



Translating research ... from bench to books

Preventative Health

Dr Jane Bowen, Children and Families Team

National Research
FLAGSHIPS



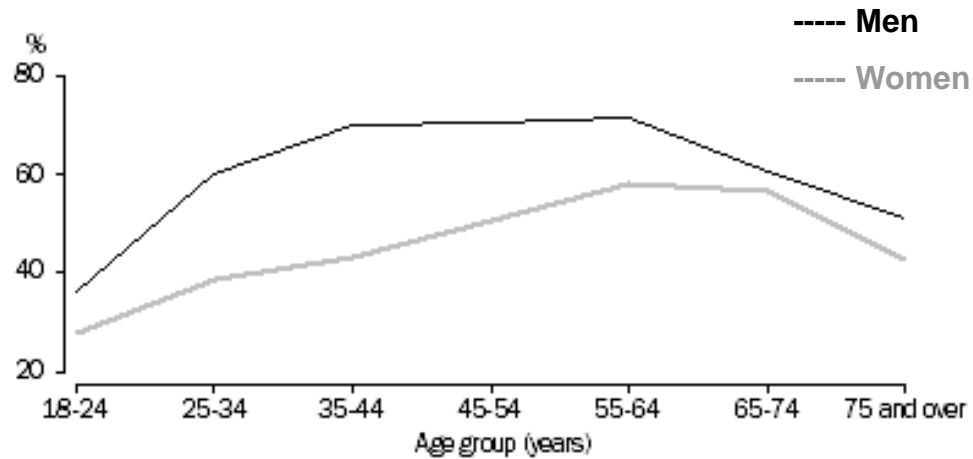
What do we aim to achieve?

Deliver evidence-based, cost effective solutions to improve the health and wellbeing of Australians



Why?

Proportion of overweight and obese adults



Source: National Health Survey 2004-05

<http://www.abs.gov.au/>:

4719.0 - Overweight and Obesity in Adults, Australia, 2004-05

Our publishing history – for adults

CSIRO

dr many noakes with dr peter clifton

the CSIRO total wellbeing diet

Australia's no.1 diet book

- the weight-loss program that can actually work
- a healthy eating plan for life

the new scientifically proven diet for Australians

2005

CSIRO

the CSIRO total wellbeing diet

- new exercise program
- 80 additional recipes
- the scientifically proven diet for Australians

book 2

dr many noakes with dr peter clifton

extending australia's favourite weight-loss program

2006

From the team who created the CSIRO Total Wellbeing Diet

the CSIRO healthy heart program

dr many noakes & dr peter clifton

The 12-week Complete Lifestyle Program (CLIP) with recipes and exercises for:

- Lowering blood pressure
- Lowering cholesterol
- Improving overall cardiovascular health

Reaching and maintaining a healthy weight

2008

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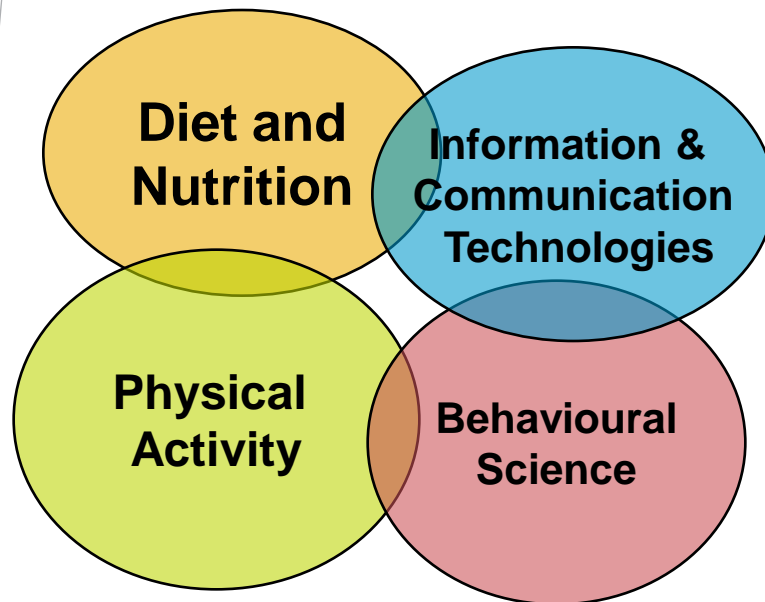
From adults to children



Why children and families?

