Exploring grade and gender influences on movement behaviour during balanced school day nutrition breaks

Do Kids Move It, Move It?

The Canadian 24-Hour Movement Guidelines for Children and Youth recommend daily minimum physical activity and sedentary behaviour amounts for 5- to-17 year olds.

WHAT IS THE BALANCED SCHOOL DAY?

During each nutrition/activity break, children are given 20 minutes to eat and 20 minutes of outdoor leisure time (recess).

The Project

1 Purpose

To examine primary (grades 1-3) and junior (grades 4-6) students' physical activity (PA) in the context of the Canadian 24-hour movement guidelines, specifically their time spent 'sweating', 'stepping', and 'sitting' during school day nutrition/activity breaks.

2 Methods

- 159 participants (52% female) wore an ActiCal accelerometer on their waist for 5 consecutive school days between March and June.
- Pre-determined cut-points (1) were used to calculate the amount of time spent 'sweating' (moderate-to-vigorous PA; MVPA), 'stepping' (light PA; LPA), and 'sitting' (sedentary behaviour; SB) during the 40-minute nutrition/activity breaks.

3 Results

- Boys displayed significantly more 'stepping' (LPA) and 'sweating' (MVPA) and less 'sitting' (SB) than girls.
- Students in the primary grades spent significantly more time 'stepping' (LPA) than those in junior grades.
- Junior grade students spent significantly more time 'sweating' (MVPA) than primary grade students.

As children progress into the junior grades, an upward trend was seen for the amount of MVPA accumulated during activity break times.

Further research is required to better understand children’s choice of activities during unstructured play-time to develop strategies that decrease SB during those times.

Bottom Line: Children did some activity during balanced school day activity breaks, but we’d like to see more.

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