Inactivity in childhood linked to poor health outcomes in adolescence

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How active you are as a child could have an impact on your weight and risk of chronic disease from as early fifteen years of age, according to new research led by the University of Sydney.

The landmark study followed more than 4,600 children for four years and found that those who were more active in late childhood were healthier teens, with lower body fat and reduced risk factors for cardiovascular disease and diabetes.

Lead researcher Associate Professor Emmanuel Stamatakis from the University's Charles Perkins Centre and Faculty of Health Sciences, has called for a robust long-term national policy to get children moving.

"Our study provides clear evidence that the negative effects of inactivity in childhood are evident well before adulthood," said Associate Professor Stamatakis.

"We found that by age 15 more active children showed consistently better health outcomes.

"For example, an increase of 60 minutes of daily activity in childhood was linked to two percent less body fat.

"If inactivity patterns persist into adulthood, which is very likely, we expect an increased risk for developing heart disease, diabetes, and obesity."

Associate Professor Stamatakis believes parents cannot carry sole responsibility for providing opportunities for children to get active.

"With technology today meaning excessive sitting and screen time, we urgently need a serious long-term health policy which promotes strategies in schools and communities to give young people more opportunities for walking, cycling, play, and sports on a daily basis," he said.

The research, published in *Pediatrics*, is the longest running study to objectively measure children's physical activity and sedentary behavior against a comprehensive range of health measures relating to heart health, obesity, and diabetes.

Motion sensors were used to measure children's physical activity levels at 11 years of age, which was compared to their health outcomes at 15 years of age.

The research is an important step forward as long-term studies into the effects of children's activity levels are very limited.

"Research looking at the health implications of inactive lifestyles in adulthood is rapidly expanding, but if we want to focus on prevention we must start with a better understanding of its impact in the early years," Associate Professor Stamatakis said.

The study did not show any association between sitting time and negative health consequences; however the researchers speculate that a longer-term follow up into adulthood could reveal different results.

Provided by University of Sydney