Screen time plus snacking a risk for metabolic disorder in teens

March 24 2019

Credit: CC0 Public Domain

Teens who sit for hours watching TV, using the computer or playing

video games while eating unhealthy snacks are at increased risk for a group of risk factors for heart disease and diabetes, according to research to be presented Monday, March 25 at ENDO 2019, the annual meeting of the Endocrine Society, in New Orleans, La.

The study found these teens are at risk of developing metabolic syndrome—a cluster of risk factors including increased blood pressure, high blood sugar, excess body fat around the waist, and abnormal cholesterol or triglyceride levels—that elevate the risk of heart disease, stroke and diabetes. Metabolic syndrome affects near 25 percent of the adult population and approximately 5.4 percent of children and adolescents in the United States.

"The take home message is limiting your screen time is important, but when it is not possible, avoiding snack consumption may help you to reduce your risk of metabolic syndrome," said lead researcher Beatriz Schaan, Ph.D., of the Universidade Federal do Rio Grande do Sul in Porto Alegre, Brazil.

The research was part of the Study on Cardiovascular Risks in Adolescents (ERICA), a nationwide school-based survey of Brazilian teens. The study included data on 33,900 teens ages 12 to 17. The researchers measured the teens' waists and blood pressure, and took blood samples to measure blood glucose, HDL-cholesterol, and triglycerides. Almost 60 percent of the teens were female, and the average age was 14.6. Half of the teens were physically active; 85 percent said they usually eat snacks in front of the TV, while 64 percent usually ate snacks while using the computer or playing video games.

The researchers found 2.5 percent of the teens had metabolic syndrome. Those who spent six or more hours a day in front of screens were 71 percent more likely to have metabolic syndrome compared with those who spent less time in front of screens. However, heightened risk was

only seen in those who reported usually eating snacks in front of screens.

There was no association between screen time and metabolic syndrome among teens who reported no snacking in front of screens. Among teens who reported habitually eating snacks in front of the TV or computer, the risk for metabolic syndrome rose the longer teens spent in front of screens.

"As we live surrounded by screens, especially young people, sometimes it is not feasible to eliminate or reduce screen time," Schaan said. "In these cases, avoiding snack consumption may be easier. Beyond reducing screen time, interventions aiming to reduce snacking in front of screens among youth should be evaluated."

Provided by The Endocrine Society