Evening Use of Light-Emitting Tablets May Disrupt Healthy Sleep

A new Physiological Reports study reveals that evening use of light-emitting tablets can induce delays in desired bedtimes, suppress secretion of melatonin (the hormone that regulates sleep and wakefulness), and impair next-morning alertness.

Nine healthy adults participated in a randomized and counterbalanced study comparing 5 consecutive evenings of unrestricted use of light-emitting tablet computers versus evenings reading from printed materials.

On evenings when using light-emitting tablets, participants’ self-selected bedtimes were on average half an hour later, and they showed suppressed melatonin levels, delayed timing of melatonin secretion onset, and later sleep onset. When using the tablets, participants rated themselves as less sleepy in the evenings and less alert in the first hour after awakening on the following mornings.

“These findings provide more evidence that light-emitting electronic devices have biological effects,” said co-author Dr. Jeanne Duffy, of Brigham and Women’s Hospital and Harvard Medical School. “Using light-emitting electronic devices in the late evening can postpone our decision to go to sleep, and make us more sleepy the next morning.”

Link to Study: https://physoc.onlinelibrary.wiley.com/doi/10.14814/phy2.13692

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