

Study finds that higher BMI and waist circumference are associated with increased risk of aggressive prostate cancer

June 2 2016



Micrograph showing prostatic acinar adenocarcinoma (the most common form of prostate cancer) Credit: Wikipedia, [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)

A study of almost 150,000 men from 8 European countries, presented at this year's European Obesity Summit (Gothenburg, 1-4 June) shows that higher body mass index (BMI) and waist circumference are associated with an increased risk of aggressive prostate cancer. This analysis of the

European Prospective Investigation into Cancer and Nutrition (EPIC) is by Dr Aurora Perez-Cornago, Cancer Epidemiology Unit, Nuffield Department of Population Health, University of Oxford, UK, and colleagues.

To date, evidence on the association of body size and adiposity with [prostate cancer risk](#) is not clear. In this study, the authors investigated the associations between various body measurements at baseline, mainly BMI and [waist circumference](#), and the risk of prostate cancer incidence, with a focus on tumour stage and grade, and on mortality from prostate cancer. A total of 141,896 men with a mean age at recruitment of 52 years in 8 European countries (Italy, Spain, United Kingdom, the Netherlands, Greece, Germany, Sweden, and Denmark) from the EPIC cohort were included. Data were adjusted for education level, smoking, marital status, diabetes and physical activity.

After an average of 14 years of follow-up there were 7,022 incident cases of prostate cancer, of which 934 were fatal. The researchers focussed on aggressive prostate cancer, looking at cancers with a high grade and cancers which resulted in death (fatal prostate cancer).

Men with a higher BMI and waist circumference had an increased risk of high grade prostate cancer, an aggressive form of the disease (10% increased risk for BMI for every 5 kg/m² increase and 13% for waist circumference for every 10cm increase).

Furthermore, a 14% higher risk for fatal prostate cancer was observed for every 5 kg/m² increase in BMI, and 18% [increased risk](#) in every 10 cm increase in waist circumference.

The authors conclude: "The findings from this large prospective study show that the association between body size and prostate cancer is complex and varies by disease aggressiveness; men who have greater

adiposity have an elevated risk of high grade prostate cancer and [prostate cancer](#) death."

They add: "Our results are in line with health advice for other non-communicable diseases. Men should try to maintain a healthy weight."

Provided by European Association for the Study of Obesity

Citation: Study finds that higher BMI and waist circumference are associated with increased risk of aggressive prostate cancer (2016, June 2) retrieved 26 April 2024 from <https://medicalxpress.com/news/2016-06-higher-bmi-waist-circumference-aggressive.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.