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# THE NEXUS BETWEEN FOOD LITERACY, FOOD SECURITY AND DISADVANTAGE

Danielle Gallegos

# ACKNOWLEDGEMENT OF COUNTRY

Indigenous peoples have a strong and unbroken connection to the land and sea. Addressing the issues of sovereignty and treaties is long overdue.



## **Wampum Belt representing the Dish with One Spoon Treaty**

**The beads on the belt form the image of a dish, which symbolises the land on which all people depend for survival. People must keep the dish clean, take from it only what is needed, and protect it for current and future generations. Human Rights Museum, Winnipeg, 2018**

<https://www.rbgsyd.nsw.gov.au/whatson/aboriginal-bush-food-experience>

# ACKNOWLEDGEMENT OF CO-RESEARCHERS



**PhD students**  
Rhonda Dryland  
Thuy Vuong



# THE PRESENTATION JOURNEY

What does being food secure mean?

How food secure are we in Australia?

Where does food literacy fit in?

What is the reality of living in a food insecure household?

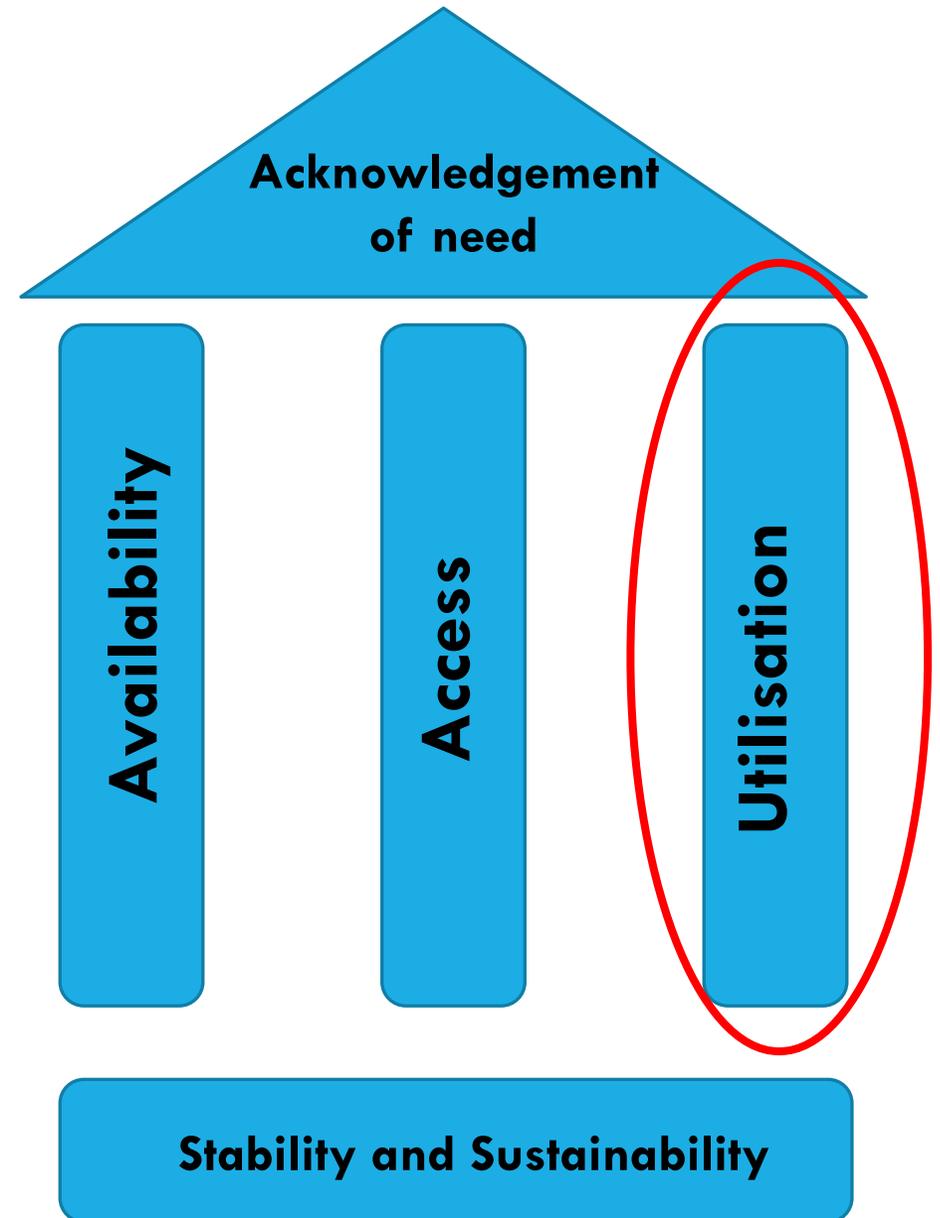
What is the neoliberal response to food insecurity?

Where to from here?

# WHAT IS FOOD SECURITY

“Food and nutrition security exists when **all people at all times** have physical, social and economic access to food, which is safe and consumed in **sufficient quantity and quality** to meet their dietary needs and food preferences, and is supported by an environment of adequate sanitation, health services and care, allowing for a healthy and active life.”

(Committee on World Food Security, 2012)



# WHAT ARE THE OUTCOMES OF FOOD INSECURITY - ADULTS

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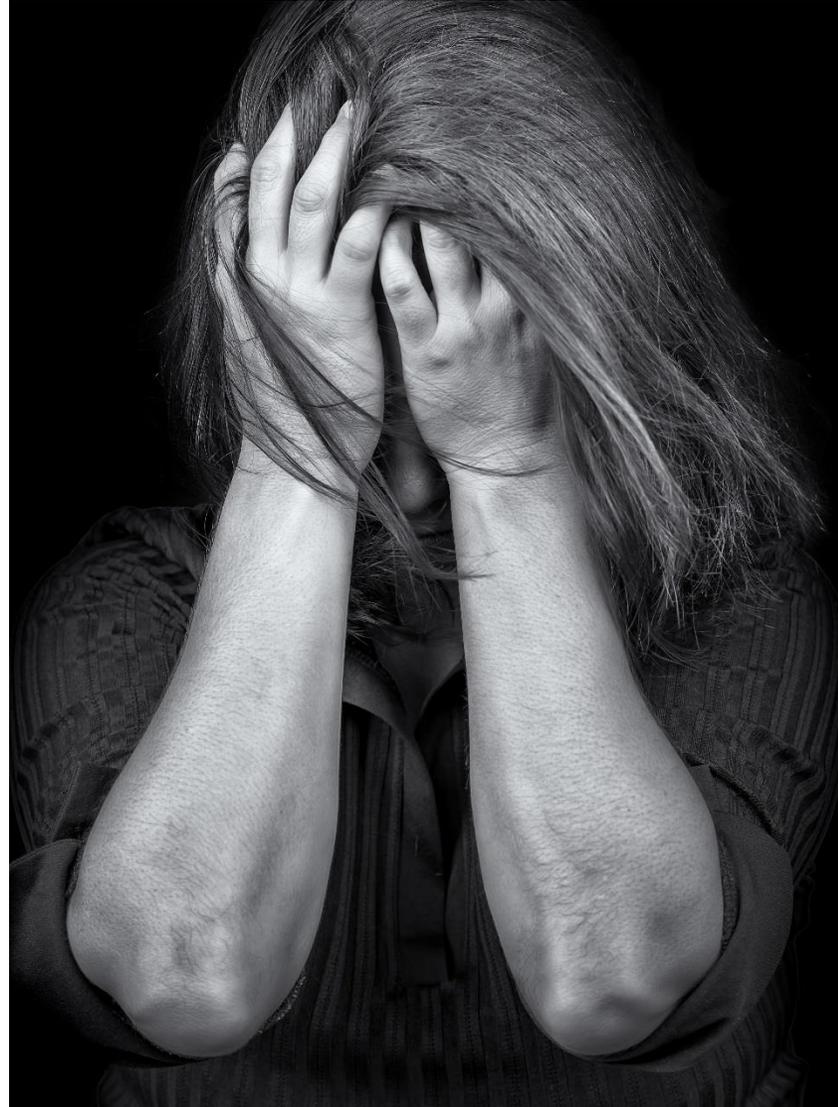
Increased ill-health

Increased use of health system

Increased depression and anxiety

Increased incidence of chronic conditions

Overweight and obesity in women



# WHAT ARE THE OUTCOMES OF FOOD INSECURITY - CHILDREN

Increased ill-health

Increased use of health system

Increased depression and anxiety

Increased behavioural issues (externalising –transient; internalising – persistent)

Decreased academic outcomes

Decreased social engagement

Increased risk of developmental delay

The most recent *Child Wellbeing in Rich Countries* report – Australia (not enough data) (UNICEF)





# HOW FOOD INSECURE ARE AUSTRALIANS?



# HOW DO WE MEASURE FOOD INSECURITY?

“in the last 12 months were there any times that you ran out of food and couldn’t afford to buy more”

- No indications of severity
- Access – affordability only dimension measured
- Not routinely collected
- At a population level underestimates by between 5-8 percentage points (McKechnie et al 2018).