- Leverage point for forming lifelong habits (healthy)
- Opportunity to influence children *and parents*
- Parental motivation for child's health is high
- Without intervention, overweight in childhood tracks into adolescence and adulthood

The Healthy Weight and Wellbeing for Children



Children's Team research program

Determinants research

(knowledge/understanding of the determinants of key eating and lifestyle behaviours)



Intervention research

(develop, implement and evaluate interventions that support healthy lifestyle behaviours within family context)



Research into practice

(communicate research in innovative ways which influence healthy lifestyle behaviours within family context)

Determinants Research



Secondary analyses of 2007 Australian National Children's Nutrition & Physical Activity Survey

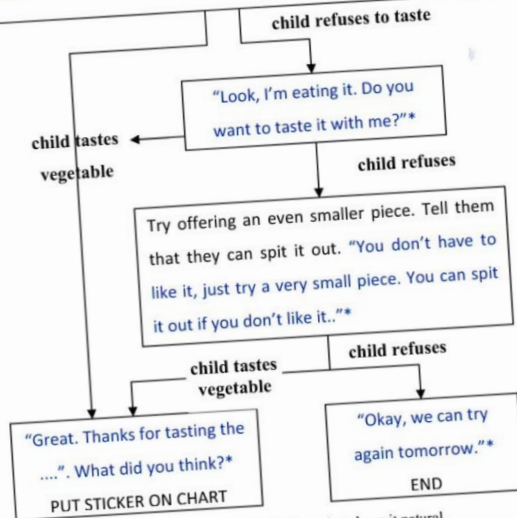
- Vegetable consumption
- Dairy intake
- Red meat intake
- Cereal foods & legume consumption
- What are children aged 5-8 years eating during & after school?
- Relationships between Maternal SES variations & children's dietary intake

Intervention Research

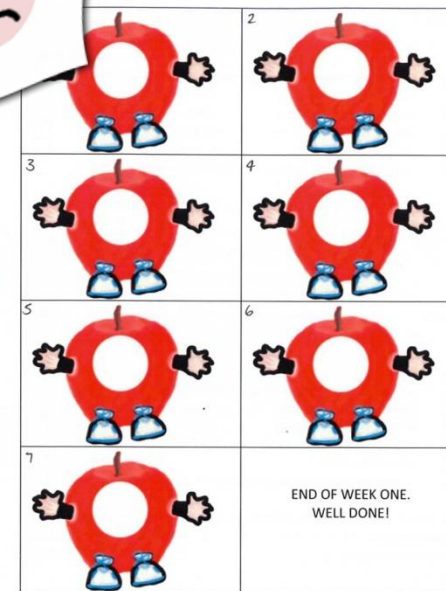
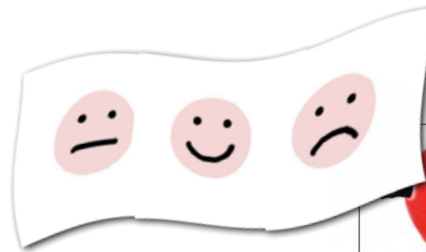
SUMMARY OF WHAT TO DO

Follow the flow chart below depending on your child's responses. There are tips on the following pages to help you at each stage of the process.

At about the same time each day, before a meal or snack of your choice, take a small piece of <YOUR TARGET VEGETABLE> and offer it to your child. Say "Would you try (name the veg) and tell me how you think it tastes?*" (SEE TIPS NEXT PAGE)



*You can use your own (similar) words to keep it natural.



Vegetable liking

Objective

To evaluate the effectiveness of **repeated taste exposure** with **positive reinforcement** to encourage children to like and eat vegetables

