

# Public health nutrition perspectives on the food system.

Heather Yeatman, DPH  
Graduate School of Public Health  
University of Wollongong



# Overview:

- Food system - whole of food chain
- Key public health issues
- Key policy/ regulation papers
- Tensions and opportunities
- Ideas for ways forward

# Food system - whole of food chain:

Primary food production

Food processing & transport

Food retailing

Food consumption

??? Nutrition, health & safety



What are the big public health issues related to food?

- ◆ Chronic diseases

# Overweight & Obesity

67% of adult men and 52% of women to be overweight or obese in 2000, or around 7 million Australian adults

(1999/2000 Australian Diabetes, Obesity and Lifestyle Study)

- Overweight - Males (48%); Females (30%)
- 1989 – 2000, the proportion of Australian adults who were overweight or obese increased by around 25%
- 20 to 25% of Australian children are either overweight or obese

# Diseases associated with obesity

| Relative risk               | Associated with metabolic consequences  | Associated with weight   |
|-----------------------------|---|--|
| <b>Greatly increased</b>    | Type 2 diabetes<br>Gall bladder disease<br>Hypertension<br>Dyslipidaemia<br>Insulin resistance<br>Atherosclerosis                                 | Sleep apnoea<br>Breathlessness<br>Asthma<br>Social isolation/depression<br>Daytime sleepiness/ fatigue |
| <b>Moderately increased</b> | Coronary heart disease<br>Stroke<br>Gout/ hyperuricaemia  | Osteoarthritis<br>Respiratory disease<br>Hernia<br>Psychological problems                              |
| <b>Slightly increased</b>   | Cancer (breast, endometrial, colon)<br>Reproductive abnormalities<br>Impaired infertility<br>Polycystic ovaries<br>Skin complications<br>Cataract | Varicose veins<br>Musculo-skeletal problems<br>Bad back<br>Stress incontinence<br>Oedema/cellulitis    |

# Diseases associated with childhood obesity

---

## Immediate adverse health problems

Psychological dysfunction  
Social isolation  
Body dissatisfaction possibly leading to eating disorders  
Asthma

---

## Adverse short-term health outcomes

Gastrointestinal disorders, cardiovascular, endocrine and orthopaedic problems  
Reproductive system abnormalities  
Menstrual abnormalities  
High intra-abdominal adipose tissue  
Type 2 diabetes  
Hypertension  
High cholesterol

---

## Adverse intermediate health outcomes

High prevalence of cardiovascular disease risk factors  
Tracking of cardiovascular mortality and morbidity into adulthood



# What are the big public health issues related to food?

- Acute disease episodes
- ◆ New disease entities & patterns

# What are the big public health issues related to food?

- Inequitable social & health status
- Internationalisation of food supply
- Food safety & bioterrorism

## Food is a winning recipe for extortionists

THE CONTAMINATION threat against shoppers and their chocolate bars has raised questions about the vulnerability of food manufacturers to extortion.

More than three million Mars and Wrigley's chocolate bars were recalled in NSW last week after manufacturers Mars and Wrigley's discovered a dangerous bacterium in their products which had been contaminated within the Sydney area.

The letters was one of four received in the past month as the company's head office in the Virginia city of Fairfax which made Quaker's granola as well as other products.

The first letter was received on Wednesday as health officials showed the manufacturer may be a particularly vulnerable power.

Confiscatory Manufacturers of

It was not unusual of the extortionists to use a food company to make demands on a third party even though the food producer was not the target, he said.

The letter produced being used as a vehicle for other either political or religious agendas a third party for whatever reason, he said.

"It's because these brands are so high profile, it's a case of going extortion."

Mars and Wrigley's quickly in Fairfax in NSW.

On Saturday, the manufacturer's spokesman said public health officials of Mars and Wrigley's regional president

Mars and Wrigley's had been targeted and that the chocolate bars appeared to have been chosen at random.

