# Provision of Healthier Food in schools



## A Fact Sheet

Good nutrition, particularly in the early years of life is fundamental to health. A healthy diet during childhood and adolescence promotes optimal health, growth and cognitive development and may contribute to prevention of disease later in life. Children's health and wellbeing have also been shown to influence a child's 'opportunity to learn' and achieve optimal education outcomes. It is acknowledged that ensuring children receive adequate nutrition during childhood optimises their opportunity to grow to their full potential and participate in society.

#### **Current Health Statistics for New Zealand children**

- New Zealand ranks 29th/30 OECD countries for child health and safety<sup>4</sup>
- One-third of children aged 2-14 years are either overweight (21%) or obese (8%) with the greatest burden found among Māori and Pacific children.<sup>5</sup>
- Children who are obese in childhood are more likely to go on to be obese in adulthood. 6
- Overweight and obesity are major risk factors for type 2 diabetes, cardiovascular disease, stroke and common cancers. <sup>7,8,9,10,11</sup>

### The most recent data from the 2002 National Nutrition Survey of schoolchildren aged 5-14 years identified:

- 60% of children did not meet the recommendations for fruit intake.
- 40% of children did not meet the recommendations for vegetable intake
- 21% of children never drank milk
- 49% of children did not meet the recommendations for lean meats etc.
- 17% of children do not eat breakfast regularly at home
- lodine, zinc, vitamin A, folate, Calcium and iron deficiencies were common for some children<sup>12</sup>
- •Poor nutrition, overweight and obesity can have adverse effects on children and young people's psychological and educational outcomes 13, 14

#### **Current Education Statistics**

- In 2010, 63% of European, 67% Asian, 36% Māori and 41% Pasifika students achieved level 2 NCEA<sup>15</sup>
- Wide disparities in student achievement exist between average performers and bottom performers <sup>16</sup>

While it is acknowledged there are numerous factors that influence children's health which affect education outcomes, schools are an important setting for nutrition intervention as they have the power to influence children's knowledge and behaviour. It is also in a community's best interests to ensure their students' health doesn't compromise their 'opportunity to learn' and affect school achievement. The World Health Organisation recommends that schools provide a supportive health promoting environment for youth and include healthy choices in school food services. The WHO report states, 'an effective school health programme can be one of the most cost effective investments a nation can make to simultaneously improve education and health'.<sup>17</sup>

New Zealand Schools have a responsibility to promote healthy food and nutrition to all students under the government's National Administration Guideline 5 clause (ii). 18

## Why Schools are an important setting to impact children's food choices and dietary quality

- School-based interventions reach almost 100% of school-age children across diverse ethnic and socioeconomic groups.<sup>19</sup>
- Children spend a quarter of their waking lives in school<sup>17</sup> and consume an average of 32% of their daily energy intake in school.<sup>20</sup>
- A recent review showed the majority of schools in New Zealand believe they should play a role in promoting healthy lifestyles but also acknowledged the importance of families, communities, and wider societal issues such as the price of food in addressing the issue.<sup>21</sup>

### Healthy food provision in the school setting improves diet and nutrition outcomes

- A recent literature review commissioned by the Heart Foundation and authored by Ni Mhurchu (2011) provided evidence to show that nutrition policies/guidelines are effective in improving the school food environment and student's dietary intake at school. The review found that to be effective these policies must relate to all food consumed on school premises and have the support of school parents and administration.<sup>22</sup>
- Further research by Clinton et al, 2010 found a School Nutrition policy made it more likely that food and nutrition were seen as priority issues within the school.<sup>3</sup>
- In the UK, nutrient based school food standards set in 2008 have seen caterers provide a healthier lunch, with substantial increases in children's fruit and vegetable consumption (60% on average) and a 32% decrease in sodium intake. It was acknowledged that the adoption of food standards was supported by a 'whole school approach'.<sup>23</sup>
- A 2010 review found evidence around the effectiveness of multicomponent school food interventions on self-reported dietary behaviour but an absence of evidence for effects on body weight/obesity.<sup>24</sup>
- A review by Quigley & Watts (2005) showed the most successful multicomponent school interventions which had a positive effect on what children eat included the following factors:
  - School wide policies that support healthy eating;
  - Sequential, comprehensive health education curriculum that includes nutrition which is fun;
  - Coordination between school food services and nutrition education;
  - Training for school staff;
  - Family and community involvement; and
  - Evaluation<sup>13</sup>

#### Healthier food provision in the school setting linked to children's educational outcomes - recent studies

- The aforementioned Ni Murchu review highlighted a gap in research that fails to provide clear evidence that improving school food provision improves student's academic achievement. This could be due to the fact a number of causal factors contribute to academic achievement, and are difficult to control for. However, it is suggested an indirect link between nutrition and academic achievement exists due to improvements in physiological, behavioural, psychological and social wellbeing. Overall these improvements lead children to a state where they have a greater 'opportunity to learn'.<sup>3</sup>
- However, several studies outside the scope of the review above have provided evidence the introduction of healthier school meals can improve short term observed learning behaviour<sup>25</sup> and overall academic achievement.<sup>23</sup> Improving a child's nutrient intake through improved food provision can enhance cognition as well as influence behaviour.<sup>13,14</sup>
- Poor nutrition may result in decreased immunity and greater susceptibility to infectious disease,

leading to increased levels of absenteeism from school which in turn affects academic achievement. 13.14,23

Overall evidence suggests multifaceted school interventions that include environmental and policy changes and foster a 'whole school approach' are the most effective interventions to improving school food provision. Providing healthy food in schools can improve children's nutritional intake, childhood obesity and thereby has potential to influence long-term health outcomes. While evidence to show a direct causal link between healthy food provision at school and education outcomes is limited, an indirect link shows improving nutrition can increase a child's 'opportunity to learn'.<sup>3</sup>

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