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Proven again: Microwave radiation has negative biological effects on human beings

The evidence that mobile phone radiation, and in particular 5G technology, is anything but harmless for human beings and that the current threshold values are by no means sufficient to protect health, is becoming increasingly clear and frequent.

For example, on 10 January 2023, a Swedish case study¹⁾ was published in the "Annals of Case Reports", an international peer–reviewed scientific journal, which proved **that 5G radiation causes typical symptoms of the so-called microwave syndrome**²⁾. The couple examined in the case study, a 63-year-old man and a 62-year-old woman, experienced health problems such as **constant fatigue**, **sleeping problems**, **dizziness**, **emotional effects such as irritability and**



depression, **nosebleeds**, **tinnitus**, **heart symptoms**, **memory problems and skin issues** just a few days after a 5G base station went into operation on the roof above their home. All symptoms disappeared within 24 hours (man) or 1-3 days (woman) after the couple had moved to another flat with lower radiation levels.

The case study also showed that, contrary to what politicians and industry claim, the conversion to 5G increases radiation exposure significantly. Even before the 5G antenna was put into operation, 3G and 4G base stations had been installed on the roof, **but when 5G was switched on**, **the radiation exposure increased 188-fold** (from 9 milliwatts/m2 to a maximum of 1.690 milliwatts/m2)! Mona Nilsson, executive director of the "Swedish Radiation Protection Foundation" and co-author of the study told the American "The Defender": "There are no studies that show that this technology and the increasing and common exposure to 5G and 4G base stations at levels allowed by the government is safe. On the contrary,

studies have repeatedly and convincingly showed increased risk of the microwave syndrome and cancer, at levels that are far below the levels that the government and the telecom companies falsely claim are safe."³⁾

Alarmingly, the telecommunications industry tried to censor the article about this case study when it was first published in the medical journal "Medicinsk Accessin" in the spring of 2022. A representative of Ericsson – the world's leading 5G infrastructure provider and the umbrella organisation of 1.200 technology companies, i.e. all major telecommunications companies in Sweden – wrote to the editor of the Swedish magazine urging him "to withdraw the article," the authors of the case study explained. Numerous Swedes had contacted the "Swedish Radiation Protection Foundation" and reported health problems after a 5G antenna was installed in their neighbourhood. "Based on the measurements of massively increased radiation from 5G and what we know this far, we can conclude that 5G is very dangerous and must be halted," Nilsson said.⁴⁾

Biological systems are strained significantly by wireless communication

A peer-reviewed study⁵⁾ published in "Frontiers in Public Health" in December 2022 concluded that there is "extensive evidence" that "human biological systems are significantly stressed by exposure to everyday wireless communication devices and related infrastructure". Researchers from the Oceania Radiofrequency Scientific Advisory Association (ORSAA) and the Centre for Environment and Population Health at Griffith University's School of Medicine and Dentistry in Brisbane, Australia, summarised the results of 1.106 experimental and epidemiological studies that looked at the biological and health effects of electromagnetic fields and radiation. **Two-thirds of the scientific studies** examined, found significant biological effects on health. The Australian scientists wrote that hundreds of papers found effects of mobile phones and mobile phone infrastructure on basic biological processes in the human body, including for example protein damage, biochemical changes and oxidative stress.

Another peer-reviewed study⁶⁾ published in September 2022 in the journal "Neuro-Oncology" by the Faculty of Medicine of the Chinese University of Hong Kong in cooperation with the Association of Pacific Rim Universities also came to the conclusion that the use of a mobile phone, among other factors, must be **clearly associated with the development of primary brain tumours**.

Biological effects are often still ignored



In this context, a longitudinal study⁷⁾ published in the journal "Environment International" on 5 January 2023 should be mentioned, in which the daily dose of high-frequency electromagnetic fields in the bodies of more than 6.000 British adolescents was examined over a period of two years (2014-2016). While the value in the entire body remained approximately the same at the respective time of measurement, **the researchers found a significant increase of 32% in the brains of the adolescents after two years,** especially in the

temporal lobe. (The temporal and frontal lobes are where most glioblastoma tumours develop). The main reason for the increase was the adolescents' use of their own mobile phones, with 2G networks still primarily in operation at the time of measurement.

Critics, however, point out that this study has clear shortcomings, especially because the authors refrained from investigating potential biological and health effects. This may have to do not least with the fact that various study authors have connections to the mobile phone industry. Eileen O'Connor, co-founder and director of the "EM Radiation Research Trust" in the UK and a board member of the International EMF Alliance, described the study as "industry-friendly". "The keywords for the paper are 'estimate and assumed' with the focus placed on the specific absorption rate (SAR), which only refers to emissions from mobile phones that can heat biological tissue," she said. That SAR is no good as a measurement method for mobile phone effects on humans is confirmed by many experts. In 2013, a team of researchers evaluated SAR as a method for quantifying the potential biological effects of electromagnetic fields and concluded that "SAR actually refers to thermal effects, while the vast majority of the recorded biological effects from man-made non-ionizing environmental radiation are non-thermal."

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