*In the last 12 months was there any time you have run out of food and not been able to purchase more? (2011-2012)*

**4%**

**22%**

**31%**

**15%**



# INTERNATIONAL COMPARISONS (FAO 2016)

Country	%FI	% severe FI	Proportion of severe to total %	Country	%FI	% severe FI	Proportion of severe to total %
Ireland	10.9	4.3	39	Estonia	8.4	1.3	15
Belgium	7.8	2.8	36	Netherlands	5.5	0.8	15
Finland	9.4	3.2	34	Italy	8.2	1.0	15
UK	10.8	3.5	32	USA	10.2	1.2	12
New Zealand	9.3	2.9	31	Denmark	4.9	0.6	12
Australia	10.6	2.6	25	Hungary	9.7	1.1	11
Canada	8.0	2.0	25	Bosnia	8.0	0.9	11
France	6.9	1.7	25	Korea	7.9	0.9	11

Table 2-1

Questions in the Food Insecurity Experience Scale Survey Module for Individuals (FIES SM-I) as fielded in the 2014 GWP		
	<b>Now I would like to ask you some questions about food. During the last 12 MONTHS, was there a time when... :</b>	(label)
(Q1)	... you were worried you would not have enough food to eat because of a lack of money or other resources?	(WORRIED)
(Q2)	... you were unable to eat healthy and nutritious food because of a lack of money or other resources?	(HEALTHY)
(Q3)	... you ate only a few kinds of foods because of a lack of money or other resources?	(FEWFOODS)
(Q4)	... you had to skip a meal because there was not enough money or other resources to get food?	(SKIPPED)
(Q5)	... you ate less than you thought you should because of a lack of money or other resources?	(ATELESS)
(Q6)	... your household ran out of food because of a lack of money or other resources?	(RANOUT)
(Q7)	... you were hungry but did not eat because there was not enough money or other resources for food?	(HUNGRY)
(Q8)	... you went without eating for a whole day because of a lack of money or other resources?	(WHLDAY)

<sup>4</sup> The eight FIES questions are derived directly from the eight questions referring to adults in the ELCSA.

<sup>5</sup> It is essential to include a resource constraint in the questions as it contributes to define the construct of food insecurity as limited access to food. Enumerators are trained to emphasize the expression “because of a lack of money or other resources” to avoid receiving positive responses due to fasting for religious reasons or dieting for health reasons. The “other resources” notion has been tested in several contexts, to make it appropriate for respondents who normally acquire food in ways other than purchasing it with money.

# HOUSEHOLD FOOD AND NUTRITION SECURITY SURVEY

Kleve et al (2017); Archer et al (2017)

Think about the last 12 months.  
Have you or anyone else in your house or home:

**3.1 EVER NOT HAD ENOUGH FOOD TO EAT?**

- Yes
- No
- Don't know

**3.2 EVER NOT BEEN ABLE TO HAVE NUTRITIOUS FOOD TO EAT?**

Nutritious food is food that the body needs every day to function at its best.  
Nutritious food comes from the following food groups: Milk/dairy foods and their alternatives, fruit and vegetables, meat and meat alternatives, and grains and cereal foods.

- Yes
- No
- Don't know

**3.3 BELOW ARE SOME OF THE REASONS WHY PEOPLE MAY NOT HAVE ENOUGH FOOD, OR NUTRITIOUS OR SAFE FOOD.**

Please tick as many as apply to you.

<input type="checkbox"/>	There just isn't enough money for food
<input type="checkbox"/>	There are too many other things to pay for (such as rent, bills, medicines etc)
<input type="checkbox"/>	The food in the shops or supermarket costs too much
<input type="checkbox"/>	It is too hard to get to the store, shops, supermarket or market
<input type="checkbox"/>	The store, shops, supermarket or market is too far away
<input type="checkbox"/>	The shops don't sell or stock nutritious food
<input type="checkbox"/>	Foods that are familiar or appropriate for our culture or religion are not available
<input type="checkbox"/>	Don't know what foods to buy
<input type="checkbox"/>	Don't know how to prepare or cook food
<input type="checkbox"/>	No place to store food safely
<input type="checkbox"/>	Don't have the equipment to prepare or cook food
<input type="checkbox"/>	Kitchen is not sufficient or safe for cooking
<input type="checkbox"/>	Not enough time to cook or shop
<input type="checkbox"/>	Physical or mental health condition that stops me being able to cook or eat properly
<input type="checkbox"/>	Have not experienced the above

Think about the last \_\_ weeks/months.

Because of the reasons you ticked in question 1 (above), have you or anyone in your house/home ever

(Please circle the answer that applies to you)

Limited the variety of food you ate?

Every week	Every fortnight or more	Almost every month or more	Some months, but not every month	Only one or two months of the year	Never	Don't know
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Cut the size of your meals or skipped meals?

Gone without food, or changed the types of food that you eat, to pay for other expenses (e.g. bills)?

Felt stressed or left out socially isolated because you couldn't provide the food you wanted for special occasion?

Eaten less than you thought you needed?

Felt worried or stressed that food will run out for any adults in your house/home?

Relied on others to provide food or money for food?

Gone hungry?

Not eaten for a whole day?

Ever felt worried or stressed that food will run out for any children in your house/home?

Run out of food and not been able to get more?

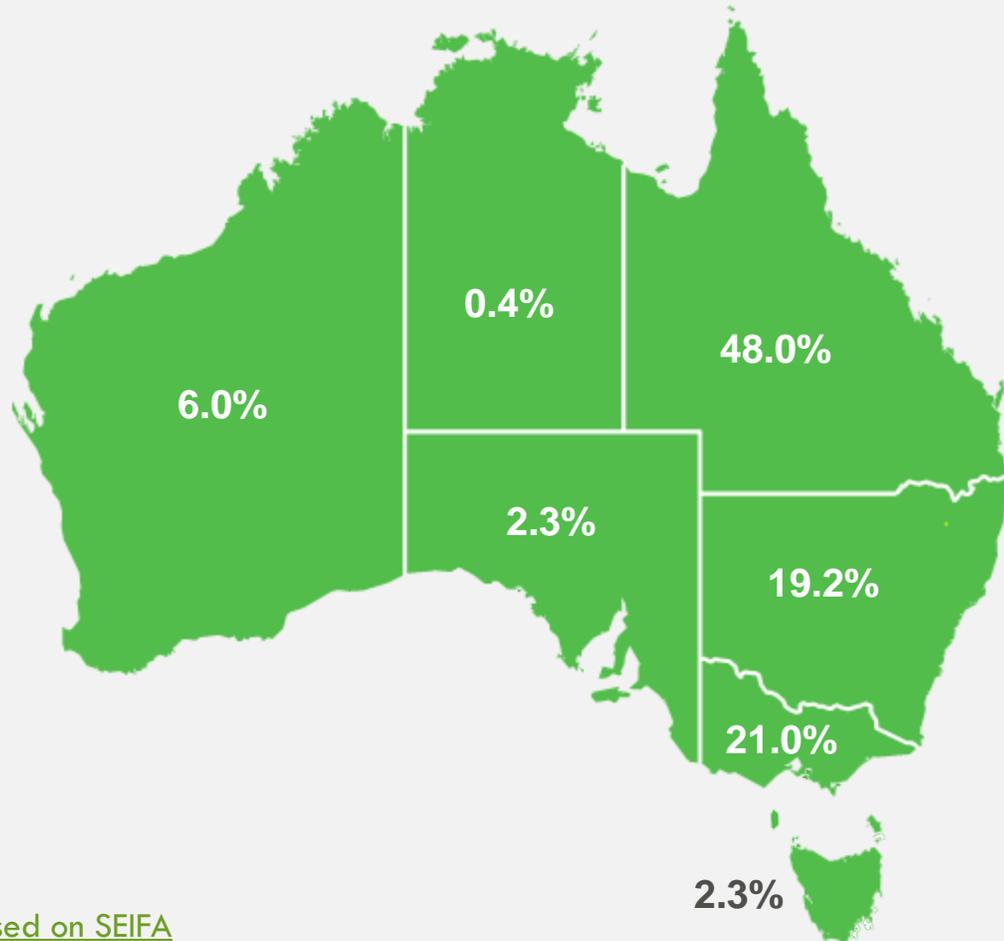
Used emergency food relief or food banks?

# FUNDING DECLARATION

This research was funded by SecondBite through a philanthropic donation by Rowly and Judy Paterson.

# WHERE THE SAMPLE LIVES

& Economic Indexes for Areas (SEIFA)



\* Based on SEIFA

## Geographical remoteness

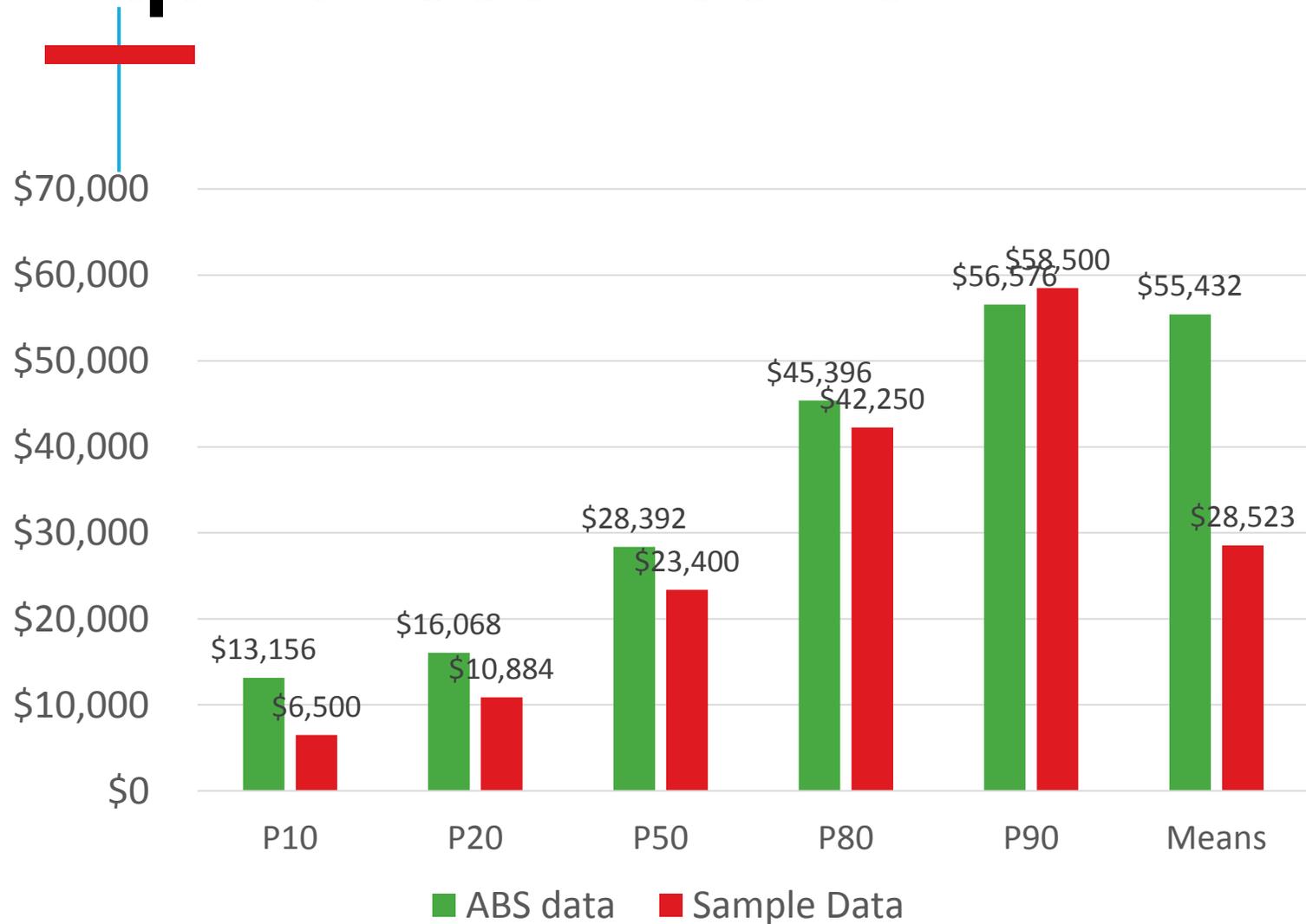


Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
776 people 77%	149 people 15%	72 people 7.2%	1 person 0.1%	6 people 0.6%

Total (assignable) : 994      Total sample : 1010

Socioeconomic	Percentiles	National (ABS)	Sample
Low	1-32	24.2%	21.2%
Medium	33-65	32.4%	30.3%
High	66-100	43.4%	48.4%

# Equivalised Income



- Equivalised income is an indicator of the economic resources available to each individual in a household.
- This graph compares different percentiles of incomes from the ABS (in Green) to the Survey data (in Red)
- Our mean score is a lot lower than the ABS average, suggesting that our sample is of a lower income.
- In the 10<sup>th</sup> percentile (bottom 10%) the survey sample has a lower income amount than the ABS, again highlighting that this sample is on lower incomes than the general population.
- This is reflected in the 20<sup>th</sup>, 50<sup>th</sup> and 80<sup>th</sup> percentile
- The 90<sup>th</sup> percentile is very similar across the two samples.

# Who is food Insecure?



**71%**  
are **Renting**



**Certificate**  
(trade/business)  
Education median



**34** YRS  
MEAN AGE



**68/100**  
score in  
**Nutrition knowledge**



**27%, 15%, 14%**  
FT, Students, PT  
**top 3 working conditions**



**28%** **23%**  
Living with  
others      Living  
alone



**Just enough** to  
make ends meet



**<\$300pw**  
\$41,600-\$51,599 p.a.  
**HH income median**

# Who is food Secure



**Post-school**  
**Qualifications**  
Education median



**39** yrs  
Mean age



**71%**  
are **Home-owners**



**74/100**  
score in  
**Nutrition knowledge**



**39%, 15%, 11%**  
FT, PT, Student  
**top 3 working conditions**



**30%** **30%**  
Couple w/o  
kids      Couple w/  
kids



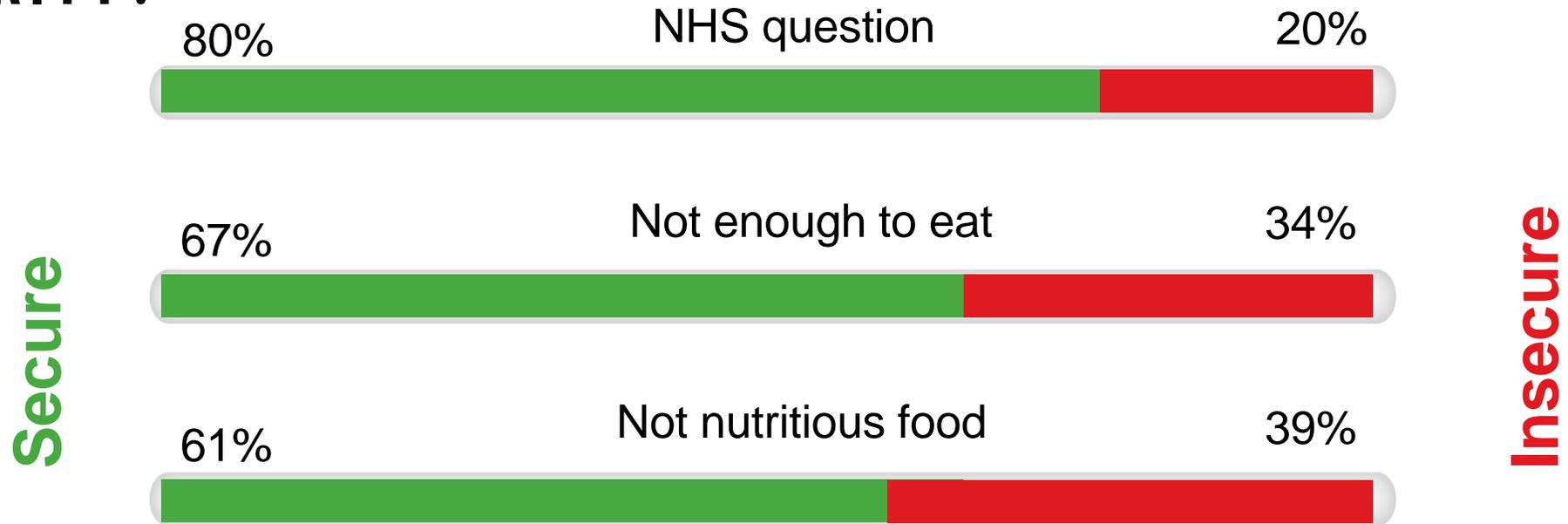
**Comfortable** with  
their money  
situation



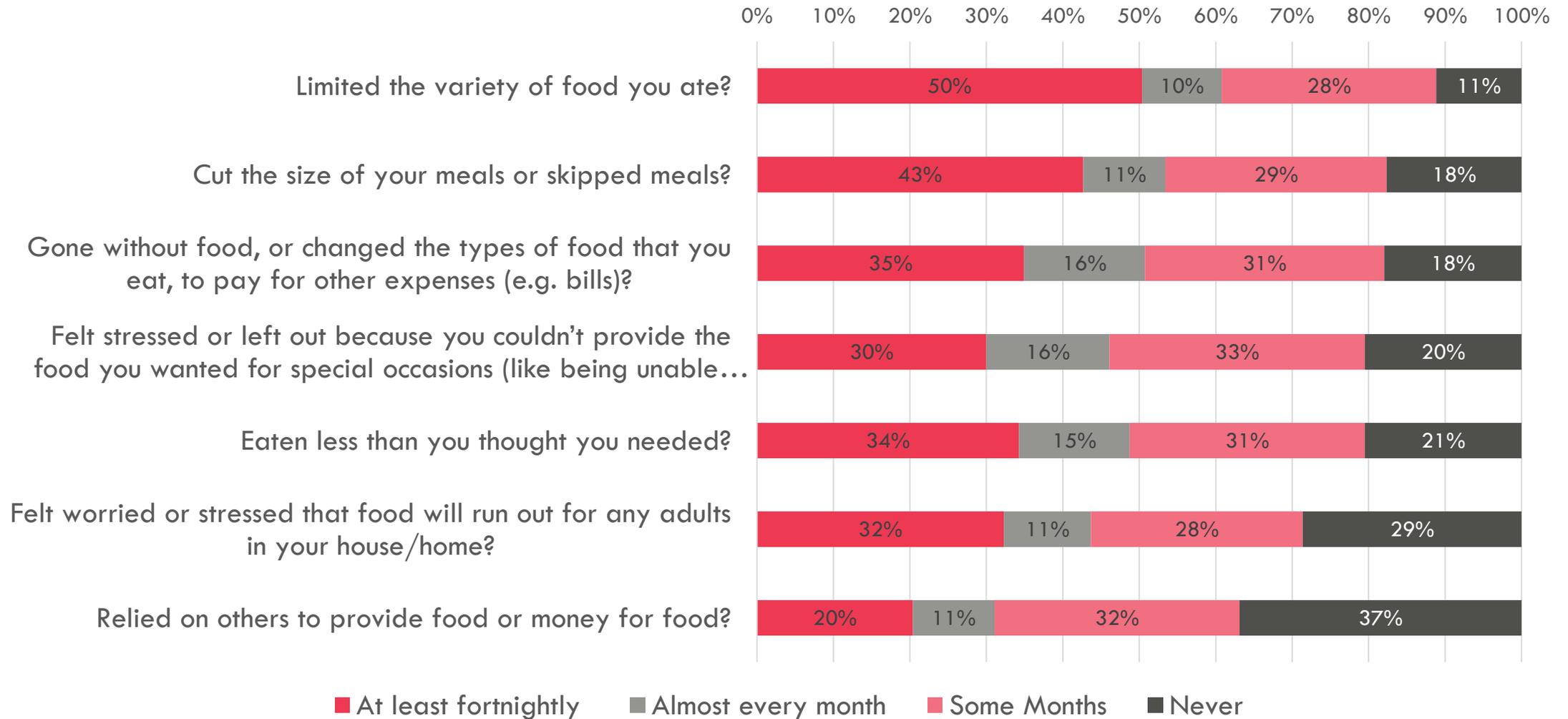
**\$1,250-\$1,490 pw**  
\$65,000-\$77,999 p.a.  
**HH income median**

# WHAT DO DIFFERENT QUESTIONS TELL US ABOUT FOOD

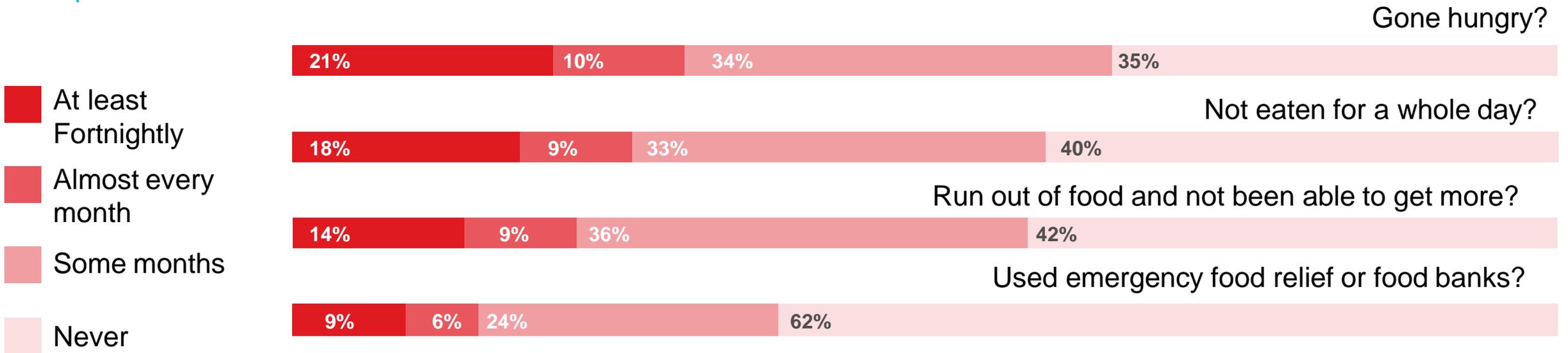
## INSECURITY?



# BEHAVIOUR/PRACTICES: ADULTS



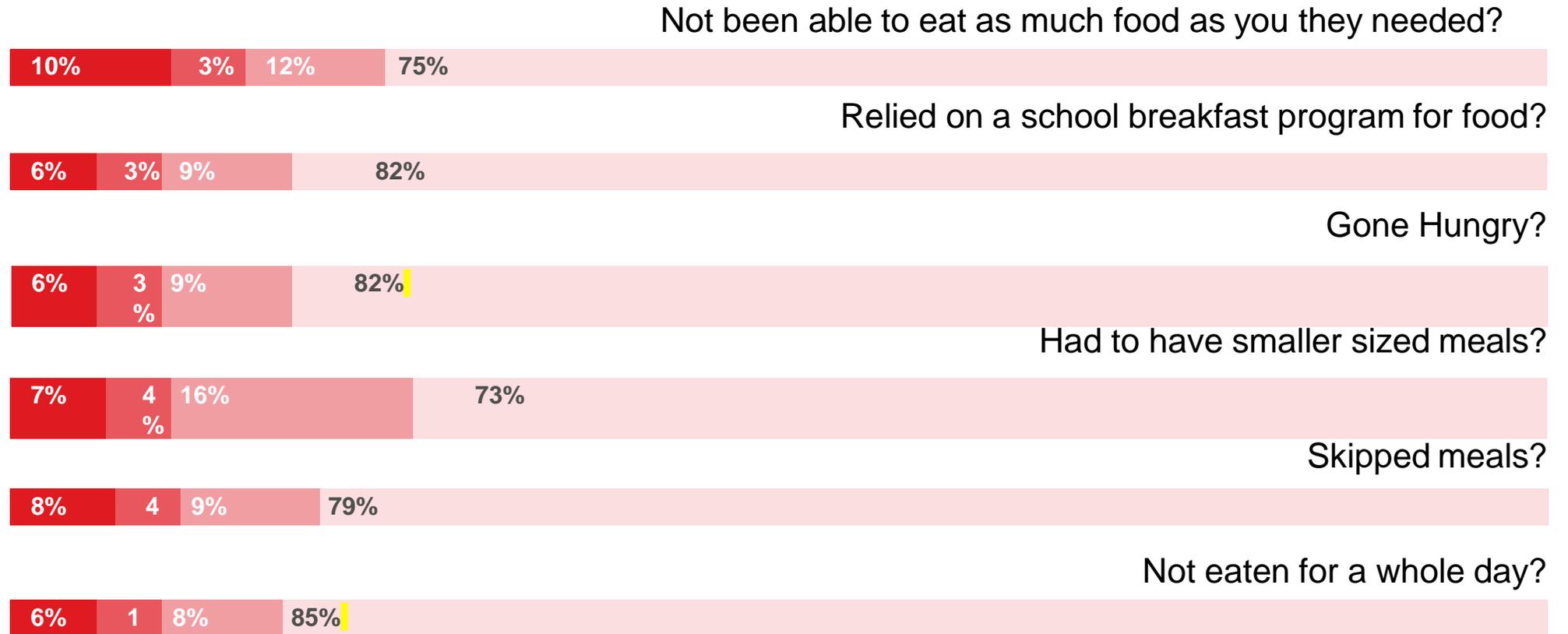
# BEHAVIOUR/PRACTICES: ADULTS CONTINUED



# BEHAVIOUR/PRACTICES - CHILDREN

*Have your children ever...*

- At least Fortnightly
- Almost every month
- Some months
- Never

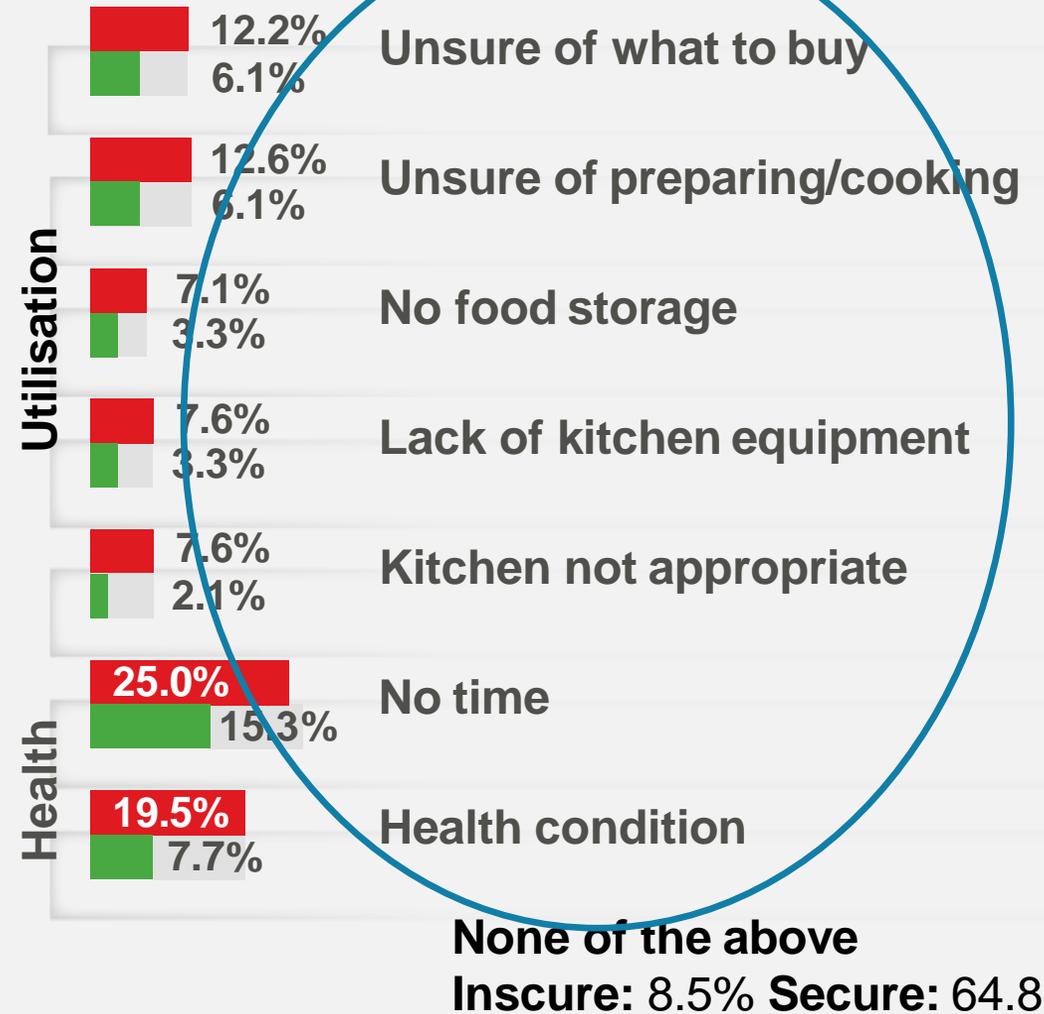
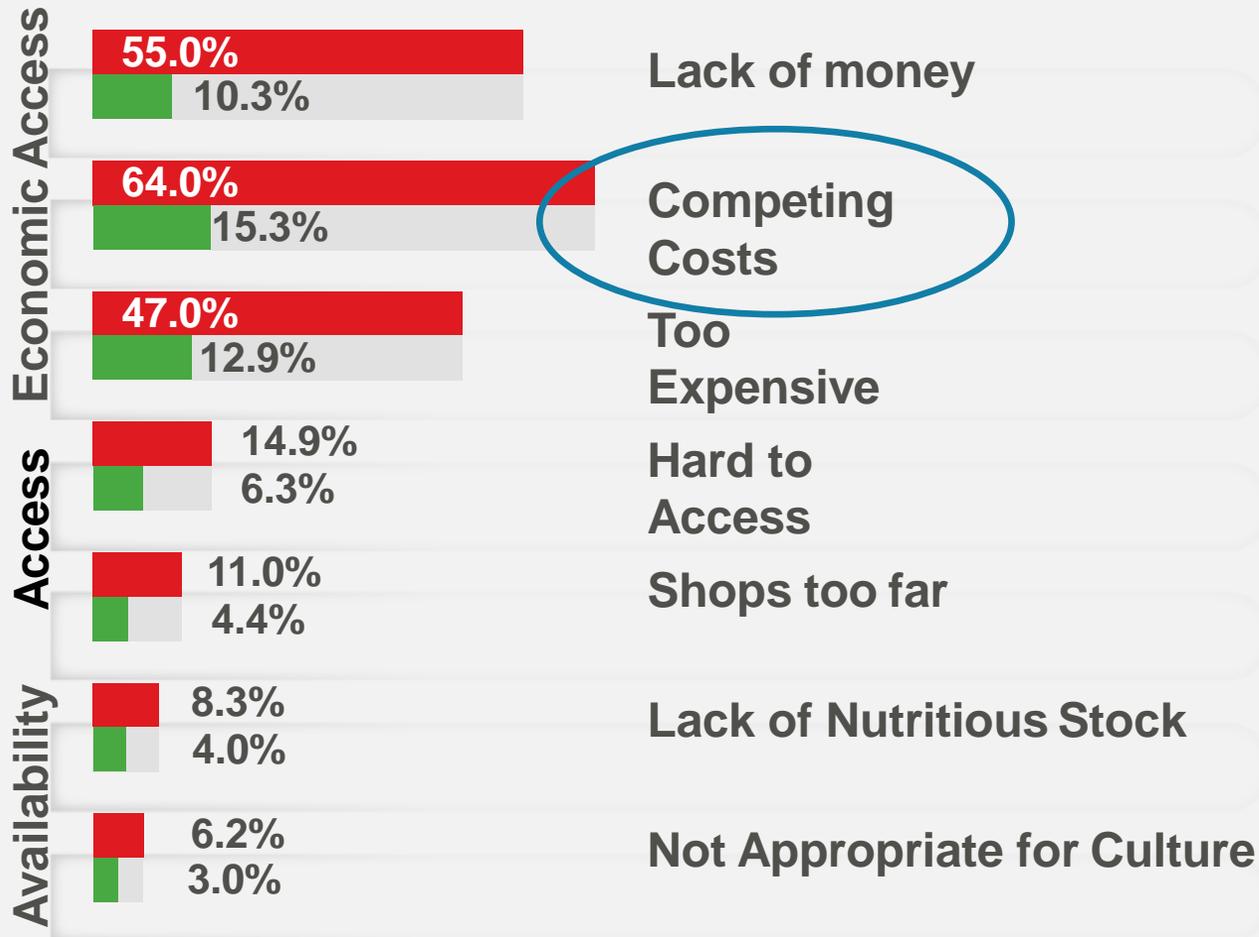


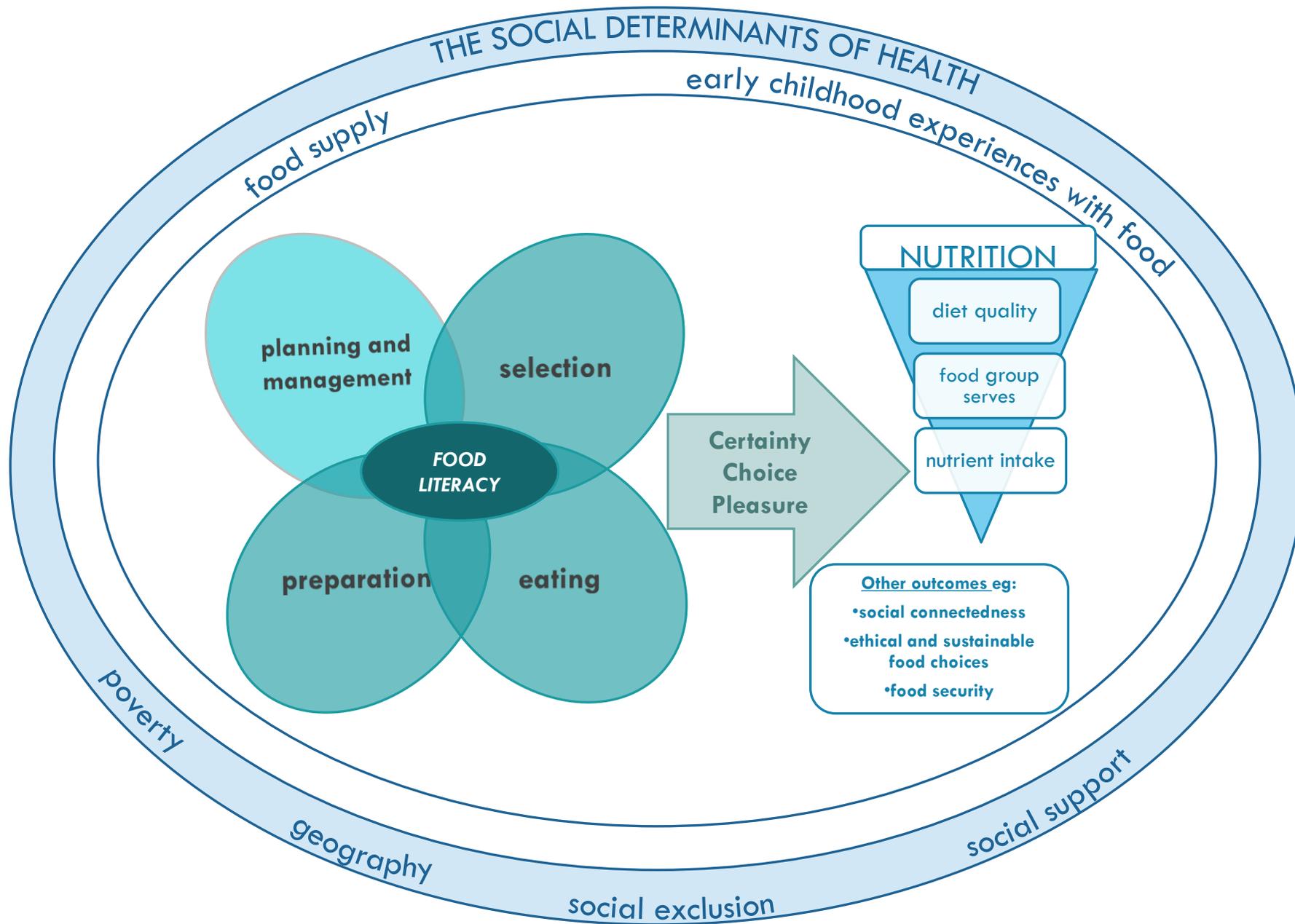


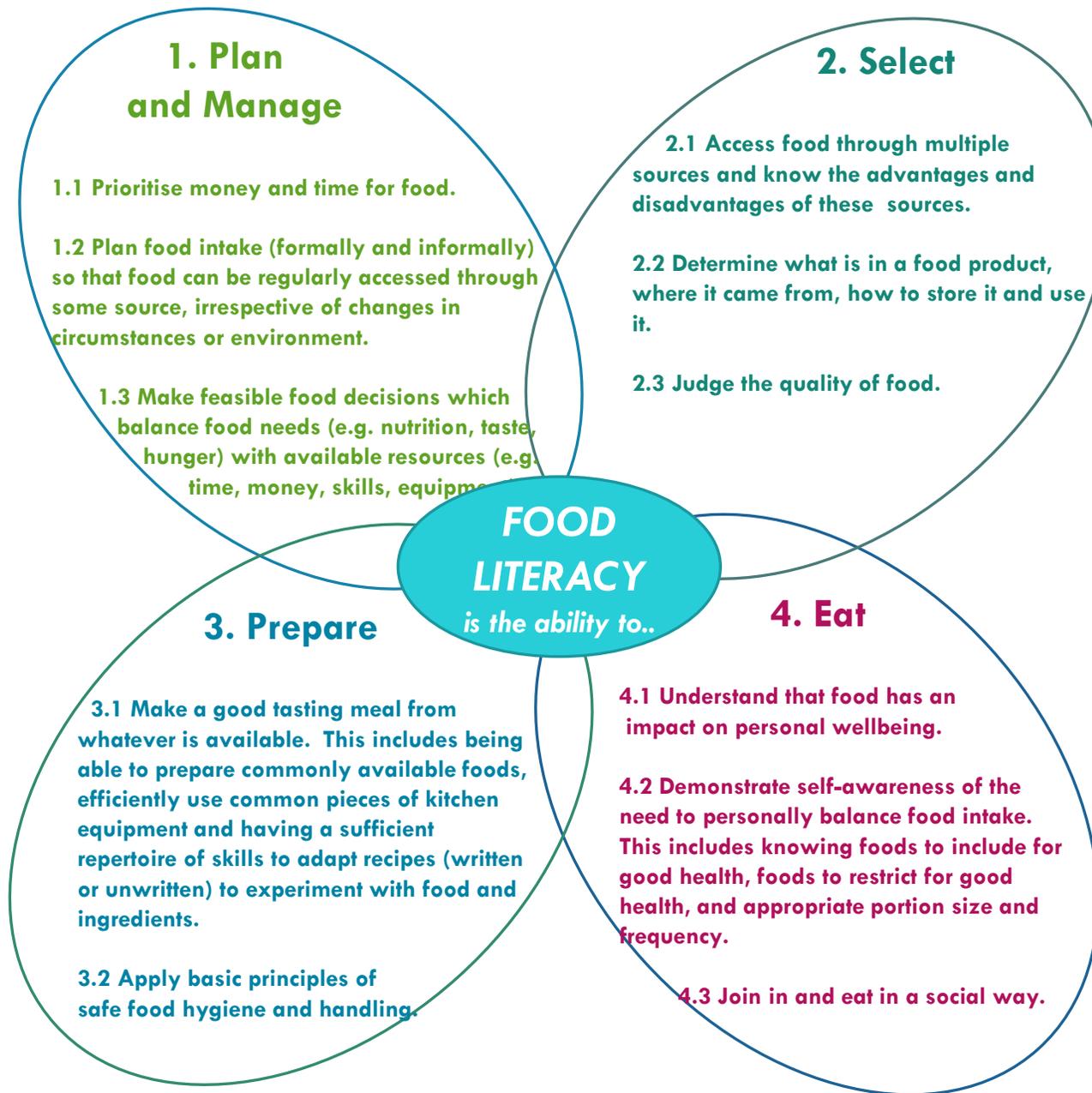
**WHERE DOES FOOD LITERACY FIT IN?** |

# FOOD PILLAR COMPARISONS

(Food Insecure & Secure)









# ARE FOOD INSECURE HOUSEHOLDS FOOD LITERATE? PLANNING

Food security is a “managed process” whereby a range of coping strategies are used to avoid or delay hunger for their families and in particular for children

- identifying where to shop and shopping at different stores based on price;
- buying in bulk;
- catching foods on sale as a collective;
- rationing items to purchase in a fortnightly pay cycle based on need;
- prioritizing food items based on children’s needs and/or preferences;
- and in the US utilizing food coupons with maximum effect

For those experiencing disadvantage prioritizing money for food is not a simple feat. Individuals and households need to balance a range of competing priorities including ensuring access to one of the other fundamental human rights – shelter.



© Danielle Gallegos

# WHAT IS THE LIVED EXPERIENCE OF FOOD INSECURITY

If we are struggling [food] is the the first thing that goes we would be back to sausages... Well \$8 for 20 sausages or something is a cheap meal for 4 people and I guess its' food that my kids will eat there is no hesitation they would eat a sausage on bread and feel quite happy and lucky no curries or vegetables just good old sausage on bread



# ARE FOOD INSECURE HOUSEHOLDS FOOD LITERATE? SELECTION & PREPARATION

There is evidence, however, that low income households are more likely to cook foods at home. High levels of food literacy are deployed to put food on the table:

- cooking dishes that are cheap and filling – prioritizing quantity and satiety over quality;
- eating nutritionally sound but socially devalued foods;
- making use of foods that can be frozen and stored; storing and using leftovers;
- stretching the food to make it last longer; removing spoiled areas or insects from food to extend its usability;
- using foods that were beyond the expiry date; cutting down on the variety of fruits and vegetables to only those that are most affordable, most filling



© Danielle Gallegos

# WHAT IS THE LIVED EXPERIENCE OF FOOD INSECURITY

It was the non-priority stuff that got sorted out through my tax like car, new TV and food shopping which was so much fun there was a lot of fun food in there. The kids just went mum can we get that yeah okay. It probably wasn't too nutritious for a couple of weeks but it was a lot of fun. Fun food. Have to forgo fun when money is tight.



# ARE FOOD INSECURE HOUSEHOLDS FOOD LITERATE? PREPARATION & EATING



© Danielle Gallegos

- household chaos and the complex manipulation of time to balance obligations
- stressors of role overload
- more frequent moving from one household to another,
- changes in the size of the household to improve economic viability,
- demands for childcare at irregular hours
- jobs that require longer commutes and
- heads of households engaged in non-standard employment

# WHAT ABOUT NUTRITION KNOWLEDGE?

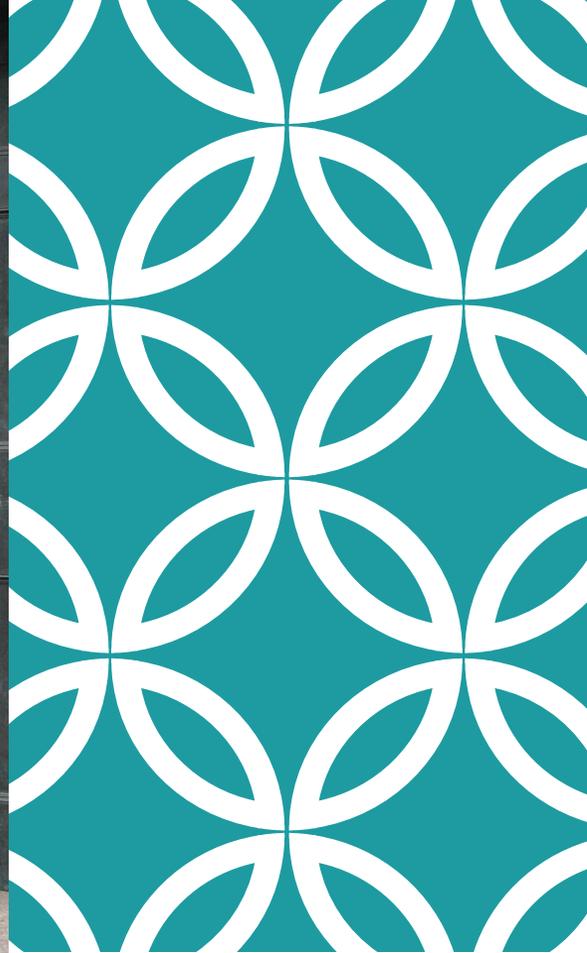
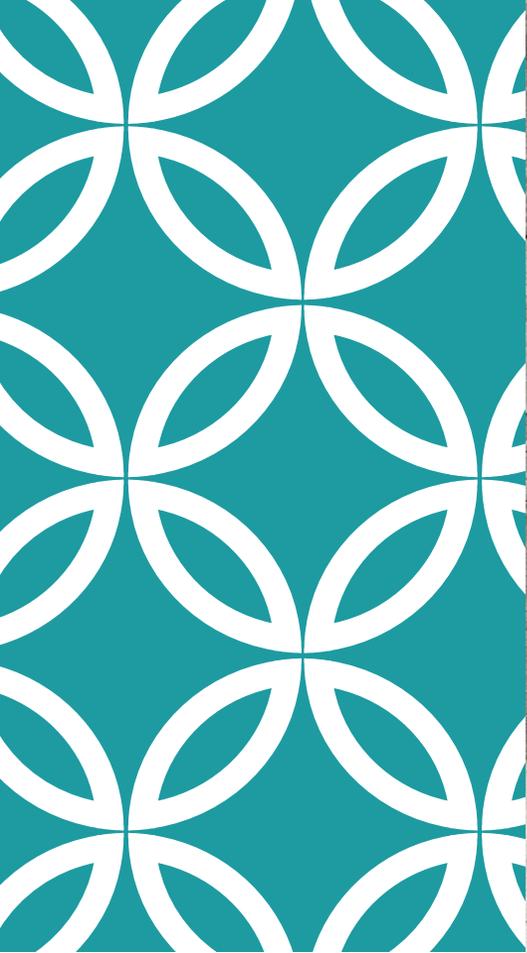
In our study significant differences were found between nutrition knowledge and food secure and food insecure

There is evidence that nutrition knowledge among families living with disadvantage is low especially around nutrition categories rather than necessarily food categories

Disadvantaged families tend to relate more to foods and the impact foods have on external appearance while families on higher incomes relate the nutritional value of foods in terms more likely to be understood by a health professional.

The way families understand and appreciate the nutritional value of food may be different it does not, however, necessarily make it wrong.





# WHAT ARE THE RESPONSES TO FOOD INSECURITY IN HIGH INCOME COUNTRIES



# NEOLIBERAL APPROACHES

Emphasis on individual responsibility and mutual obligation

Deserving poor – those who demonstrate “citizenship” by actively seeking employment and participating in the process

Low income families simply need to manage their household finances better

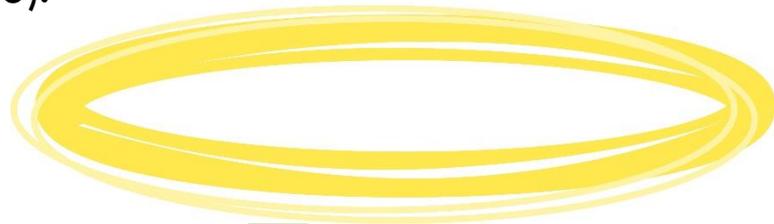
Disadvantage  $\neq$  low income: deprivation, social exclusion and capabilities (the failure of society to provide opportunities)



<https://www.dailytelegraph.com.au/newslocal/west/blacktown-medicare-moving-to-centrelink-is-negative-labor-mp-michelle-rowland-tells-parliament/story-fngr8i5s-1227047283753>

# THE CHARITABLE APPROACH?

“The hidden functions of transnational corporate food banking which construct domestic hunger as a matter for charity thereby allowing indifferent and austerity-minded governments to ignore increasing poverty and food insecurity and their moral, legal and political obligations, under international law, to realize the right to food” (Riches 2018).



**Good nutrition,  
should not be  
something reliant on  
acts of charity**

# THE CHARITABLE APPROACH

a needs-based approach that assumes recipients are passive and does not necessarily fit with a rights-based approach

- fails to return beneficiaries to a state of food self-reliance
- fails to maintain human dignity

In attempting to adopt a more rights-based approach organisations have moved to creating more enabling environments which = building personal skills

- organisations assume knowledge and skills deficits and link access to food with nutrition education, budgeting and cooking skills

Empowering individuals or resolving food insecurity through individualizing responsibility?

“[Food insecurity] isn’t solved by giving somebody a bag of food”  
(Valerie Tarasuk)

NOR

Is it solved by showing someone how to cook it

# WHAT ABOUT NUTRITION AND FINANCIAL EDUCATION?

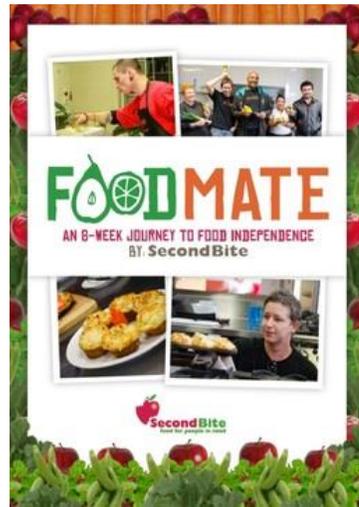


## Healthy eating with FoodREDI

Would you like to learn more about how to look after the health of your family by cooking simple great tasting food on a budget? Then come along to FoodREDI!

You can learn basic nutrition, ways to shop on a limited budget and prepare tasty and healthy foods that are easy to make. The workshops are easy and fun. Each session includes a talk followed by cooking and eating together!

FoodREDI is a 2 hour workshop each week for 6 weeks. It is suitable for all adults (18+). It is **FREE of charge to attend**.



 Tasmania University Union

## FINANCIAL COUNSELLING

A **FREE** service for students at UTAS

**Bills getting out of hand?  
Struggling to buy food & pay the rent?  
Issues with Centrelink?**

To arrange a face to face or telephone appointment

**Call**  
**(03) 6226 2495**

**Email**  
**financial.counselling@tuu.utas.edu.au**

 **Anglicare**  
TASMANIA

Another **SSAF**  
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# VOLUNTARY FAILURE: POTENTIAL WEAKNESSES OF THE NOT FOR PROFIT SECTOR

***Philanthropic insufficiency*** – unable to generate enough adequate, reliable funding to meet the demand for services.

***Philanthropic particularism*** – some sub-groups of the population may not be adequately represented

***Philanthropic paternalism*** – those with the greatest power and resources define community need and control and determine the activities. Those most in need of charitable services will not be able to make decisions regarding the services available to them, causing a dependent relationship between those giving and receiving charitable aid.

***Philanthropic amateurism*** – often staffed by volunteers lacking professional training and professionalised models of service provision

Salamon, Lester M. "Of market failure, voluntary failure, and third-party government: Toward a theory of government-nonprofit relations in the modern welfare state." *Journal of voluntary action research* 16.1-2 (1987): 29-49.

Thanks to Sue Booth for introducing me to Salamon's theory



<http://www.gossipcenter.com/prince-william/prince-william-participates-cooking-class-homeless-youth-967857>

## The 10-Plan

Spend your food money in the same way as you balance the foods in your diet.

### First Step

Write down the amount of money you usually spend on food per week or fortnight or month.

#### Food money

\$ \_\_\_\_\_

### Second Step

Divide this amount by 10 to give you a 'part' (e.g. \$140 divided by 10 means \$14 per 'part').

#### Food money

\$ \_\_\_\_\_ ÷ 10

=

\$ \_\_\_\_\_ per part

### Third Step

On the 10-Plan below, write the amount you should spend on each section.

**Eat Least Foods**  
These foods usually cost around \$10-20 kg.

#### 1 Part

\$ \_\_\_\_\_ x 1

= \$ \_\_\_\_\_ to spend on margarine, oils and other 'extra' foods.

**Eat Moderately Foods**  
These foods usually cost around \$5-12 kg.

#### 3 Parts

\$ \_\_\_\_\_ x 3

= \$ \_\_\_\_\_ to spend on lean meat and similar, milk and milk foods.

**Eat Most Foods**  
These foods usually cost around \$2-6 kg.

#### 6 Parts

\$ \_\_\_\_\_ x 6

= \$ \_\_\_\_\_ to spend on vegetables, legumes, fruit, bread and plain cereal foods.

Remember - for every \$10 that you spend on food, spend:

\$6 on 'Eat Most Foods'

\$3 on 'Eat Moderately Foods'

\$1 on 'Eat Least Foods'

# THE RELATIONSHIP BETWEEN FOOD SECURITY AND FOOD LITERACY

Food security is providing appropriately distributed, sustainable opportunities to access the fundamental commodity – food

Food literacy is being able to, at an individual and community level, take advantage of these opportunities.

Food literate individuals living in food insecure situations are potentially more likely to be able to reach the “certainty, choice and pleasure” outcomes for longer periods of time, until resources are so depleted that it is no longer possible.



# THE RELATIONSHIP BETWEEN FOOD SECURITY AND FOOD LITERACY

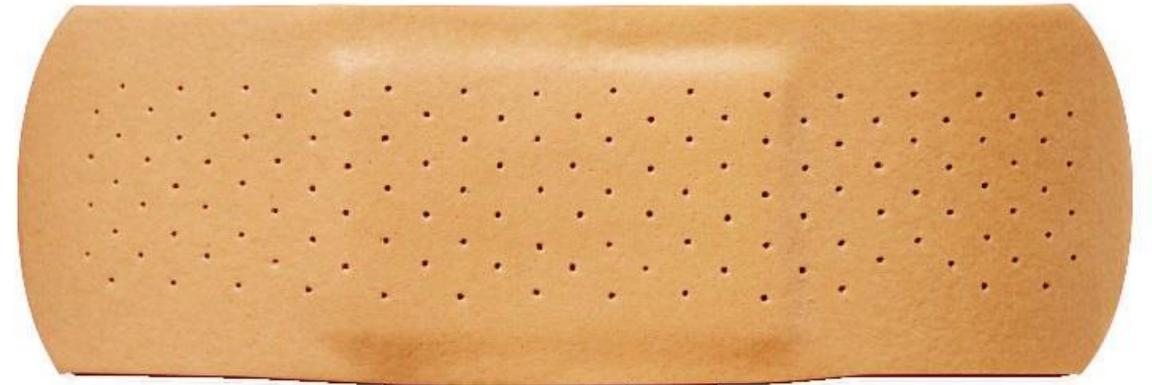
Food literacy therefore has the potential to ameliorate some aspects of food insecurity, by increasing resilience and maximizing the use of available resources.

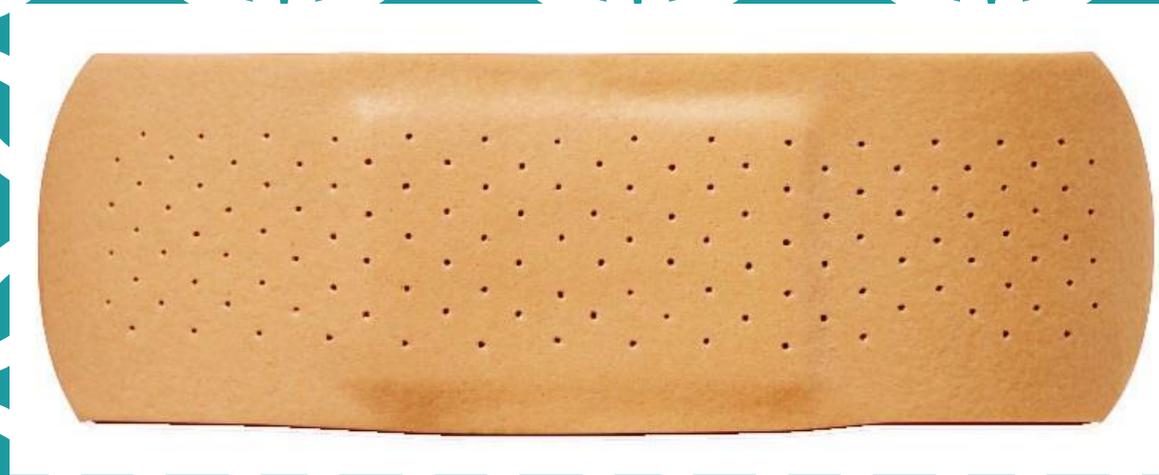
Food literacy could therefore, be the key to maximizing food security for a limited amount of time.

The cautionary caveat is that:

- food literacy is context dependent
- in situations of deprivation and disadvantage
  - food literacy will be unable to improve the quality or quantity of food, where this food or the means to grow or acquire it are simply not present
  - food cannot be prepared when there is no stable housing or equipment available

A focus on food literacy as the predominant means to alleviated food insecurity could therefore, potentially mask underlying social security and food security systems failures.





# **SOLUTIONS: MOVING BEYOND BANDAIDS**

# THINKING BIG: WHAT SOLUTIONS SHOULD WE BE ADVOCATING FOR?

**Adequate income** – we need to be debating a different system. Universal basic income; Basic income guarantee

Strengthening the **welfare safety net**

National **poverty alleviation** strategy (Go Canada!)

Housing **affordability**, energy **affordability**, water **affordability**

**Food affordability**: evidence is suggesting that a subsidy could work (but more than the current 10% GST)

**Monitoring and surveillance** – if we don't know we don't change

# WHAT ARE THE FOOD SEGMENTS OF AUSTRALIAN FOR THE TOPIC OF FOOD SECURITY?

Prior research has demonstrated that the political views of people affect how beliefs about who should take responsibility for social problems (Westheimer and Kahne 2004).

Three types of citizens have been identified with different approaches to democracy

- Justice-oriented
- Participatory
- Personal responsibility

We therefore hypothesised that citizen type might be able to predict Australian attitudes towards the topic of food insecurity.

## Three citizenship types:

Justice oriented

Critical about established systems and structures, acts to solve root causes

Participatory

Organises community events & takes leadership positions

Personal Responsibility

Honest character & law abiding members of the community

*“If Participatory Citizens organised the food drive and Personally Responsible Citizens donate food, the Justice-Oriented Citizens ask why people are hungry, then act on what they discover.” (Westheimer, 2015, p. 41)*

The 3 scores turned into categorical by assigning a citizenship type based on the highest scoring variable