The unnamed Sydney company had no connection to Mars and Wrigley's.

The last major extortion case in Australia was in January 2001 when a supermarket chain's food was targeted to be sold in a store after a threat.

and people really question that because they did not know their concerns could be held at the manufacturer's attention.

"They can be abused by people who have either tried to get their grievance addressed, or they simply use the size of a company to get their way."

"Threats are a strategy for a small business that

chocolate bars were recalled last week, a demand not being met the case to get on the list usually to have on the market usually for a long time.

Mr Weston-Webb said, while it was unclear if both firms had consented to the alleged extortion, the company was being held liable for the recall.

Mr Weston-Webb said, while it was unclear if both firms had consented to the alleged extortion, the company was being held liable for the recall.

**'Threats' can be issued by people who have either tried to get their grievance addressed or they commonly use this kind of strategy'**

—James Pridemore, the author

on a considerable scale. The following is a general guide to the victim's rights in such cases.

## Chocolate bar poison victims Two claim illness after sweets

By JILLIAN SALPIS

TWO people claiming to have been physically ill after eating either a Mars or Wrigley's bar are helping in the hunt for the chocolate bar extortionists.

Manufacturer Mars and Wrigley's president Andy Weston-Webb was yesterday in contact with the two people, who sought hospital treatment after eating the chocolate over the weekend.

Mr Weston-Webb said, while it was unclear if both firms had consented to the alleged extortion, the company was being held liable for the recall.

### What you should do

- Anyone with a Mars or Wrigley's bar is advised not to eat the product.
- The bar should be placed in a plastic bag, sealed and placed in the garbage bin.
- Anyone feeling ill after eating a chocolate bar should seek medical treatment.
- A Mars/Wrigley's customer hotline has been set up about the recall — 1 800 808 502.

bars have also been recalled from 4000 homes and charity boxes.

Mars/Wrigley's announced the recall on Friday after the company received a letter from a person claiming to have commissioned several hundred Mars and Wrigley's bars.

Mr Weston-Webb revealed yesterday the first two letters — "received on June 8 and 10 — mentioned only the 'chocolate bars' and 'the problem'."

"It threatened a large money withdrawal from the company if the bars were not recalled," he said.

The Daily Telegraph, Tuesday, July 5, 2005

# There are many other health/medical **problems** associated with food.

- **Teeth**: can old people or very poor people eat properly if they can't chew?
- **Hip fractures** in old people – are they a nutritional problem?
- **HIV/AIDS** – nutrition as therapy
- Can all people **cook meals**?
- Do people know what a **nutritious eating** pattern might include?
- Do young **mothers** know what their children need to eat?

# Range of nutrition issues

Many people are overweight or obese.

- A great many of these will develop diabetes or peripheral vascular disease or heart disease
- many will lead uncomfortable lives
- a number will find it difficult to get and retain jobs

People seek to enhance well-being and prolong life.

- Greater use of supplements & alternative therapies
- Individualism replacing public focus

People seek to 'escape' pressures in their lives.

- Overuse of alcohol and certain foods

People do not enjoy security of their food supply.

- Increased reliance on welfare relief
- Going without food
- Eating cheaper, unhealthy food options
- Impacting on children's education and health development

# Emerging issues

New food borne illnesses, eg listeria, new strains of E coli, salmonella, BSE

Greater opportunities for contracting food-borne illness (eating out, travel, etc)  
ted to food?

## **Diet may be factor in child asthma**

A lack of fresh fruit and vegetables could be contributing

## **Our food is bugged**

..... is the second most common food

# Emerging issues

- **Food security** - uneven access to the food system & affordable food
- Greater dependency on structures and systems, rather than **local production** – government or industry led?
- Greater complexity of the system, resulting in access to **more information but less knowledge; more products but less nutrition**

# Oxygen cans a fad not to be sniffed at

By ELLEN CONNOLLY

It's small enough to fit in your handbag, is as light as a feather, and claims to cure hangovers, fight ageing and aid weight loss.

