

## Intervention centred on playground marking to promote physical activity in Italian schoolchildren

Health in Europe from global to local policies,
methods and practices

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**ISSUE.** Overweight prevalence in Italian children is among the highest in Europe, in some regions above 40%. Moreover, is worrying the 'involutive' trend of motor skills in subsequent generations.

The school is a privileged setting to increase PA up to recommended daily levels and it should implement comprehensive programs: physical education, before and after school PA, daily playtime (recess), active breaks in classroom, involvement of parents and community.

**INTERVENTION.** The intervention involved 82 school-children, 6-11 years aged, in a school of Central Italy. The main action consisted in realizing a 'marked playground', an outdoor area where children play guided by the colourful shapes painted on the surface (geometric, symbols, roads, footprints). Pupils have started with instructional games strictly defined by rules, but after a few weeks, they freely changed the rules and invented new ways to use the painted marks also by painting original drawing created by them.

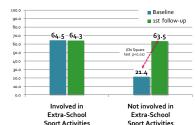
To ensure safety conditions the 'supervisors' (physical educators, teacher, assistant) and the children have been trained about the rules for safety and management of space, time and conflicts that may arise.

From October 2012 to June 2013 the children used the playground three days a week after the lunch time.



**EVALUATION.** The intervention was evaluated about its effectiveness (children's health and fitness outcomes) and the process (teachers' reports and opinions).

The main short-term outcome was a significant increase in the proportion of children reaching recommended daily PA, especially in the subgroup not involved in structured extra-school port activities (from 21.4% to 63.5%). Moreover there was a significant improvement in coordinative motor skills.



Teachers confirmed a positive impact on behaviours and attention level in the classroom and noticed an improvement on childrens' academic achievement.

## Main messages

- 1. The school marked playground may be the only opportunity for some children to be physically active in a day. They can develop and reinforce the skills to be active in their own time.
- 2. The intervention produced as material resource the model of playground planimetry and user manuals easily reproducible in other spaces and lasting against a relatively low cost. It's effective and reproducible also in other community settings (municipalities, entertainment centres).