Title: Urban and social environment and childhood obesity – a natural moving2health experiment

Acronym: UrbanKids

Project leader: Martine Vrijheid

Host organisation: ISGlobal (Barcelona Institute for Global Health)

Main purpose of the project: UrbanKids evaluates how changes in the urban and social environment affect weight gain and obesity in children. The project will use a natural experiment approach, focusing on whether moving to a different residential location can have a long-term impact on body weight trajectories and obesity risk.

Design/methodology/approach: UrbanKids will use data from a large longitudinal cohort of 1 million children and adolescents in Catalonia, with repeated measures of height and weight. Exposure to a wide range of urban environment factors will be estimated, including air pollution, green spaces, social deprivation, food environment, and built environment (walkability, street connectivity).

Potential results: UrbanKids will identify which neighbourhood urban and social exposures, and their patterns, are associated with the development of obesity in children and adolescents, and will provide quantitative estimates of the impacts of urban and social environment improvements on childhood overweight and obesity.

Social relevance of the research: Childhood obesity rates in Spain are among the highest in Europe. Prevention in early life is critical to alleviate the life-long consequences of obesity. Long-term solutions to the childhood obesity epidemic may be achieved by modifying multiple aspects of the urban environment, but evidence to inform prevention policies is lacking.

Originality/value of the project: UrbanKids combines a natural experiment approach with a large longitudinal cohort and rich urban exposure and socio-demographic data, to identify which modifiable aspects of the urban environment have a measurable impact on childhood obesity rates. This will inform policy-level decisions about how future neighbourhoods ought to be designed.