Reducing children’s classroom sitting time using sit-to-stand desks: Findings from pilot studies in UK and Australian primary schools

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In this pilot study published by the Journal of Public Health, irrespective of implementation, incorporating sit-to-stand desks into classrooms appears to have effectively reduced classroom sitting in a diverse sample of children. Based on these findings, longer-term efficacy trials will determine effects on children’s health and learning.

Methods. Pilot controlled trials with similar intervention strategies were conducted in primary schools in Melbourne, Australia, and Bradford, UK using sit-stand desks by Ergotron.

UK
- 30 students
- Six sit-to-stand desks replaced a bank of standard desks
- Each child exposed to the sit-to-stand desk once a day for at least one hour

AU
- 44 students
- Sit-to-stand desks replaced all standard desks
- Children initially encouraged to stand for at least one 30-minute class per day, increased gradually over trial

- Children were exposed to the sit-to-stand desks for 9–10 weeks
- Control classrooms retained their normal seated desks
- Classroom sitting time was measured at baseline and follow-up using the activPAL3 inclinometer

Results. Students provided valid activPAL data at baseline and follow-up. The proportion of time spent sitting in class decreased significantly at follow-up in both intervention groups. See graphs below:

In children, adverse associations between sedentary behavior (sitting) and the following have been reported: 1–4
- cardio-metabolic health risk markers (obesity, blood pressure, cholesterol, insulin)
- fitness
- cognitive development
- academic achievement

From a pedagogical standpoint there are wider benefits in “promoting children’s social, emotional and cognitive development”

Parents and children expressed support for sit-to-stand desks in classrooms

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