

Adolescent's weight, socioeconomic status may affect cancer later in life

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Overweight adolescents were twice as likely as their normal weight peers to later develop esophageal cancer in a recent study from Israel. The study, which is published early online in *Cancer*, a peer-reviewed journal of the American Cancer Society, also found that lower socioeconomic status as well as immigration from higher risk countries were important determinants of gastric cancer.

Zohar Levi, MD, MHA, of the Rabin Medical Center in Israel, and his colleagues measured body mass index in one million Israeli adolescent males who underwent a general health examination at an average age of 17 years from 1967 to 2005, and through the country's [cancer](#) registry, identified which of the participants later developed cancer. Participants were followed from 2.5 to almost 40 years, with an average follow-up of 18.8 years.

The researchers were amazed to find that events—particularly weight and socioeconomic status—up to the age of 17 years had a tremendous impact upon cancer development later in life. Adolescents who were overweight had a 2.1-fold increased risk of developing esophageal cancer. Adolescents who were of low socioeconomic status had a 2.2-fold increased risk of developing intestinal type [gastric cancer](#). Those who had nine years or less of education had a 1.9-fold increased risk of developing this type of cancer. Also, immigrants born in Asian and former USSR countries had higher risks of developing gastric cancer (3.0-fold and 2.28-fold increased risks, respectively).

"Adolescents who are overweight and obese are prone to [esophageal cancer](#), probably due to reflux that they have throughout their life. Also, a lower socioeconomic position as a child has a lot of impact upon incidence of gastric cancer as an adult," said Dr. Levi. "We look at obesity as dangerous from cardiovascular aspects at ages 40 and over, but here we can see that it has effects much earlier." He noted that it is unclear whether losing weight later in life or gaining higher [socioeconomic status](#) might reduce the risks observed in this study.

More information: "Body mass index and socioeconomic status measured in adolescence, country of origin and the incidence of gastroesophageal adenocarcinoma in a cohort of 1 million men." Zohar Levi, Jeremy D. Kark, Ari Shamiss, Estela Derazne, Dorit Tzur, Lital Keinan-Boker, Irena Liphshitz, Yaron Niv, Moshe Furman, and Arnon Afek. *Cancer*; Published Online: October 14, 2013. [DOI: 10.1002/cncr.28241](#)

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