Design

RCT

- exposure only,
- exposure + reward,
- control

Outcomes

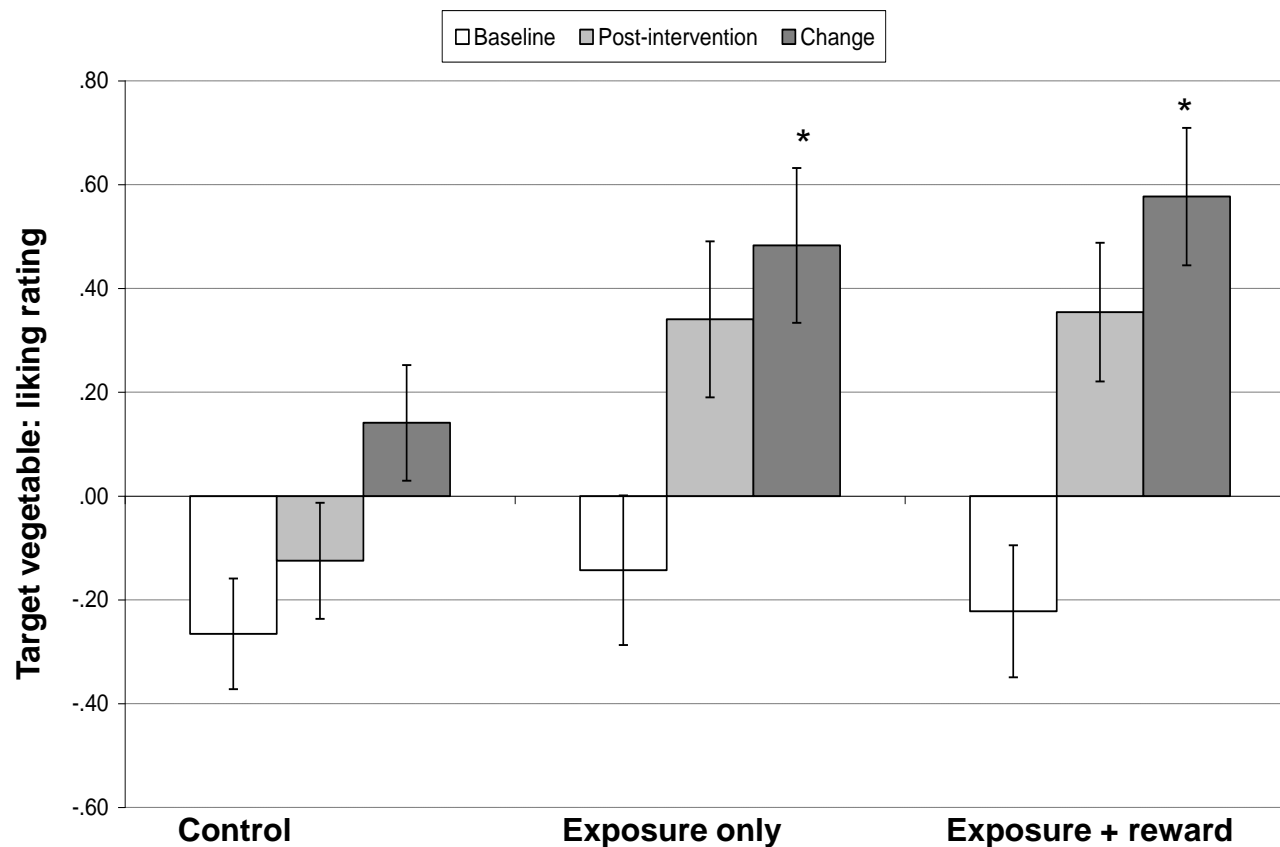
- Number of taste exposures
- Liking
- Consumption
- Usual vegetable intake



Vegetable liking

Results

- Both E+R and EO increased liking at post-intervention (Fig 1)
- All groups increased consumption of the target vegetable.



