Discovery CHANNEL

Do Your Eyes Make The Sound of Fingernails on a Blackboard Worse?

By Erik Trinidad | Tue Nov 1, 2011 12:38 PM ET

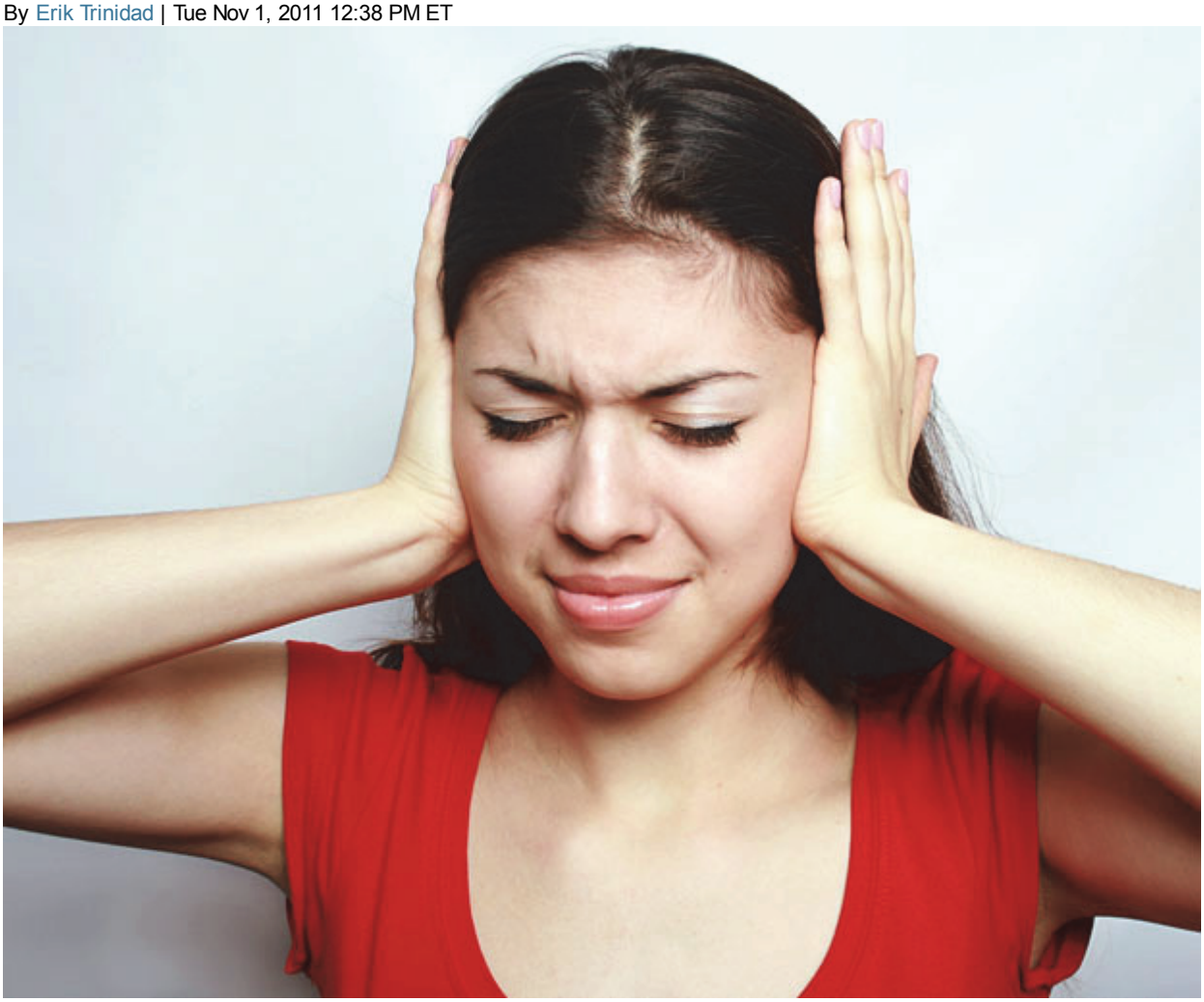

Photo: Thinkstock

Most people agree on what one of the worst sounds in the world is: the high-pitched screech of fingernails scratching against a blackboard. But did you know that part of what makes this sound annoying is seeing or knowing that said sound is from that source?

According to an article in *Wired*, a study conducted by musicologists Michael Oehler of the Macromedia University for Media and Communication (Cologne, Germany) and Christoph Reuter of the University of Vienna showed that people who were subject to this high-pitched screech found it less annoying when they were *not* told that the sound came from nails on a blackboard; the psychological sight of that image in our minds is what makes it unbearably worse.

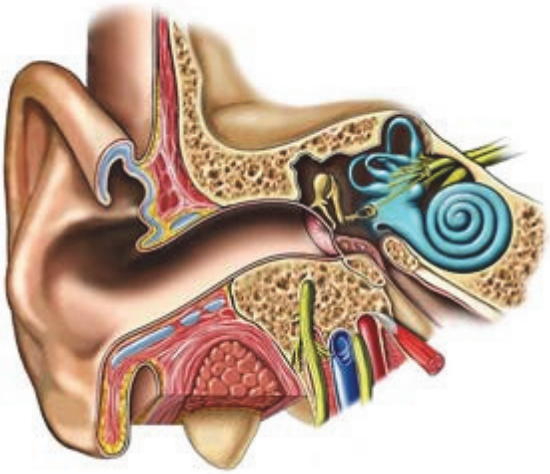

Photo: Visuals Unlimited/Corbis

However, Oehler and Reuter's study did show that regardless of where the subjects thought the sound was coming from, the human body still has a physical reaction to that sound — changes in heart rate, blood pressure and the electrical conductivity of skin. This is due to a primordial condition associated with the shape of the human ear canal, which seems to amplify sound frequencies in the 2,000 to 4,000Hz range — the wavelength of nails on a chalkboard.

So the next time someone scratches up their nails on a blackboard, try closing your eyes and thinking of something else before covering your ears.