

# CHARACTERISTICS OF CITIES THAT PREDICT PHYSICAL ACTIVITY AND THE RISK OF OBESITY IN CHILDREN

## SUMMARY

**Childhood obesity is related to a higher risk of morbidity both during childhood and adulthood, and subsequent greater risk of premature mortality.** We performed geospatial analyses on the urban environment to assess the role of multiple environments and exposures in predisposing to children obesity, based on samples of European populations, with the aim to identify actionable determinants of obesity at urban and behavioural levels.

We collected and processed geospatial information such as high-resolution images provided by satellites to characterise neighbourhoods, and linked these with participants from our population samples. The purpose was to identify characteristics of the urban environment (e.g. “walkability”, density of fast foods, density of green spaces and playgrounds) that can predict obesity in children. Based on a standardised definition of “neighbourhood” across studies, we found, for instance, that in a Slovenian population, evidence showed that green spaces and playground facilities were beneficial to the physical fitness of children, while higher “walkability” of the environment and the number of playgrounds had beneficial effect on children’s body mass index.

Slovenian schools intensively promote physical activity among children, and we will extend this analysis to other contexts in Eastern Europe, including Croatia and Romania. Similar analyses were performed in other populations among 12,000 children aged 3-4 years.

**While analyses are still ongoing,** the identification of urban settings that facilitate physical activity or predict the risk of obesity is clearly of paramount importance to allow better city planning.



For more information, visit [www.stopchildobesity.eu](http://www.stopchildobesity.eu)

