

# Prevalence and socio-demographic distribution of eating, physical activity and sedentary behaviours among Australian adolescents

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## Introduction

Childhood obesity is a significant public health issue in Australia, with recent estimates indicating around one in four children are overweight or obese.<sup>1,2</sup> Overweight children are at increased risk of becoming overweight adults<sup>3</sup> and experiencing chronic diseases such as type 2 diabetes, heart disease and some cancers.<sup>4</sup> Modifiable lifestyle factors including diet, physical activity and sedentary behaviours are associated with excess weight in young people.<sup>5,6</sup> Despite this, there has been a lack of regular monitoring of young people's eating and physical activity behaviours at the national level.

The most recent national survey of children's nutrition and physical activity was conducted in 2007, with 4,487 participants aged 2 to 16 years, and there is no commitment to repeat the survey in future years.<sup>1</sup> While many States have their own ongoing school surveys focused on these health behaviours,<sup>7,8</sup> they only provide prevalence and trend data at an individual state level. To address this gap, the National Secondary Students' Diet and Activity (NaSSDA) survey was established by Cancer Council Australia and the National Heart Foundation of Australia. First conducted in 2009-10, the NaSSDA survey is intended to become a regular monitoring system to track Australian adolescents' diet and physical activity behaviour at both

a state and national level and foster a strong evidence base for the advocacy and evaluation of youth obesity prevention initiatives.<sup>9</sup>

The primary aim of this study is to provide a current assessment of the prevalence and socio-demographic distribution of adherence to national dietary and physical activity recommendations among Australian secondary school students. The Australian Guide to Healthy Eating recommends adolescents eat at least four serves of vegetables and three serves of fruit each day, and that people limit their consumption of energy-dense and nutrient-poor 'extra' foods such as sugary drinks and fast foods.<sup>10</sup> Australia's physical activity recommendations are that adolescents engage in at least 60 minutes of moderate-to-vigorous physical activity every day and spend no more than two hours per day using electronic media for entertainment.<sup>11</sup> Data on how adolescents are performing in relation to national recommendations are needed to elucidate potential targets for change, inform program development and evaluation, and provide evidence that informs policy.

## Method

### Design and procedure

Data were obtained from students participating in the National

## Abstract

**Issue addressed:** To examine the prevalence and socio-demographic distribution of adherence to national dietary and physical activity recommendations among Australian secondary school students.

**Methods:** Cross-sectional survey of 12,188 students in Years 8 to 11 (aged 12-17 years). Students' self-reported eating, physical activity and sedentary behaviours were assessed using validated instruments administered via an online questionnaire.

**Results:** Less than one-quarter of students (24%) reported meeting the daily requirement of at least four serves of vegetables, while 41% reported consuming the recommended three or more daily serves of fruit. Just 15% of students reported engaging in at least 60 minutes of moderate-to-vigorous activity every day, and only one in five students met the recommendation of spending no more than two hours per day in small screen recreation. Males were performing better than females in terms of fruit intake and physical activity, but worse in relation to frequency of consumption of sugary drinks and fast food, and time spent using electronic media. The proportion of students meeting fruit and vegetable recommendations declined with advancing year level, while lower socio-economic position (SEP) students were faring less well than those from high SEP neighbourhoods, particularly with regards to healthy eating.

**Conclusions:** There is considerable scope for improving young people's health behaviours in line with national dietary and physical activity recommendations.

**Key words:** health behaviours, recommendations, adolescents, cross-sectional study

*Health Promotion Journal of Australia* 2012; 23: 213-8

## So what?

Policy proposals to support adolescents in making healthy behaviour choices and redress socio-demographic disparities should be implemented.