Vegetable liking

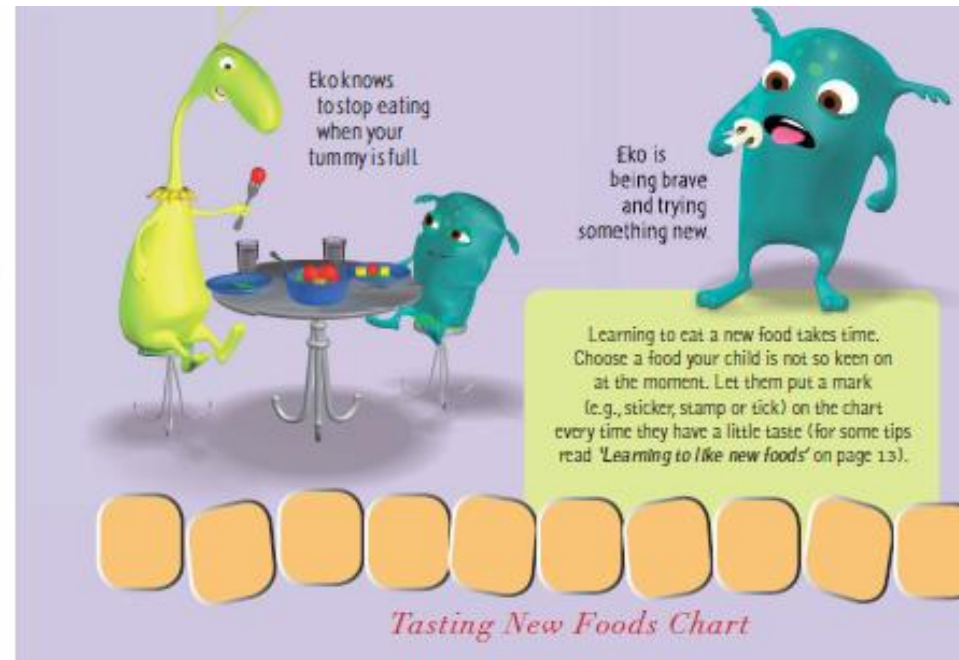
Conclusions

- Rewards can be helpful to encourage children to taste vegetables
- Exposure alone & Exposure + Rewards both effective
- Using a simple sticker reward chart may be a useful short-term strategy for parents to use with a repeated taste exposure technique.

Research to Practice



Healthy Eating



The CSIRO Wellbeing Plan for Kids



- * a step-by-step plan for giving kids a healthy start to life
- * train your child's tastebuds
- * over 100 recipes you and your children will love



the CSIRO wellbeing plan for kids

Vegetable taste challenge

Training tastebuds is a process you can use to help your child move from not wanting to try a food, to tasting it, accepting it and finally to liking it. While this is a useful strategy for introducing new foods, of course it won't work for all foods – your child will have preferences for some foods and dislike others.

In this chapter we provide strategies, skills and tools to help you teach your child how to enjoy trying new flavours and widen the variety of foods they enjoy.

Researchers in the United Kingdom investigated if children's liking for a vegetable could change. When parents offered a vegetable daily for two weeks, liking improved in 62 per cent of children. As a comparison, when parents simply received information about the importance of eating vegetables, only 31 per cent of children improved.

