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Introduction

- The World Health Organisation recognise overweight and obesity as the most common childhood disorder in Europe (1).
- Up to 200 million school aged children are overweight (2).
- 1 in 4 children in Ireland have poor aerobic capacity and are overweight/obese (3).

Study Objectives

- Use the best practice model of "Project Energize" in New Zealand and adapt it to an Irish setting(4).
- Participating schools work alongside trained "Energizers," who support teachers to implement physical activity and nutrition programmes aligned with the curriculum.

Images: Sample Study Resources



Intervention Objectives

To deliver and evaluate a whole school health promotion intervention targeted at primary schools in Cork.

Main objectives:

- I. Increase physical activity levels
- II. Decrease sedentary time
- III. Improve nutrition knowledge

Methods

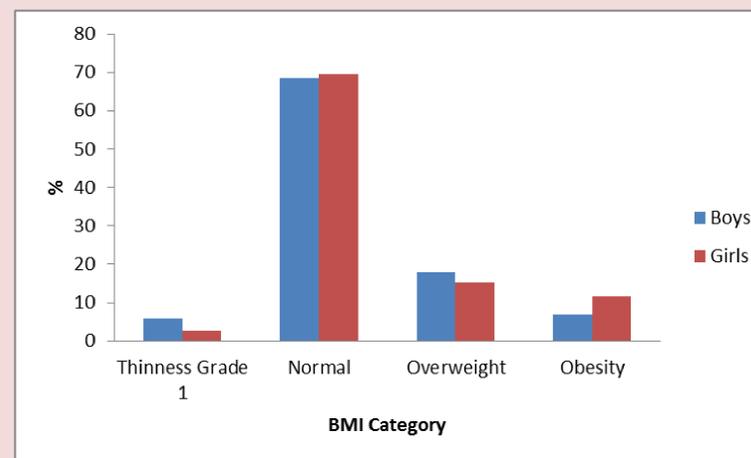
Evaluation took place in 4 primary schools of which 2 are intervention and 2 are control, both urban and rural at baseline October 2013. A sample of 230 children agreed to partake in the evaluation.

This included:

- A school stock take, needs analysis & action plan conducted with school staff.
- Physical measurements of senior infants and fourth class groups including height, weight, body fat, blood pressure, waist circumference & 550m fitness test.
- Physical activity behaviour of sample using Actigraph triaxial accelerometers.
- Knowledge and Attitudes questionnaires for children to complete and Food and Drink questionnaires for parents to complete.

Preliminary BMI Findings

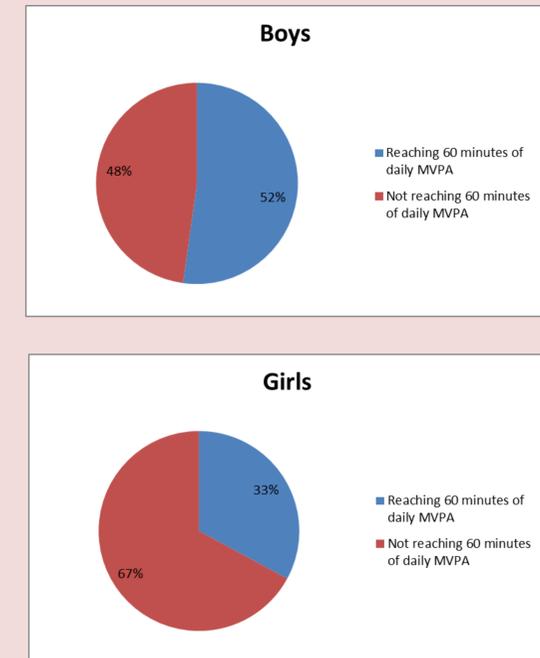
Figure 1.1 BMI categories by gender



- BMI categories were determined according to the International cutoffs for thinness, overweight and obesity (5).
- 29 (35%) boys were in the overweight/obese category.
- 30 (27%) girls were in the overweight/obese category.

Preliminary Physical Activity Findings

Figure 1.2 & 1.3 Percentage of school children reaching and not reaching the recommended 60 minutes of daily moderate to vigorous physical activity (MVPA) by gender



- Of the 230 children who wore the accelerometer 169 (73%) fulfilled the inclusion criteria and completed 4 or more days of recording (6).
- Boys recorded a mean of 64.5±19.3 daily minutes of MVPA.
- Girls recorded a mean of 52.8±17.6 daily minutes of MVPA.

The relationship between BMI and levels of physical activity was investigated using Spearman's rho correlations. There was no significant correlation between the 2 variables for males ($r=-0.13$, $p=0.224$) and females ($r=-0.71$, $p=0.54$).

Conclusion

- Approximately 48% of boys and 67% of girls are not reaching the physical activity guidelines.
- One in four children are in the overweight/obese category.
- Project Spraoi is a 20 month intervention with post testing taking place in June 2015.