

# Obesity is a killer in nonsmoking women

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Obesity is an important contributor to premature death in women who have never smoked, especially among women in low income groups, finds research published in the *British Medical Journal* today.

While established research has shown clearly that smoking is linked to [premature death](#) and health inequalities, it is not known which causes of death are related to the social position of women who have never smoked, says the paper.

To investigate this area further, the authors, led by Dr Laurence Gruer from NHS Health Scotland, reviewed the cases of 3,613 women who had never smoked. These women participated in a study of over 15,000 adults who were recruited in Scotland between 1972 and 1976 when aged 45-64 and have been followed up until death.

Dr Gruer and colleagues grouped the participants by occupational class (1 & 2, 3 non manual, 3 manual, and 4 & 5) and by weight (normal weight, overweight, moderately obese and severely obese).

During the follow-up period of 28 years, half the women died, including 916 (51%) from diseases of the heart and circulation and 487 (27%) from cancer.

The results show that women in the lower occupational groups were more likely to die of diseases of the heart and circulation, but not cancer. They were also more likely to be severely obese and those who were severely obese had the highest death rates.

The authors also found that, compared with the smokers in the overall study, the women who never smoked were much more likely to be overweight or obese. This suggests that high smoking rates 35 years ago probably concealed the true extent of obesity in non-smoking women and that the decline in smoking rates in recent decades may have contributed to the increase in overweight and obesity, say the authors.

Dr Gruer argues that the results have important implications. Although lifelong smoking is clearly responsible for much higher mortality rates, obesity, and especially severe obesity, has probably been an important contributor to premature mortality in populations like this for some time. He adds that where obesity is more common in disadvantaged groups it may contribute to health inequalities and increase the burden on local health and social services.

On a positive note, the authors conclude that [women](#) who never smoke and are not obese have relatively low mortality rates regardless of their social position.

In the accompanying editorial, Professor Johan Mackenbach from the Erasmus Medical Center Rotterdam, says the study is welcome "but it is important not to forget that smoking is a much stronger risk factor for mortality than most other risk factors, including obesity."

He concludes that "inequalities in mortality persist among those who have never smoked, partly because [obesity](#) takes over the role of [smoking](#), but they persist at a much lower level, and that is good news for whoever wants to reduce [health inequalities](#)."

Provided by British Medical Journal

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