# Using systems thinking to collaborate and catalyse community action

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ANA Conference Auckland, May 2019





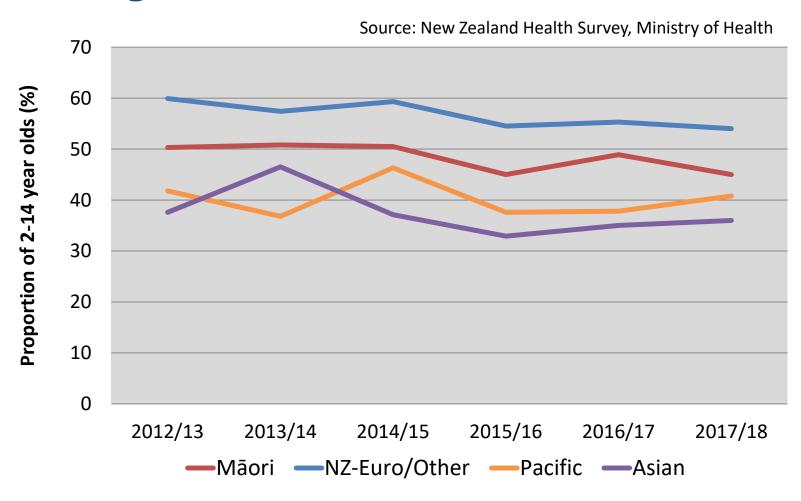
MEDICAL AND HEALTH SCIENCES



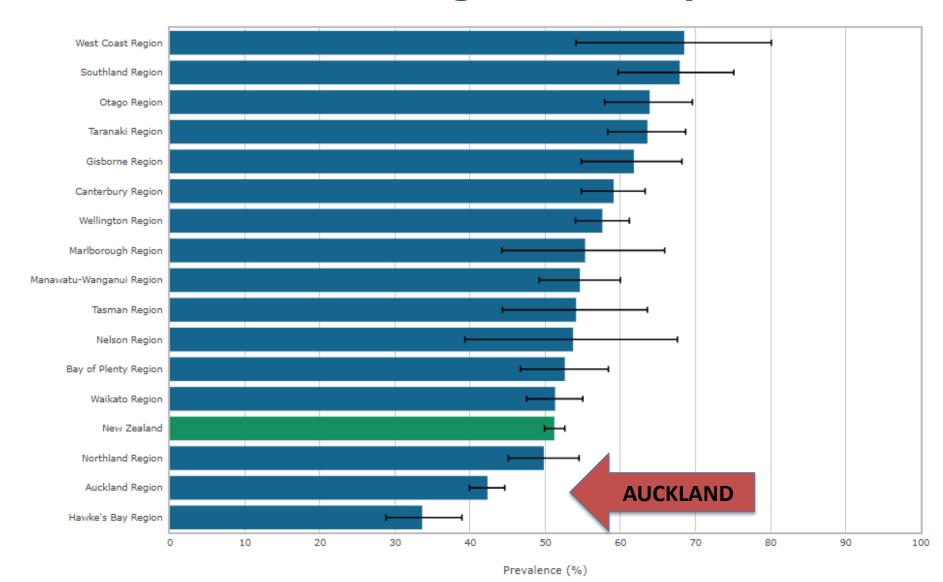




# What proportion of NZ children meet fruit and vegetable recommendations?



# Children (aged 2-14 years) eating 2 serves of fruit and 3 serves of vegetables daily



Source: 2016/17 New Zealand Health Survey





#### Aims of the research:

- 1. Identify current systemic barriers for children aged 2-14 years to meeting the FV guidelines
- 2. Catalyze action on equitable interventions which would improve children's nutrition by increasing FV intake.

1. Cognitive mapping interviews with national actors

System dynamics methods

Community group model building







## **Community group model building**

Workshops with 17 members of West Auckland local community (parents, high school students, teacher, community leaders, public health nurse, supermarket employee, caterer) to create a causal loop diagram about barriers and solutions to FV intake in children.





# Group model building





#### Workshop 1

Changes over time in their community



Workshop 2
Causality



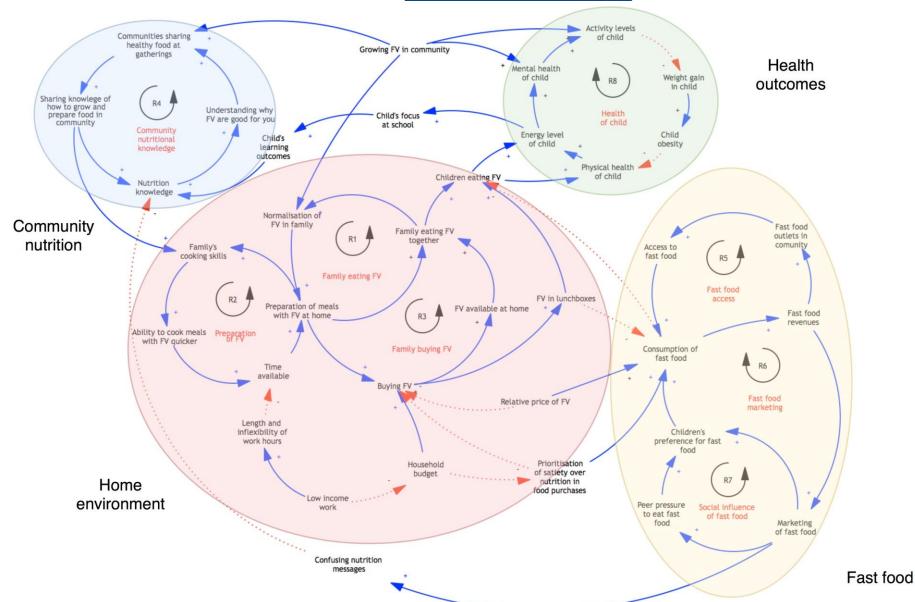
Workshop 3
Points for
intervention





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## **Community solutions**



Sharing healthy food at church and marae



School trips to supermarket to learn about fresh F+V



'Healthy living bus' at community events



Change school BOT food policies and more children's books about F+V



Community workshops:

- Gardening
- Bootcamps
- Cooking
- Holistic wellbeing



Talk to local MP about the issue and free fruit in all schools



Community licences/stickers for healthy outlets







### **Summary**

Group model building process is successful at engaging research participants to explore barriers, and catalyzed local action to improve children's nutrition

Partnership key to success of the research - breaking the silos in academia and public health organisations

#### **Recommendations:**

- Extend free FV school programmes
- FV in early childhood and school curriculum
- Restrict fast food marketing and density of outlets in low socioeconomic neighbourhoods







## **Acknowledgements**

#### **Researchers:**

Dr Sarah Gerritsen
Dr Wilma Waterlander
Dr Ann Bartos
Sophia Harré
Ana Renker-Darby
Dr David Rees
Professor Boyd Swinburn



Waitakei He oranga whānau

Kerry Allan Debbie Raroa Michele Eickstaedt Zaynel Sushil

#### **Funder:**



Explorer Grant #16/656



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