Background

The primary aim of the International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE) was to determine the relationships between lifestyle behaviours and obesity in a multi-national study of children, and to investigate the influence of higher-order characteristics such as behavioural settings, and the physical, social and policy environments, on the observed relationships within and between countries.

Methods/design

The targeted sample included 6000 10-year old children from 12 countries in five major geographic regions of the world (Europe, Africa, the Americas, South-East Asia, and the Western Pacific). The protocol included procedures to collect data at the individual level (lifestyle, diet and physical activity questionnaires, accelerometry), family and neighborhood level (parental questionnaires), and the school environment (school administrator questionnaire and school audit tool). A standard study protocol was developed for implementation in all regions of the world. A rigorous system of training and certification of study personnel was developed and implemented, including web-based training modules and regional in-person training meetings.

Discussion

The results of this study will provide a robust examination of the correlates of adiposity and obesity in children, focusing on both sides of the energy balance equation. The results will also provide important new information that will inform the development of lifestyle, environmental, and policy interventions to address and prevent childhood obesity that may be culturally adapted for implementation around the world. ISCOLE represents a multi-national collaboration among all world regions, and represents a global effort to increase research understanding, capacity and infrastructure in childhood obesity.