

# Effects of childhood obesity on learning, and the role of the school food environment

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#### **Heart Foundation in Education**



- 21 Nutrition Advisors
- Support Schools and Early Learning Services
- Fuelled4Life

www.learnbyheart.org.nz



# **Objectives**

Summary of evidence prepared for the Heart Foundation by Adjunct Associate-Professor Penni Cushman, University of Canterbury on:

- The association between children's educational outcomes and obesity
- The association between educational outcomes and the school food environment
- The modifications needed to the school environment to address any negative associations between obesity and educational outcomes.



## Currently....

The Annual Update of Key Results 2015/16: New Zealand Health Survey<sup>2</sup>

1 in 9 children (2-14yrs) were obese15% Maori and 30% Pacific children obeseChildren in most deprived areas 5x more likely to be obese34% of children don't eat breakfast at home



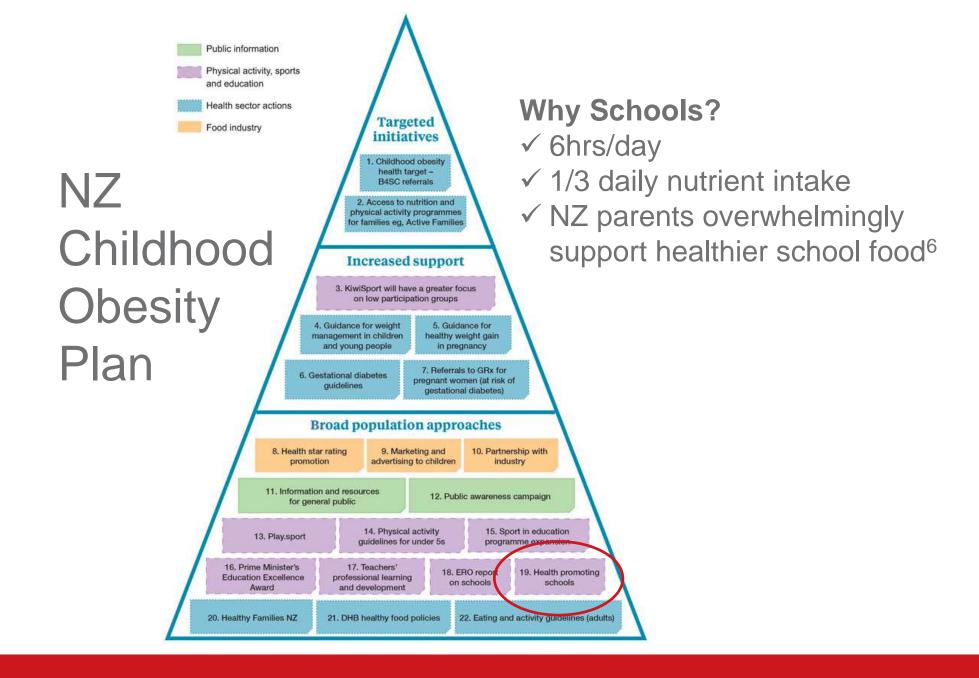
# The need to improve school food environment

Obesity can affect a child's health, educational attainment and quality of life<sup>5</sup>

- Rising obesity rates
- Poverty-related food issues
- Nutrition → learning





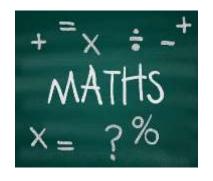




#### **Obesity and learning outcomes**

Healthier children are more likely to succeed academically<sup>8</sup>

Obesity-related issues negatively affect students' learning outcomes

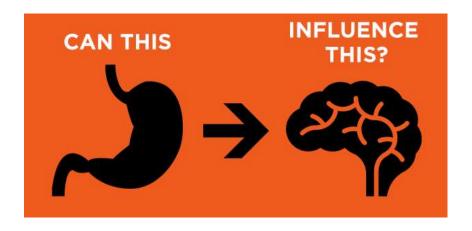








#### **Obesity and learning outcomes**



- Social and emotional factors have been viewed as underlying relationships between obesity and learning outcomes
- Healthy diet is linked with better emotional health<sup>28</sup>



#### School food and learning outcomes

Healthy food consumption
better educational
outcomes<sup>1</sup>

Habitual breakfast eaters
= better educational
outcomes and classroom
behaviour<sup>68,69</sup>





#### School food and learning outcomes



- Whole school food environment needs to improve, not just canteen<sup>85</sup>
- Student achievement rises when whole school environment promotes healthy eating<sup>85</sup>



#### Modifying school food environment

 Food policy development must include all school stakeholders<sup>135</sup>

 Classroom nutrition education and food provision need to be mutually supportive<sup>100</sup>





#### **School Gardens**



- 55% of NZ schools have school gardens = ↓ BMI and ↓ fast-food consumption<sup>110</sup>
- † self-esteem and confidence for students who struggle academically<sup>111</sup>



#### **Food outlets**



Fast food outlets near schools inhibit school canteens to offer students healthy choices<sup>135</sup>

68% of urban and 14% of rural schools had a convenience store within 800m<sup>138</sup>



#### **Parental involvement**

↑ likelihood that healthy initiatives will be transferred into the home 118

When dietary changes extend to family, parents are more likely to role-model healthy food habits<sup>124</sup>





### In summary....

The school food environment can be modified to assist in addressing obesity, and to encourage and promote healthy eating for students and their families.

Thank you to <a href="www.fuelled4life.org.nz">www.fuelled4life.org.nz</a> for funding the review.

Fact Sheet available for download from:

www.fuelled4life.org.nz/news/obesity-educational-outcomes-and-the-school-food-environment

For further information or a copy of the full paper, please contact:

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