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Editorial

Children's fitness, fatness and sugar

This issue brings two particularly important papers in the area of physical activity and children's health. The first paper, from Vella, Gardner, Kemp, Schweickle and Cliff, drawing data from the Longitudinal Study of Australian Children (N = 4286). The authors measured time spent in organised sports at age 10 years and time spent in physical activity at age 12 via parental-reported time-use diary, dietary behaviours were self-reported at age 12, screen time was parent-reported and body fat was measured at age 14 using bioelectrical impedance analysis. They found no significant indirect relationships between sports participation and body fat via any of the mediating variables in the total sample, or among sport participants. The authors underlined the need for the generation of better-quality evidence to support the promotion of organised sports programs as public health initiatives in their current form during childhood and adolescence.

The second paper, from Telford, Telford, Martin and Welvaert, reports data from the Australian Lifestyle of our Kids (LOOK) longitudinal study (N = 556) specifically examining the drivers of body composition during adolescence. This work combined the use of DXA to measure percent body fat, accelerometers to measure physical activity and sedentary behaviour, and a multi-pass recall with checks for under-reporting to measure dietary intake. It may seem counter-intuitive that they found no significant relationships emerging between fatness and daily total kilojoule intake, or daily sugar or fat intake. In other words, in general, the fatter children did not eat more food in general, nor more sugar or fat, either in total or as a percentage of kilojoule intake. Fatter children were differentiated from leaner children in that in that they were simply less active. It should be of interest to any government serious about reducing the prevalence of obesity in our youth that their analyses showed that the less physically active a child or adolescent, or the longer they sat around each day, the higher their percent body fat.

The authors suggest these results support the hypothesis that control of energy balance through the appetite centres of our brain is best achieved in a physically active individual. While acknowledging the importance of a well-balanced diet to the health of our children, they also point out that any campaign to lower the prevalence of obesity in our children and adolescents is more likely to be successful should the focus fall mainly on the positive aspect of increasing physical activity rather than the negative aspect of restricting food intake.

The December 2019 issue of the Journal of Science and Medicine in Sport provides an excellent range of articles of interest to researchers and clinicians in sport science and exercise medicine.

Gordon S. Waddington
Editor-in-Chief

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