**NFHSS scale: determines if people are food insecure (or not):**

*Scores:*

**0**

*food secure*

**1-2.9**

*somewhat food insecure*

**3+**

*extremely food insecure*

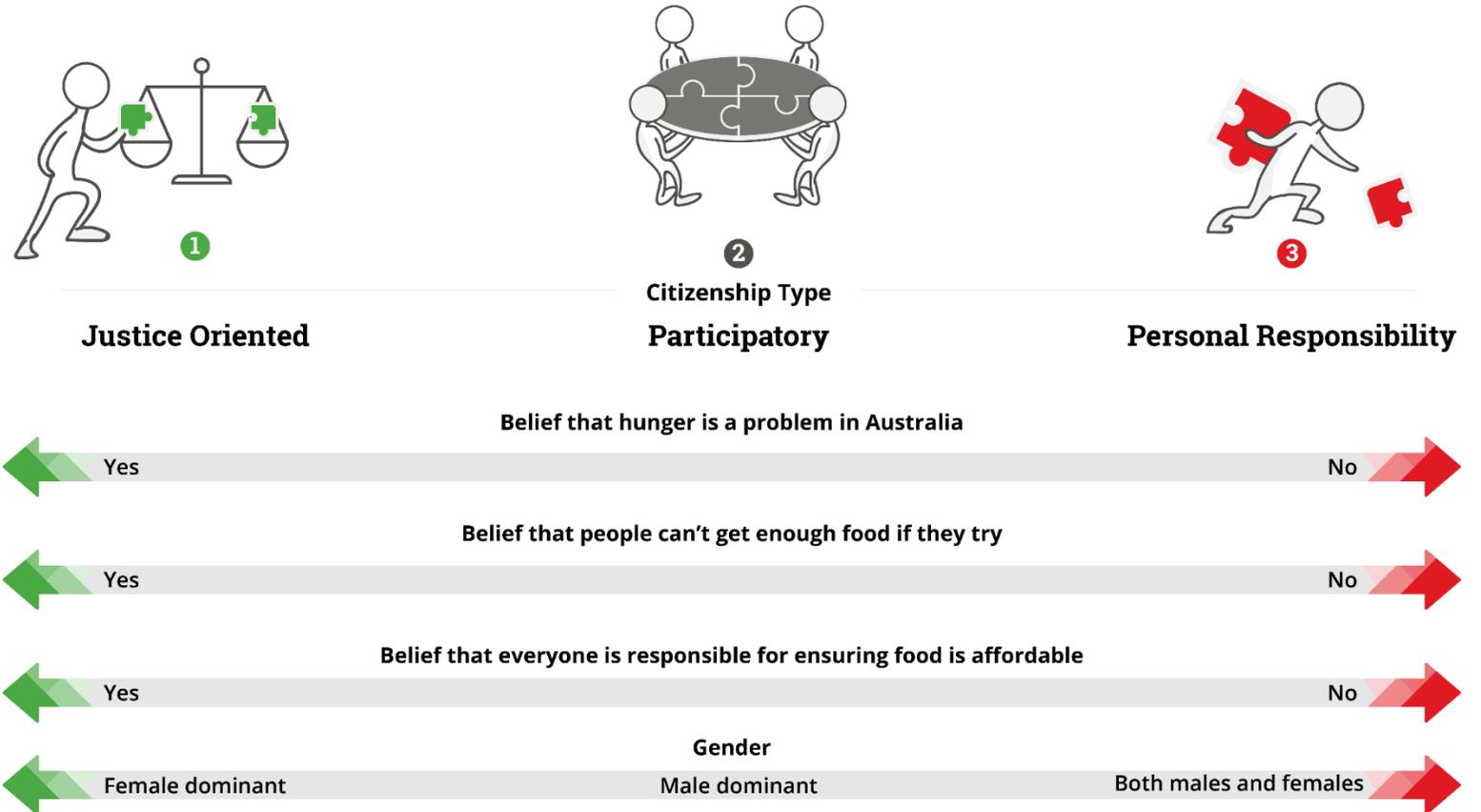
# How do Australians' attitudes, knowledge, behaviours to eat healthily/ be food secure differ by food segment?

The analysis used to identify the food security attitude segments was 2 step cluster analysis. The statistic underpinning the analysis is chi-square.

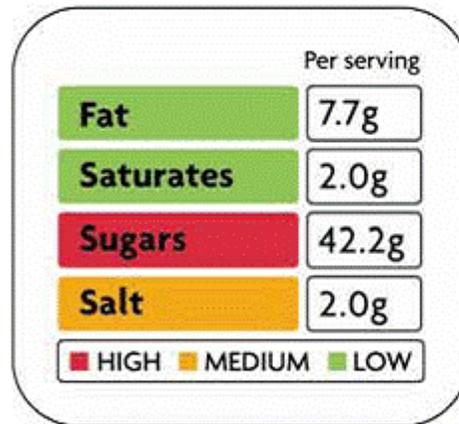
Responses from participants to the attitude and knowledge questions, citizenship type and demographic data were analysed.

The results showed 3 clear segments that were based on the citizenship type as the key distinguishing variable.

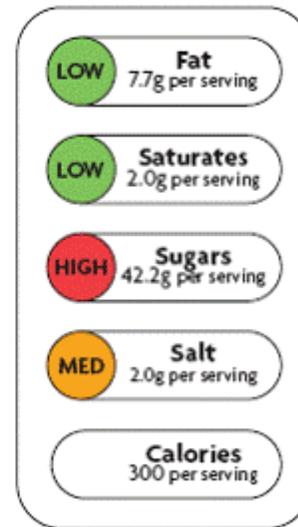
Income, age and food security status did not differ across the segments.



# CONCEPTUALISING FOOD LITERACY BEYOND THE INDIVIDUAL: SELECT



© foe.org.nz



© smh.com.au

Food labelling that is accessible, understandable and empowering regardless of your ability to read

# CONCEPTUALISING FOOD LITERACY BEYOND THE INDIVIDUAL: PREPARE



© kitchengardenfoundation.org.au



© dailymercury.com.au

Embedded food skills (not just nutrition knowledge) from prep to leaving school

# CONCEPTUALISING FOOD LITERACY BEYOND THE INDIVIDUAL: EAT

© marymackillopfoundation.org.au



Promoting a celebratory food culture

# AND WHAT ABOUT FOOD SECURITY AND FOOD LITERACY?

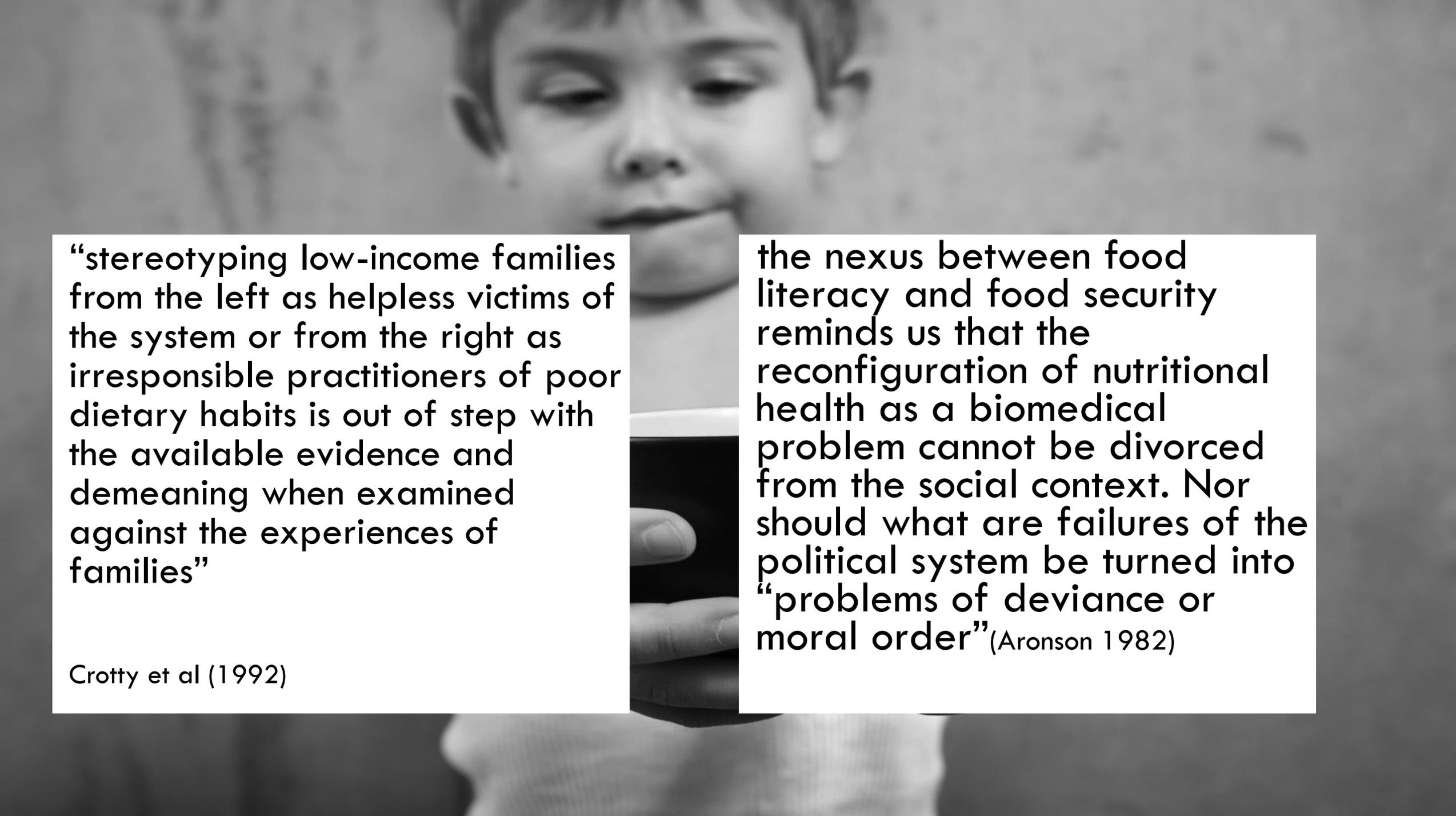
WHOLE of population approach – rebuilding food literacy into schools

STOP privileging “cooking from scratch” – engage with the time and convenience

THINK about the whole food system

TAKE an assets-based approach

CO-CREATE with recipients



“stereotyping low-income families from the left as helpless victims of the system or from the right as irresponsible practitioners of poor dietary habits is out of step with the available evidence and demeaning when examined against the experiences of families”

Crotty et al (1992)

the nexus between food literacy and food security reminds us that the reconfiguration of nutritional health as a biomedical problem cannot be divorced from the social context. Nor should what are failures of the political system be turned into “problems of deviance or moral order” (Aronson 1982)

THANK YOU

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# INTERNATIONAL COMPARISONS

Country	%FI	% severe FI	Proportion of severe to total %	Country	%FI	% severe FI	Proportion of severe to total %
Belgium	7.8	2.8	36	Australia	10.6	2.6	25
Finland	9.4	3.2	34	Canada	8.0	2.0	25
Ireland	10.9	4.3	39	France	6.9	1.7	25
New Zealand	9.3	2.9	31	Japan	3.0	0.6	20
UK	10.8	3.5	32	Singapore	4.3	1.1	26
Estonia	8.4	1.3	15	Bosnia	8.0	0.9	11
Germany	4.3	0.7	16	Denmark	4.9	0.6	12
Netherlands	5.5	0.8	15	Hungary	9.7	1.1	11
Norway	3.9	0.6	15	Italy	8.2	1.0	15
Sweden	3.1	0.5	16	Korea	7.9	0.9	11
Switzerland	3.0	<0.5	<16	USA	10.2	1.2	12