Cell phones emit radiofrequency energy (radio waves), a form of non-ionizing radiation. Tissues nearest to where the phone is held can absorb this energy. Radiofrequency energy is a form of electromagnetic radiation. The only known biological effect of radiofrequency energy is heating. Radiofrequency exposure from cell phone use does cause heating; however, it is not sufficient to measurably increase body temperature. A recent study showed that when people used a cell phone for 50 minutes, brain tissues on the same side of the head as the phone’s antenna metabolized more glucose than did tissues on the opposite side of the brain. Currently, cellular phones are classified as carcinogenic category 2b - potentially carcinogenic to humans by the International Agency for Research on Cancer (IARC). Studies point out that people who spend a lot of time talking on their phones have higher levels of oxidative stress in their bodies. Oxidative stress is a disturbance in the balance between the production of reactive oxygen species (free radicals) and antioxidant defenses. It is extremely dangerous as this process wrecks human cells, in particular DNA, and is a crucial cancer risk factor. The damage caused by oxidative stress is linked to cellular and genetic mutations which cause the development of tumors. Researchers compared the saliva content of heavy users to samples from a control group, which consisted of deaf patients who either do not use a cell phone, or use the device exclusively for sending text message and other non-verbal functions. Hamzany and his team found that heavy cell phones user had significantly higher salivary oxidative stress in all measurements studied. Scientists worried about the impact of cell phone use, particularly the effects of radiofrequency non-ionizing electromagnetic radiation on human tissue located close to the ear. Researchers said although these results don't uncover a conclusive "cause and effect" relationship between cellular phone use and cancer, they add to the building evidence that cell phone use may be harmful in the long term, and point to a new direction for further research.

**REFERENCE**

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