that affect us everyday?

We actually live in an environment where man-made electromagnetic radiation is very pervasive. Basically, electromagnetic radiation is emitted whenever electrical equipment is used.

Around the home, hair-dryers, microwave ovens, refrigerators, TV, computers, cordless phones, vacuum cleaners, baby monitors and stereo receivers are all sources of electromagnetic radiation.

Outside the home, we are continually bombarded by electromagnetic radiation from commercial WiFi routers, video screen displays, cell phone towers, radio transmissions, GPS systems, bluetooth and other electrical installations.

Those of us who use cell phones actually carry around a source of electromagnetic radiation with us everywhere we go.

## 3. What are some of the harmful effects of electromagnetic radiation?

According to Dr. Neil Cherry of Lincoln University, New Zealand.

“Scientific studies at the cellular level... show compelling and comprehensive evidence that RF (radiofrequencies, which generate electromagnetic radiation) exposure... which are a minute fraction of present “safety standards” resulted in altered brain function, sleep disruption, depression, chronic fatigue, headaches, impaired memory and learning, adverse reproductive outcomes including miscarriage, still birth, cot death, prematurity and birth deformities.

Many other adverse health effects have been found, predominantly cancer of many organs, especially brain cancer, leukemia, breast cancer and testicular cancer.”

#### 4. What are the effects of electromagnetic radiation on our bodies?

Electromagnetic radiation causes our bodies to react negatively.

When our cells detect electromagnetic radiation (for example, from the cell phone or computer), they interpret it as a "danger signal". Messages are sent to the cell nucleus that causes gene expression changes.

These gene expression changes trigger a cascade of events such as:

- changes in heart rate and variability
- enzyme activity changes
- proto-oncogenes are turned on
- stress genes are turned on and stress proteins are produced.

The change in heart rate and variability causes an induction of heart stress condition. When this is prolonged, this leads to a reduced chance of surviving an infarction.

Changes in enzymic activities cause changes in the normal cell metabolism processes. One consequence of this is an increased rate of cell proliferation. This in turn can lead to fetal abnormalities and cancer.

Another consequence of changes in cell metabolism is that it interferes with and leads to changes in cell secretion. One result of this is that it leads to changed production of brain substances, affecting our brain functions. This will lead to stress and stress symptoms, hormonal disturbances, short-term memory loss, learning impairment, headaches and fatigue.

Another effect of changes in cell secretion is a reduction of melatonin being produced by the brain's pineal gland. This triggers a series of disorders including mood disorders, behavioral disturbances, sleep disorders, disturbed circadian rhythm, and a feeling of permanent jet lag.

The reduction in melatonin also causes our immune system to be impaired and down-regulated. This means our body's resistance to sickness and disease is lowered. It can also lead to blood disorders and asthma.

A third consequence of reduced melatonin production is that it can lead to an increase of DNA breaks, contributing to a disturbance of the body's repair functions and chromosomal damage. These may lead to fetal abnormalities, degenerative diseases like alzheimer, parkinson and also cancer.

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So we can see that the long-term and not-so-long term effects of prolonged exposure to electromagnetic radiation can damage various functions of our brain and body.

<http://www.icems.eu/docs/howSusceptibleAreGenes.pdf> (page 8)

### **5. How does the WaveRider protect us from electromagnetic radiation?**

WaveRider uses a proprietary, patented technology to counteract man-made electromagnetic radiation, by producing “natural” frequencies that “ride” on the waves of the electromagnetic radiation. These frequencies form a “noise field” similar to that occurring in nature, which the human body has been long-accustomed to.

These WaveRider frequencies are natural, random and noisy, and the cells of our bodies perceive them to be acceptable, and therefore do not react negatively against them. Conversely, electromagnetic waves of the cell phone, WiFi and other electrical devices produce frequencies that are man-made and constant, which are interpreted as harmful to our health.

When the WaveRider is turned on in the presence of cell phones, WiFi and other electrical devices, the resultant waves received by the body is an enhanced noise field. This noise field is accepted by the cells as “normal” so there is no negative reaction from the cellular mechanisms.

This means that our cells, in the presence of the WaveRider frequencies, are able to function without the adverse effects of the electromagnetic radiation.

### **6. Who invented the WaveRider ?**

The WaveRider is the brainchild of scientist-inventor, Dr. Igor Smirnov. Dr. Smirnov was awarded two US patents for the technologies that led to the creation of the WaveRider.

Dr. Smirnov specializes in advanced research on the influence of low frequency electromagnetic oscillations on human cellular physiology.

He is most well-known for his pioneering invention of the Molecular Resonance Effect Technology or MRET. His MRET technology has helped heal people suffering from a wide range of diseases ranging from cancer, diabetes, alzheimer disease to psoriasis and chronic fatigue syndrome.

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Dr. Smirnov brings a depth of knowledge from nuclear engineering, mechanical and bioengineering, biological sciences, quantum physics, biophysics, biochemistry and even clinical psychology into his work. His works are well published in international scientific publications including the European Journal of Scientific Research, International Journal of Biophysics and Journal of Research in Biology, among others.

### **7. What is noise field technology?**

The term, "noise field" refers to a randomized and noisy electromagnetic field of very low and subtle frequencies that resembles the electromagnetic field of the natural earth and living things, including man.

Noise field technology is the result of research funded by the US Army to answer the question, "Can man-made electromagnetic fields cause negative biological effects?"

