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Current trends suggest increased levels of obesity.

Background

But we are only focusing on changes in prevalence or at the middle...

Background

Imagine taking the whole population of England and lining up everyone in order of their BMI...
Background

Background

Background


BMI ≥ 30

Background

Middle BMI (mean/median)

Background

Aims

1. To explore how the distribution and dispersion of BMI has changed for England between 1992 and 2013
2. To examine how trends vary by sex and socioeconomic status

Methodology

Data
• Health Survey for England, 1992-2013
• Adults aged 20 and over
• Mean sample size per year; 10,418
• Height (m) and weight (kg) measured by interviewer
• Education used as a proxy for socioeconomic status

Methodology

Statistical analyses (stratified by sex and SES)
• Standard deviation as a measure of dispersion
• 5\textsuperscript{th}, 50\textsuperscript{th} (median) and 95\textsuperscript{th} percentiles calculated using quantile regression
Results


Results

Females

Males

Results

Results

Discussion

Key results
• First evidence of varying temporal patterns in the distribution of BMI by sex and SES for England
• Corroborates with international evidence (albeit not yet explored by SES)
Why should I care?

• There is a j-shaped association of BMI to multiple morbidities and mortality
• The slowing down of median BMI hailed by some public health officials may not be quite the success it first appeared

Discussion

Limitations:

- Data are cross-sectional – need for confirmation of results with longitudinal data
- Declining response rates for HSE over time – potential for bias