Ability to Learn Is Affected by the Timing of Sleep

Researchers find that how soon we sleep after learning new information impacts how well we retain it. Christie Nicholson reports

Sleep has many functions—including facilitating learning.

Now a study finds that when we acquire new information, and how soon we sleep after that may affect our retention of the info. That’s according to research in the journal Public Library of Science One.

Scientists had more than 200 subjects memorize related words like “fire and smoke,” or unrelated word pairs like “insect and truth.” Some studied the words at 9 A.M., others at 9 P.M.

The researchers tested the subjects’ ability to remember the pairs after 30 minutes, 12 hours or 24 hours.

Sleep had little effect on the ability to recall related words. But subjects who slept between tests were significantly better at remembering the unrelated words than those who got no shuteye.

Here is the most interesting finding: In the 24-hour retest—where all subjects had a full night of sleep—those participants who went to bed shortly after learning the words did much better than those who went through an entire day before sleeping.

And this leg up in memory was maintained on subsequent days. So if you need to remember something, try reviewing those notes just before bedtime. Instead of watching that rerun of Seinfeld you already have memorized.

—Christie Nicholson

[The above text is a transcript of this podcast.]