Food insecurity in lucky country

Dr Christina Pollard
Curtin Corner, 19 August 2016
Micronutrient deficiencies or “hidden hunger” affect around **2 billion people**.

Obesity affects around **half a billion adults**.

**The consequences of malnutrition range from:**

- Increased risk of **death**
- Increased prevalence of **diet-related non-communicable diseases**
- Serious chronic health conditions
What did you eat yesterday?

How did you go?
What are the main problems with your diet?
Did you eat what you need for health?
How do you know?
<table>
<thead>
<tr>
<th>GUIDELINE 1</th>
<th>Achieve and maintain a healthy weight, be physically active and eat the amount of foods to meet your energy needs.</th>
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</thead>
<tbody>
<tr>
<td>GUIDELINE 2</td>
<td>Enjoy a wide variety of nutritious 5 food group foods every day</td>
</tr>
<tr>
<td>GUIDELINE 3</td>
<td>Limit saturated fat, added salt and sugar, and alcohol</td>
</tr>
<tr>
<td>GUIDELINE 4</td>
<td>Encourage, promote &amp; support breastfeeding</td>
</tr>
<tr>
<td>GUIDELINE 5</td>
<td>Care for your food, prepare and store it safely</td>
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</tbody>
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Variety

5 Veg

Eat more cereals

Choose wholemeal

Avoid sugar

Avoid soft drink

Avoid junk food

Avoid alcohol

8 glasses of water

Choose mono-

Eat green leafy

More legumes

2 Fruit

More Dairy

Reduced fat dairy

Eat more fish

Eat lean meat

Eat less fat

No trans fat

Difficult with limited resources and access to food
Scorecard: Proportion Australians eating recommended

30% cereals
14% lean meats
10% dairy foods
31% fruit
4% veg
35% total Energy*

Scorecard:

Proportion Australians eating recommended:

- **31%** fruit
- **4%** veg
- **30%** cereals
- **14%** lean meats
- **10%** dairy foods

Fruit & veg only accounted for **10-15%** of food spending compared to **53-64%** on discretionary.

Source: Lee et al. BMC Public Health (2016) 16:315
The problem

- Unhealthy diets are a major contributor to key risk factors for chronic diseases
- Socially and economically disadvantaged have the worst health and a greater incidence of disease risk factors
- At times individuals have to compromise the quality or quantity of their diet because of a lack of money for food
Australians deserve ‘a fair go’ for health

underpinned by a safe, nutritious, affordable, secure and environmentally sustainable food system.

We live in the ‘lucky country’ where food is considered safe and relatively cheap. So, most families have the income to afford it, right?

Donald Horne 1964

Food Security

“when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”

World Food Summit in 1996
SEC. 2. FINDINGS.

Congress makes the following findings:

(1) According to the Food and Agriculture Organization of the United Nations (referred to in this section as the “FAO”), 805,000,000 people worldwide suffer from chronic hunger. Hunger and malnutrition rob people of health and productive lives and stunt the mental and physical development of future generations.

(2) According to the January 2014 “Worldwide Threat Assessment of the US Intelligence Community”—

(A) the “[l]ack of adequate food will be a destabilizing factor in countries important to US national security that do not have the financial or technical abilities to solve their internal food security problems”; and

(B) “[f]ood and nutrition insecurity in weakly governed countries might also provide opportunities for insurgent groups to capitalize on poor conditions, exploit international food aid, and discredit governments for their inability to address basic needs”.

(3) A comprehensive approach to sustainable food and nutrition security should not only respond to emergency food shortages, but should also address malnutrition, resilience to food and nutrition insecurity, building the capacity of poor, rural populations to improve their agricultural productivity and incomes, removing institutional impediments to agricultural development, value chain access and efficiency, including processing and storage, enhancing agribusiness development, access to markets and activities that address the specific needs and barriers facing women and small-scale producers, education, and collaborative research.

(A) the “[l]ack of adequate food will be a destabilizing factor in countries important to US national security that do not have the financial or technical abilities to solve their internal food security problems”; and

(B) “[f]ood and nutrition insecurity in weakly governed countries might also provide opportunities for...
Global Food Security Index

Indexing three core issues in 113 countries

Affordability
Availability
Quality and Safety

- Best performance
- Good performance
- Moderate performance
- Needs improvement

Australia
Rank 4/113
• Food is affordable for most Australians. Australians spend on average 17 per cent of their total household income on food and non-alcoholic beverages, and average incomes are rising faster than food prices.


“In Australia food is available and most Australian families have the income to afford it”

Commonwealth Government (2014)

“social disadvantage and remoteness lead to “pockets” of food insecurity”

Department of Food and Agriculture (2013)
Mean weekly equivalised household income for low, middle and high quintiles

Financial year

- Lowest quintile
- Middle quintile
- Highest quintile
- All persons

$
Who is food insecure in Australia?

Aboriginal people were more likely than non-Aboriginal people to be living in a household that had run out of and could not afford more.

Aboriginal people in remote areas more likely to be living in a household that had run out of food and couldn’t afford to buy more.

Culturally and Linguistically Diverse

Low income earners, single parent families unemployed persons, people with disabilities, those with mental health issues, homeless, Indigenous, older adults and refugees.

(Source: Palacios, V et al 2014)
In 2010 and 2013 the Department of Health, in partnership with Curtin monitored the cost, variety, quality and availability of foods in grocery stores (including remote Aboriginal community stores) in Western Australia.