This research was commissioned because of health complaints from soldiers who operated military equipment such as radar devices, which are sources of electromagnetic radiation. The research showed that man-made electromagnetic radiation did cause negative biological effects in living cells.

To solve this problem, scientists finally came up with a solution against electromagnetic radiation. This was the creation of a random "noise field" that is similar to that found in nature.

When this noise field was superimposed onto harmful man-made electromagnetic fields, the negative biological effects on living cells was eliminated.

### **8. How long will the WaveRider last?**

The WaveRider has a life span of 17,520 hours.

This means that if it is turned on for 10 hours a day, it will last more than four and a half years. If it is turned on for 15 hours a day, it will last for slightly more than three years.

A red light will begin to blink when 200 hours is left of the WaveRider's lifespan.

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### **9. What is the range of the WaveRider protection?**

The WaveRider's protective coverage extends to a radius of 9 meters, or roughly 30 feet.

This means that anyone using the WiFi or cell phone or other electrical appliance within 9 meters (30 feet) of the WaveRider will enjoy the benefits of its Noise Field frequencies.

### **10. Can the WaveRider noise field go through the walls?**

The WaveRider, as its name implies, "rides" on the electromagnetic waves in the home or office. Just as these electromagnetic waves penetrate the walls, so too, the beneficial noise field of the WaveRider can go through walls.

So you can place the WaveRider in your living room, and use your cell phone or WiFi in your study or bedroom and still enjoy the protection of the WaveRider. This is provided the distance between the WaveRider and you is within 9 metres (30 feet).

### **11. Will the frequencies from the WaveRider affect the signals of our cell phones or WiFi?**

The WaveRider is unique in that its frequencies ride on the signals of our cell phones and WiFi, yet they do not in any way distort these cell phones and WiFi signals.

In other words, the clarity of communication when using the cell phone and WiFi remains the same. The WaveRider's frequencies do not interfere with the cell phone or WiFi signals.

### **12. Does the WaveRider help to reduce the brain's absorption of electromagnetic radiation from cell phones?**

Yes, it does.

Radiation from cell phones and other wireless devices is often measured in terms of SAR values. SAR stands for Specific Absorption Rate. It is the rate at which the body absorbs the radiofrequency energy from the cell phone or wireless device.

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Tests on the WaveRider indicated that it actually does reduce the SAR values in 65% of the data points of the phantom head used in the tests. The magnitude of this decrease in SAR values range from 10% to 40 %.

In other words, the WaveRider can almost halve the brain's absorption of radiofrequency energy into the brain.

### **13. Has noise field technology been tested?**

Yes, the noise field technology has been tested by institutions like the Catholic University of America, the University of Western Ontario, Columbia University and the University of Washington.

### **14. How do I know that the WaveRider is working?**

When the WaveRider is working, you will see the two small LED lights lighted up. One is a green LED that remains steadily lit up. The other LED light flashes alternately from green to yellow.

### **15. What can I expect to experience or feel when I first use the WaveRider?**

The beneficial effects of the WaveRider differ from person to person, since each person has a different set of health and physical characteristics and needs.

In general, most people report that upon using the WaveRider, they are able to sleep better, more deeply, and longer. Many report that they wake up feeling more refreshed.

A common feedback is that they feel more mentally alert, less fatigued and clearer in their thinking.

All these, despite not reducing their workload or time at the computer or cell phone calls.

According to Dr. Igor Smirnov, the beneficial and healthful frequencies in the WaveRider will lead to a gradual general improvement in our health over a period of time. There is likely to be an increase in energy levels and a boost to the immune system over time.

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Dr. Smirnov has put into the WaveRider a package of frequencies that causes a positive resonance for the brain. This is likely to reduce lethargy, increase motivation to solve problems and enable the brain to function more effectively.

The WaveRider also has frequencies targeted at improving the immune system. When our immune system improves, we can expect that some diseases and illnesses will over time diminish. One user of the WaveRider who had prematurely menopausal, reported that her menstruation started again after she started using the WaveRider.

### **16. Why are parents advised that their children should not use a cell phone until they are 15 years old?**

From the time they are born, our children's brains and bodies continue to grow and develop non-stop till somewhere in their late teens.

As the brains, internal organs and skeletal structures develop and grow, they are particularly susceptible to the negative impact of electromagnetic radiation. Prolonged exposure to electromagnetic radiation has been known to damage DNA and impair natural cellular processes.

Because children's brains and bodies are still growing, the rapid cell multiplication and growth rates make them very vulnerable to DNA damage. Research has shown that radiation from cell phones and WiFi causes diminished reaction time in children, decreased motor function, increased distraction, hyperactivity and inability to focus on complex and long term tasks.

Children's skulls are also smaller and thinner, which means that the electromagnetic radiation will penetrate deeper into their brains. Their brain tissues are softer and have far more rapidly dividing cells than the adult, which means that they will absorb far more of the radiation and suffer greater harm than the equivalent adult.

The harm that electromagnetic radiation can cause to children is so well recognized that schools in France are not permitted to use WiFi, while Belgium has disallowed the sale of children-specific cell phones. Many schools in Australia and other countries have limited or disallowed wireless communication.

Instead, worldwide, as the average person becomes increasingly aware of the great dangers posed by wireless communications, there is mounting pressure for governments and education authorities to use wired networks in schools instead of networks using wireless broadband systems, including WiFi.