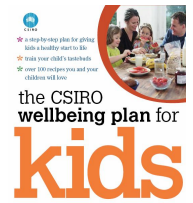
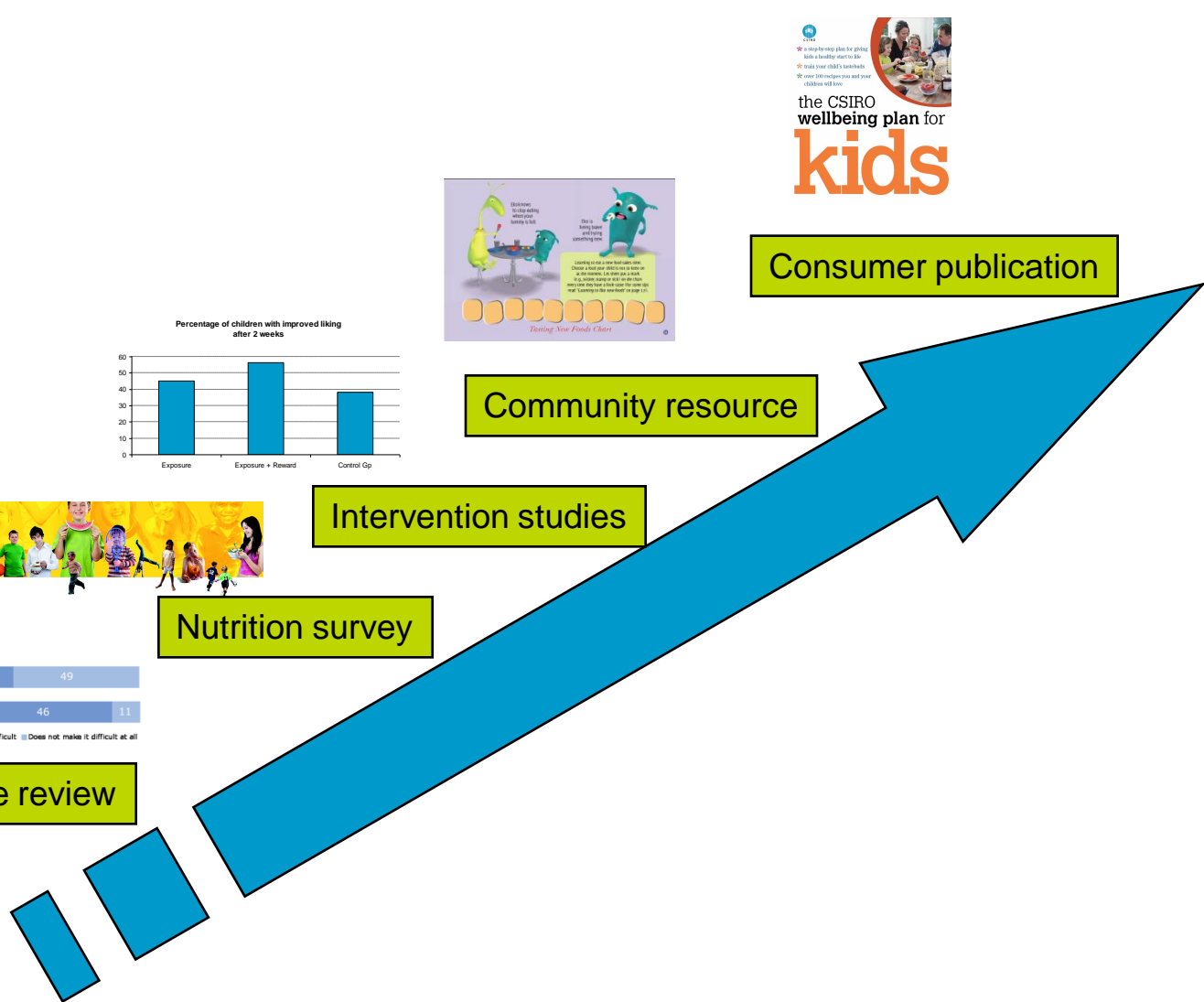


Where do I start?

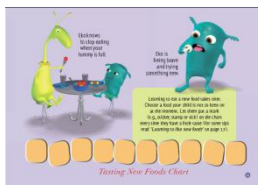
You need to establish what types of vegetables your child eats; you can then select a new vegetable you want your child to try. Using the table below, tick all the vegetables your child likes and eats regularly.

Orange/Yellow	White	Green	Purple and red
<input type="checkbox"/> Pumpkin	<input type="checkbox"/> Cauliflower	<input type="checkbox"/> Broccoli	<input type="checkbox"/> Eggplant
<input type="checkbox"/> Carrot	<input type="checkbox"/> Mushroom	<input type="checkbox"/> Spinach	<input type="checkbox"/> Red cabbage
<input type="checkbox"/> Corn	<input type="checkbox"/> Swede	<input type="checkbox"/> Zucchini	<input type="checkbox"/> Beetroot
<input type="checkbox"/> Sweet potato	<input type="checkbox"/> Potato	<input type="checkbox"/> Peas	<input type="checkbox"/> Tomato
<input type="checkbox"/> Squash	<input type="checkbox"/> Onion	<input type="checkbox"/> Beans	<input type="checkbox"/> Red capsicum
	<input type="checkbox"/> Leek	<input type="checkbox"/> Cucumber	<input type="checkbox"/> Radish
	<input type="checkbox"/> Parsnip	<input type="checkbox"/> Celery	
	<input type="checkbox"/> Turnip	<input type="checkbox"/> Green cabbage	
	<input type="checkbox"/> Fennel	<input type="checkbox"/> Green capsicum	
		<input type="checkbox"/> Asparagus	
		<input type="checkbox"/> Asian greens	
		<input type="checkbox"/> Brussel sprouts	

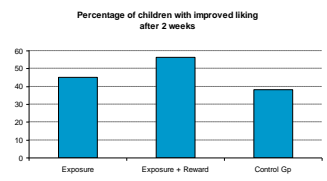
Path to Impact



Consumer publication



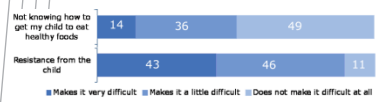
Community resource



Intervention studies



Nutrition survey



Literature review

Team members -past and present

