SURFING TO A HIGHER WEIGHT

Teen girls likely to be heavier if they spend a lot of time on the internet, study shows

By Serena Gordon, HealthDay Reporter

WEDNESDAY, July 9 (HealthDay News) -- Teen girls who spend a lot of time on the internet are more likely to see their weight creeping slowly up than adolescents who spend less time in front of the computer screen, new research shows.

And the association between computer use and weight held true even when the researchers accounted for the amount of exercise the girls were getting. The Harvard researchers also found that a lack of sleep and alcohol consumption were associated with increasing weight.

"We found more weight gain -- after adjustment for height growth and other factors, including physical activity -- for females who spent more recreational time on the internet, for those getting the least sleep, and for those drinking the most alcohol," said study author Catherine Berkey, a biostatistician at Brigham and Women's Hospital and Harvard Medical School in Boston.

Results of the study were published in the July issue of *The Journal of Pediatrics*.

Berkey's study included data on more than 5,000 teenage girls from across the United States. The girls were between the ages of 14 and 21. In 2001, they completed surveys detailing their internet use, sleep habits, coffee consumption, alcohol consumption and physical activity. The girls' weight and height were measured in 2000 and then again in 2001.

The researchers asked the girls to report only their recreational internet usage -- not usage for school or work.

Teen girls who spent more than 16 hours a week on the internet were almost twice as likely to have a change in their body-mass index, even after the researchers controlled for sleep, coffee and alcohol use. Once the researchers factored in physical activity and TV and video game use, girls with the most internet use were still about 57 percent more likely to have gained weight.

Girls over 18 who slept less than five hours a night on average, who consumed two or more servings of alcohol weekly and who spent more time on the internet averaged about a four-pound weight gain during the year.

A number of factors may cause the weight gain, said Berkey. A lack of sleep can lead to metabolic changes that may predispose girls to weight gain, and, obviously, alcoholic

beverages contain extra calories that can lead to excess weight. If you're spending time on the computer, that might be time away from exercise, but because the association still held true after adjusting for exercise, the findings can't be explained solely by a lack of physical activity, she said.

Even though the researchers controlled for exercise, Madelyn Fernstrom, the founding director of the University of Pittsburgh Medical Center Weight Management Center, noted that for "people who are spending more time on internet, their general activity in daily living is going to be a lot lower than someone who isn't on the computer." Even just standing around uses up more calories than sitting at the computer, she said.

The researchers were somewhat surprised that coffee consumption didn't appear to have an effect, but the study was conducted before the big surge in the popularity of high-calorie coffee drinks, so the study results might be different if done today, said Berkey.

Berkey said that parents should know that "encouraging their adolescents to get more sleep, spend less time on the internet and avoid alcohol may have the added benefit of helping maintain a healthy body weight."

"Four pounds may not seem like a big deal, but it's important to have weight stability in these years. One positive change will cause a cascade of other positive changes," said Fernstrom. For example, if teens stop drinking coffee, they may sleep better, and, in turn, may not turn to sugary, carbohydrate-laden foods to help them stay awake the next day.

Fernstrom, who believes these findings are likely applicable to teen males as well as females, said ideally parents should start setting limits on computer use and other potentially negative behaviors when kids are young, so they don't balk as much at the rules when they're older.

More information

To learn what's the right weight for a teen's height, visit the Nemours Foundation TeensHealth.

SOURCES: Catherine Berkey, Sc.D., biostatistician, Brigham and Women's Hospital, and Harvard Medical School, Boston; Madelyn Fernstrom, Ph.D., founding director, University of Pittsburgh Medical Center's Weight Management Center; July 2008, *The Journal of Pediatrics*.

