EMF Wave Blockers: Shield or Scheme? Testing the Effectiveness of EMF Shielding Technology

Lima, Hailey (School: American Heritage Charter School)
Paulsen, Makiya (School: American Heritage Charter School)

This study investigates the effectiveness of common electromagnetic frequency (EMF) blocking products marketed to protect users from radiofrequency (RF) EMF radiation. RF EMF is emitted by wireless devices such as cell phones, laptops, tablets, and Wi-Fi routers, etc., and RF EMF fields are classified as a possible human carcinogen by the International Agency for Research on Cancer. This project hypothesized that if EMF shields are applied to wireless devices, then measured EMFs will show no significant decrease compared to the same unsheilded device. To test this hypothesis, the project tests the RF EMF emitted by devices before and after use of these products, and compares the results of this technology across multiple brands and materials. Electromagnetic waves are everywhere and continue to emit frequencies that can be harmful to the human body. However, different shielding devices are supposed to suppress the amount of electromagnetic radiation emitted by our personal electronic devices. We decided to test the effectiveness of these wave-blocking products to protect users from radio frequency(RF) and electromagnetic frequency (EMF) radiation. Personal devices emit RF and EMF waves, including cell phones, laptops, tablets, and headphones, etc. RF and EMF are classified as possible human carcinogens by the International Agency for Research on Cancer. (IARC) During this project, we hypothesized that if EMF shields are applied to wireless devices, then measured RF or EMFs will not have a large decrease compared to the same device unshielded. We tested this hypothesis by testing the RF and EMF emitted by devices in both active and passive modes, with and without shielding. We tested this with many different technologies and different shielding materials.

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