

## MEDIA RELEASE

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# Busting the "fat and fit" theory: you can't exercise away your risk of type 2 diabetes

Major new research presented at the Sax Institute's 45 and Up Study annual meeting in Sydney today has found that when it comes to developing type 2 diabetes, being active is no protection if you're also overweight.

Researchers investigated levels of physical activity and sitting time in 29,572 men and women enrolled in the 45 and Up Study, of whom 611 developed type 2 diabetes over the course of nearly three years.

"The findings of our study are clear; if you want to avoid developing type 2 diabetes, being physically active is not enough if you are also overweight or obese," said researcher Binh Nguyen, who conducted the study with colleagues from the University of Sydney's Prevention Research Collaboration.

"We found that people who were obese but had high levels of physical activity and spent little time sitting still had five times the risk of developing type 2 diabetes compared to people who were of normal weight, and with low levels of physical activity and higher sitting levels. Those who were overweight and physically active had twice the risk of developing type 2 diabetes as people who were of normal weight, and less active. The odds of developing the condition were even greater among people who were overweight or obese, and inactive," Ms Nguyen said.

Scientific Director of the 45 and Up Study, Professor Emily Banks, said that the findings clearly demonstrated the value of Big Data research tools like the 45 and Up Study in addressing scientific controversies such as the "fat and fit" theory.

"In recent years there has been considerable scientific debate about whether it is possible to be metabolically healthy while being overweight, but this new study of such a large group of people gives us important new information for doctors and their patients on the risk factors for developing type 2 diabetes," Professor Banks said.

"The data tells us that being overweight or obese remains the major factor in developing type 2 diabetes and while being active is important, it's not a 'get out of jail free' card for people carrying excess weight. Maintaining a healthy weight by adopting healthy lifestyle behaviours, including a healthy diet, is the best way to prevent type 2 diabetes."

The diabetes findings are among many innovative research projects being discussed today at the 45 and Up Study annual collaborators' meeting, which this year has a focus on innovative ways of using research data for decision making.

Sax Institute CEO Professor Sally Redman said that more than 650 researchers and policy makers from a wide range of organisations had used the 45 and Up Study in their work.

"Each year, the Study data gets richer and grows in value as a national research resource," she said.

## **Fast facts**

- Diabetes is the fastest growing chronic condition in Australia
- Around 1.7 million Australians have diabetes
- More than 100,000 Australians have developed diabetes in the past year alone.
- Total annual cost impact of diabetes in Australia estimated at \$14.6 billion
- Globally, diabetes accounted for 5.1 million deaths in 2013.

Fast facts source: Diabetes Australia

45 and Up Study funding partners:











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#### **About the Sax Institute**

The Sax Institute is Australia's leading independent expert in helping decision makers find and make best use of research to solve real-world health and social problems.

## About the 45 and Up Study

The Sax Institute's 45 and Up Study is the largest ongoing study of healthy ageing in the Southern Hemisphere, involving a quarter of a million people – one in every 10 men and women aged 45 and over in NSW.

It is a major national research tool being used by both researchers and policy makers to better understand how Australians are ageing, how they're using health services, how to prevent and manage ill-health and disability and how this can guide decisions on our health system.

Over time, we are asking all participants ongoing questions about their health, lifestyle, and the medications they use. This is providing the first large-scale, comprehensive measure of health as people move from mid to later life and allowing governments and health policy makers to better plan health services and programs for our ageing population.

Previous research findings from the study include:

- Up to two in every three Australian smokers can be expected to die from their habit if they don't quit
- Sleeping more than nine hours a night, sitting too much during the day and a lack of exercise is a hazardous combination for health
- Overweight and obesity account for \$1 in every \$6 spent in hospitals, costing our hospitals around \$4 billion per year
  Retirement is good for your health, with retirees smoking less, more physically active, sleeping more and sitting less than those in the workforce.

45 and Up Study funding partners:







