

Cell phone use may reduce male fertility

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Men who have been diagnosed with poor sperm quality and who are trying to have children should limit their cell phone use. Researchers have found that while cell phone use appears to increase the level of testosterone circulating in the body, it may also lead to low sperm quality and a decrease in fertility.

"Our findings were a little bit puzzling," says Rany Shamloul, a postdoctoral fellow in the Department of Pharmacology and Toxicology and lead researcher on the project. "We were expecting to find different results, but the results we did find suggest that there could be some intriguing mechanisms at work."

The research team discovered that men who reported cell phone use had higher levels of circulating [testosterone](#) but they also had lower levels of luteinizing hormone (LH), an important reproductive hormone that is secreted by the [pituitary gland](#) in the brain.

The researchers hypothesize that [electromagnetic waves](#) (EMW) emitted by cell phones may have a dual action on male hormone levels and fertility. EMW may increase the number of cells in the testes that produce testosterone; however, by lowering the levels of LH excreted by the pituitary gland, EMW may also block the conversion of this basic circulating type of testosterone to the more active, potent form of testosterone associated with sperm production and fertility.

More in-depth research is needed to determine the exact ways in which EMW affects [male fertility](#).

Provided by Queen's University

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