

### Does Childhood Obesity Hinder Human Capital Development?

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# Obesity: a Key Public Health Challenge of Our Times

- Obesity is a marker for behavioural and social factors linked with chronic diseases throughout the life course
- Childhood obesity not only about childhood
- US study predicts that 57% of current children will be obese at age 35, half of this prevalence will occur during childhood (*Ward et al., 2017*)
- Childhood obesity is a social phenomenon, impacts from and on family and household functioning
- "our current knowledge of the causal impacts of obesity on [education, labour market and social] outcomes is limited at best"

#### Predicted Prevalence of Obesity at the Age of 35 Years.



Ward ZJ et al. N Engl J Med 2017;377:2145-2153



### Childhood Obesity Strongly Associated with SES in UK



### An Important, and Yet Unanswered, Question

- Substantial work on <u>adult obesity</u> and labour outcomes: obesity affects employment, wages, sick leave, early retirement
  - Causal links identified (Lindeboom et al., 2009; Morris, 2006, 2007; Font et al., 2010; Cawley, 2004; Devaux & Sassi, 2015)
  - Adult obesity causally linked with 5 socioeconomic outcomes in UK Biobank data (Tyrrell et al., 2016).
- <u>Childhood obesity</u>: detrimental impact on girls' educational attainment in correlation study based on ALSPAC (Booth et al., 2014)
- Systematic review (Martin et al., 2017; 31 studies, 17 cohorts): increasing evidence from longitudinal studies but mostly based on correlations

### The Project's Conceptual Framework



# The Economic and Social Outcomes of Childhood Obesity

### **Educational achievement:**

- cognitive achievement (test scores from assessments)
- educational attainment (highest qualification obtained)

#### **Employment and earnings:**

- whether in employment
- occupation (official occupational UK classification)
- individual earnings

#### **Civic participation:**

- taking part activities organisations
- trust other people
- voting in last general election

# Childhood Obesity Impacts over the Life Course

 Can we break the vicious circle linking obesity, ill-health and social disadvantage across generations, and mitigate its burden on women?



### Understanding Impacts over the Life Course

- Impacts of <u>early-onset</u> obesity vs. <u>adolescent</u> obesity
- Impacts on <u>educational</u> outcomes at different points in time
- Labour and social outcomes at different life stages
- Impacts of <u>childhood-onset</u> obesity vs. <u>adult-onset</u> obesity

# **Policy Relevance and Potential Impacts**

If project succeeds in demonstrating causal impacts of childhood obesity, twofold policy implications:

Strengthen childhood obesity prevention through:

- Government action in health care, public health, education, transport, environment, sport, media
- o health professionals

 $\circ$  industry

 $\odot\,\text{NGOs}$  and other civil society

Mitigate the impacts of childhood obesity through government policies, health professionals, employers, civil society