Sitting Time Not Associated with Poorer Diets in U.S. Adults

'Distracted Eating,' Advertisements May Explain Link between TV Viewing and Diet

Previously identified associations between TV viewing and a less healthful diet may stem from exposure to advertisements of high calorie foods and 'distracted eating' rather than the activity of sitting itself, although sitting time remains an independent risk factor requiring public health focus. These findings are according to a new study by American Cancer Society investigators conducted in collaboration with the Gretchen Swanson Center for Nutrition and the University of Texas School of Public Health. For their study, <u>published in *Preventive Medicine*</u>, researchers examined sedentary time using an objective measure (accelerometers), and found that sedentary time was not linked to poorer diets among US adults.

Despite the health benefits associated with increasing physical activity, reducing sedentary time, and consuming a healthy diet, most Americans do not adhere to these behaviors. Previous research has found an interrelationship among multiple health behaviors, such as physical activity, diet, smoking, and alcohol intake. For example, one study found that approximately 20% of a studied population had at least three lifestyle risk factors (e.g. smoking, physical inactivity), while other research has found that only 3% of US adults adhered to all the healthy lifestyle behaviors they examined: not smoking, having a healthy weight, eating sufficient fruits and vegetables, and meeting physical activity guidelines.

The relationship between sedentary behavior and dietary quality among adults has not been well-studied. Sedentary behavior is a relatively recent focus of scientific exploration, with accumulating evidence indicating that excessive time spent TV viewing, commuting in a motorized vehicle, or sitting at home or on the job is linked to adverse health outcomes, including an increased risk for obesity, certain cancers, and premature death, even while considering the protective effects of physical activity.

Previous studies have mostly relied on self-reported screen time or TV viewing, which are not representative of overall sedentary behavior. For their new study, investigators relied on data that used accelerometers, an objective measure of time spent in sedentary behavior to more accurately determine the exposure.

While every minute of additional moderate-to-vigorous intensity physical activity was related to a higher "Healthy Eating Index" (HEI) score, eating more fruits, and consuming fewer empty calories, more minutes per day spent in sedentary time was not significantly associated with overall dietary quality (HEI) and fruit and vegetables intake; however, more sedentary time was significantly associated with a lower intake of empty calories.

The researchers say their results, relying on accelerometer data to objectively measured sedentary time in relation to dietary quality are unique and have rarely been explored. They caution that although accelerometers are an objective measure of activity, they do not capture all forms of physical activity (e.g. cycling, swimming), and are not able to discern the specific type sedentary behavior performed. Furthermore, monitors were worn for only 4 to 7 days, so might not be representative of longer-term habitual activity levels.

Nonetheless, the authors say reducing and breaking up sedentary time might need to be targeted independently of encouraging adherence to dietary guidelines when designing and implementing programs aimed at chronic disease prevention.

Authors on the study include: Drs. Kerem Shuval, Binh T. Nguyen and Jeffrey Drope (American Cancer Society), as well as Drs. Amy L Yaroch (Gretchen Swanson Center for Nutrition) and Kelley Pettee Gabriel (University of Texas).

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