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Physical activity and sedentary guidelines; What are the similarities and differences across the globe?

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Abstract

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ideas. **Results:** Teachers acknowledged a higher level of activity was occurring more regularly for their entire student body while students identified the activities as exciting, unique and engaging. **Conclusion:** Healthy is Happy has led to increased physical activity in schools while helping students make healthier food choices. While schools received identical training, personalizing it for their own schools led to greater student engagement, and the realization that Healthy is Happy!

A Community-Based, Family-Centred Lifestyle Intervention Improves Physical Activity and Health-Related Quality of Life in Overweight Adolescents

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Objective: We conducted a staggered-entry, wait-list controlled clinical trial to test the effects of an 8-week community-based family-centred lifestyle intervention on the physical activity, sedentary time, weight status and health-related quality of life levels of overweight and obese. **Methods:** Adolescents (14.±1.6 years) and their parents completed an 8-week intervention at three community sites in Western Australia across three waves. The initial intervention was followed with telephone and SMS follow-ups at decreasing frequency. Participants (n=56) were weighed and measured, wore accelerometers, and completed the PedsQL health-related quality of life (HRQoL) instrument at baseline, before beginning the intervention, immediately following the intervention, and at 3- and 6-months follow-up. Linear mixed models with repeated measures, adjusted for age, wear-time, intervention site and wave, were used to test the effects of the intervention on accelerometer-measured and self-reported physical activity. **Results:** We present here pre-post data for 56 completers. From pre-program to 6-months, sedentary time decreased by 19 min/d, and total physical activity increased by the same amount. BMI z-score fell from 2.05±0.45 to 2.00±0.45. Health-related quality of life scores increased from 70.3±18.0 to 81.1±20.2 (all p<0.05). **Conclusion:** This program resulted in modest but significant improvements in activity patterns, weight status and HRQoL after a 6-month maintenance period.

The Relationship Between Use of Time and Health-Related Quality of Life in Australian Children and Adolescents

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Objective: Determine the associations between various aspects of time use and health-related quality of life (HRQoL) in children and adolescents. **Methods:** 239 Australian children aged 10 to 13 years

completed the Pediatric Quality of Life Survey (PedsQL) survey to quantify health-related quality of life. Time use was quantified over four days using the Multimedia Activity Recall for Children and Adolescents (MARCA), a validated 24 h recall tool. The average number of minutes spent in physical activity (divided into sport, active transport and play), screen time (divided into television, videogames and computer use) and sleep was calculated. Body fat was measured using DXA, Tanner stage by self-report and household income by parental report. Analysis used Partial Least Squares regression, with age, percentage body fat, Tanner stage, household income and time use as independent variables and PedsQL total, physical and psychosocial subscale scores as dependent variables. Analyses were stratified by gender. **Results:** For boys, the most important predictors of HRQoL were body fat percentage (negative), videogames (negative), sport (positive) and Tanner stage (positive). For girls, the significant predictors were body fat percentage (negative), TV (negative), sport (positive) and household income (positive). Active transport, active play, computer use, sleep, bedtime and morning wake time were not associated with HRQoL. **Conclusion:** While body fat was the most significant predictor of HRQoL, sport was independently associated with better HRQoL and TV and videogames with poorer HRQoL. HRQoL appears to be associated only with particular types of physical activity and particular types of sedentary behaviour.

Physical Activity and Sedentary Guidelines; What are the Similarities and Differences Across the Globe?

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Objectives: As a result of evidence documenting the health benefits of physical activity and risks associated with sedentary behaviour, many countries have created physical activity and sedentary behaviour guidelines. This research aimed to systematically identify individual countries guidelines for children and adolescents and to explore consistencies and points of difference between guidelines internationally. **Methods:** Two authors independently searched the literature in four databases to identify papers reporting on physical activity and sedentary behaviour guidelines. The google search engine was used to recover additional sources not previously identified in the academic literature. **Results:** There were guidelines for thirteen individual countries. Additional guidelines exist for Nordic countries, European Union, and World Health Organisation. Most guidelines recommended at least 60 minutes of physical activity each day, however intensities varied, while some did not provide definitions to substantiate intensity levels. Guideline age categories ranged from two to 18 years, however most were for five to 17 year olds. Some countries included recommendations for sedentary behaviour or a reduction in screen time (N=4), while most did not. **Conclusions:** Nuances in wording could lead to varied interpretations of physical activity requirements. In some instances physical activity guidelines were written up to ten years ago, emphasising the need to maintain currency. Differences in age groupings can cause concern if making international comparisons. There is a need for global consistency for accurate across country comparisons based on current evidence. Guidelines should contain details about the frequency, duration, types, and amount of physical activity and sedentary behaviour, as well as physical activity intensity.