Weight status in children at 8 years: a prospective cohort study

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**BACKGROUND**

Prevalence of childhood obesity represents a major public health concern, given the tracking of body weight from childhood to adult age and its health sequelae.

**OBJECTIVES**

To describe prevalence of overweight (OW) and obesity (OB) in children at 8 years and investigate the relationship with pre-pregnancy maternal weight and weight status at 4 years.

**METHODS**

485 pregnant mothers recruited between 2004-2007 and 409 children from a population-based cohort study. Research protocol was approved by the Ethics Committee. We analysed maternal BMI, BMI at 4 and 8 years and prevalence of OW/OB according to IOTF. At 8 years, we also measured waist circumference (enKid references) and body composition (by electrical bioimpedance).

**RESULTS**

319 children (169 boys) were studied, aged [mean(SD)] 8.26 (0.28) years.

20.2% children had OW or OB at 4 years. At 8 years, one out of three children had OW or OB.

**CONCLUSIONS**

High prevalence of overweight and obesity at 8 years was found, even more that at 4 years. There is a positive correlation between offspring's weight status and pre-pregnancy maternal weight. Childhood obesity prevention should be started from pregnancy and infancy.