Food Access and Cost Survey 2013 Report

health.wa.gov.au
A healthy food basket cost more in very remote areas in WA

- 489 grocery stores
- 57% Independents, e.g. IGA
- 17% Coles
- 18% Woolworths
- 8% remote community stores

Unique characteristics
- Remoteness
- Remote Indigenous communities
- Store locations
Financial stress indicators, Western Australia

1. Went without meals
2. Can’t afford friends/family over for a meal once a month
3. Can’t afford friends/family over for a meal once a week
4. Can’t afford a special meal once a week

33% lowest quintile experienced all 4
Food Stress

>25%

of weekly disposable household income needs to be spent on food

Food Stress in welfare dependent families

Household income

Weekly income ($)  

- 2010: Welfare income (47%), Low income (44%)
- 2013: Low income (23%), Average income (16%), Couple family (14%)

>44%
Mean weekly cost of a healthy basket of food for a two-parent family with two children was $298.

- 23% low income families $
- 26% single parent families $
- 44% weekly welfare family $
- 14% average household income
Proportion of income required to purchase an affordable healthy meal plan, 2010 and 2013

Inadequate Welfare income

Food Stress
Each year ~4% of West Australians report food insecurity, who are they and what’s the impact?

Source: Pollard, C and Daly, A. (2014) Quantifying the effect of food scarcity, PHAA, A “fair go” for health: tackling physical, social and psychological inequality”, Perth.
Who’s vulnerable? More likely:

Under 35 years
Low income <$20,000
Can’t save or just getting by
Smoke, eat take-away

**But** if earn less than $20,000 **less likely**....

Employment status, education, being Aboriginal, area of residence increased likelihood of running out of food and not being able to afford more
Depression, Disease & Distress

More likely to have:

- Depression
- Psychological distress
- Poor/fair health
- Worse health than a year ago
- Obese
Reasons in vulnerable groups?

Amongst the reasons for running out of food, participants indicated payment of household bills, late welfare payments, low income, medical bills, and rent. Whilst departure from their traditional diets when relocating to Australia and their difficulties understanding and selecting nutritious alternatives in Australia was also cited as a factor, almost equally by newly arrived and established participants.

(Source: Palacios, V et al 2014)
Access and affordability of healthy food were identified as the main barriers to healthy eating. In contrast, and as consequence, fast food was perceived as extensively advertised, readily available and affordable. Knowledge and skills regarding healthy food and cooking (or the lack thereof) were also factors raised by participants.

(Source: Palacios, V et al 2014)
Perth homeless survey uncovers two-week-old baby sleeping rough

299 people in public spaces, drop-in centres, crisis accommodation, 20 children

Children as young as two weeks old are sleeping rough on Perth's streets while more than half the city's homeless have experienced violence, a survey revealed.

The snapshot study, conducted by multiple agencies in February, gathered information from 299 people including those in outer suburbs.

The youngest homeless child was two weeks old.

Ruah Community Services manager Ros Malley said plans were being made to house the baby and its family in short-term accommodation.
The path to food security begins by exploring the challenges, then developing solutions.

http://foodsecurityindex.eiu.com/
International Institute of Agri-Food Security (IIAFS)

The International Institute of Agri-Food Security was established in November 2011 to develop innovative research and training across the international food landscape.

Clusters of Excellence
Showcasing and developing multi-disciplinary links for large-scale projects

About
Food quality for health and a more resilient food future

News
African food security a priority for Haydn
“Thinking about access to healthy food as a right, rather than a privilege of those with sufficient purchasing power to buy good food, fundamentally changes how we see causes of and solutions to food insecurity.”

Community food security

“a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance, social justice, and democratic decision-making”

- Bellows AC and Hamm MW. Journal for the Study of Food and Society 2002;6(1):31-44.
Policy for change

Between 2015 and 2016, more countries experienced declines in their scores for national nutritional standards than improvements.

“The most vulnerable populations in … high-income countries remain food-insecure. The gap between its food-secure and food-insecure populations are widening. Food-security improvements require the government to revamp food to target the needs of its poorest people.”

http://foodsecurityindex.eiu.com/Index
Countries should...

1. Focus on unacceptable health gap & urgency for action
2. Target food & nutrition security policies and actions
3. Partnerships: government, relevant agencies (collaborative effort is required to improve dietary choice)
4. Map & report on actions for food and nutrition security
5. Nothing about us without us
What are the options...

**Food and Nutrition System**
- Food production
- Food processing
- Food transport
- Food retail outlets
- Prepared food outlets

**Social and Economic Determinants**
- Employment
- Income
- Education
- Housing
- Area of Residence
- Social inclusion

(Source: Adapted from Rychetnik, 2002)
The approach

1. Agree and map food security priority actions
2. Identify, expand and develop the food security workforce
3. Establish formal and strategic food security partnerships

WA
Transport
Efficiencies

1. Acknowledge and scope food security vulnerabilities
2. Improve food distribution speed from farm to plate
3. Establish food distribution centres (metro & regional)
Social Policy

1. Broad social policy to make food affordable & accessible to vulnerable groups
2. A welfare safety net
3. Recovery pathways – employment, housing etc.
4. Meet immediate need – food relief
5. Monitor incidence & prevalence of food insecurity
Big government policy….

- GST – excludes basic foods since July 2000
- Income management / basic cards
- Remote area allowance

... what else?

~50%
Priority actions...

1. Agree and map food security priority actions
2. Identify, expand and develop the food security workforce
3. Establish formal and strategic food security partnerships

Acknowledge the extent and implications of the problem to build a shared understanding of the social, health, and economic impact of the inability to afford enough food
How? Lucky or clever

1. Population-wide monitoring of the severity of food insecurity
2. Targeted interventions to support vulnerable groups
3. Cross-sector collaborations to identify policy options
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