Flavoured oxygen in a can, a fad that has swept through New York and London, has arrived in Sydney.

Instead of having to keep up low-carbon air oxygen tanks at airports, people can have their own supply of pure oxygen in hand.

"I thought it'd be something people carry in their bag and when they're not feeling too well they'd go to the bathroom and inhale," Tuckaway store manager Amanda Papadakis said.

"You feel like you've been at the club all weekend and you are

breathing in all this fresh air. It just like revitalises your mood."

No major research has been done on the benefits of an oxygen can, but the Netherlands company that markets the product, O2O2, claims it can cure hangovers and jet lag, speed up metabolism, boost alertness during exercise and keep the mind sharp for business meetings. It also claims to be "100%" in polluted areas.

For 99c, people can sniff 150 litres of concentrated oxygen — which is about 10 shots. The product comes in scented versions, including lemon and vanilla.

Australia Medical Association NSW branch president Dr John Oullette said "breathing concentrated oxygen for short periods of

time was probably harmless but offered no health benefits.

"Most healthy, fit people get enough oxygen while breathing in air," Dr Oullette said.

He warned that high doses of oxygen to some people, particularly those with chronic lung disease, could be harmful.

Ms Papadakis said the fad was catching on. In a week since launch she had sold out of oxygen.

So, who's buying it? "It varies," Ms Papadakis said. "But I've noticed we've had a lot of people who are right into fitness."

Others were not convinced. "It's just a gimmick, really," Mick Hetherington, 27, said. "It gives you the head spin, but only short-term."

# Bottled water taps fears

MIDDLE EASTERN

AUSTRALIANS ARE spending \$125 million a year on bottled water, despite an increasing trend towards tap water.

A report by Nielsen says

# Why is the food system important to public health nutrition?

**Costs** – personal, economics & productivity

**Community** – cultural identity & cohesion

**Equity issues**

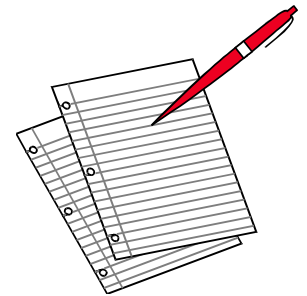
**Safety issues** – food safety; bioterrorism

**Food system** – viability; sustainability; public confidence

**Future** – sustainability, viability & advancement

# Food policy

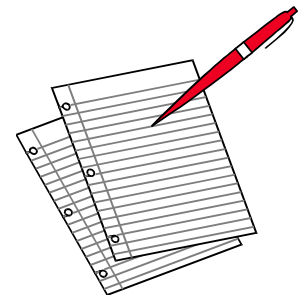
Food policy is the action and inaction of governments to influence the production, supply, distribution, marketing, sale and consumption of food [and its impact on the community].



Policy is a reflection of community and social values.

# Food policy

Food policy can also promote food systems planning.



Food issues cut across many different government departments and functions.

Winne, 2005

# Healthy Weight 2008. Australia's future

## National Obesity Taskforce, 2003

|   |                                    |  |   |  |   |
|---|------------------------------------|--|---|--|---|
| Action strategies for children and young people (aged 0-18 years) |                                    | <b>NATIONAL STRATEGIES</b>                               |   |  |   |
| <b>SETTINGS STRATEGIES</b>  | Child care                         | <b>Support for families and community-wide education</b> | <b>Whole-of-community demonstration areas</b> | <b>Evidence and performance monitoring</b> | <b>Coordination and capacity building</b> |
|   | Schools                            |  |   |  |   |
|   | Primary care services              |  |   |  |   |
|   | Family and community care services |  |   |  |   |
|   | Maternal and infant health         |  |   |  |   |
|   | Workplaces                         |  |   |  |   |
|   | Food supply                        |  |   |  |   |
|   | Media and marketing                |  |   |  |   |

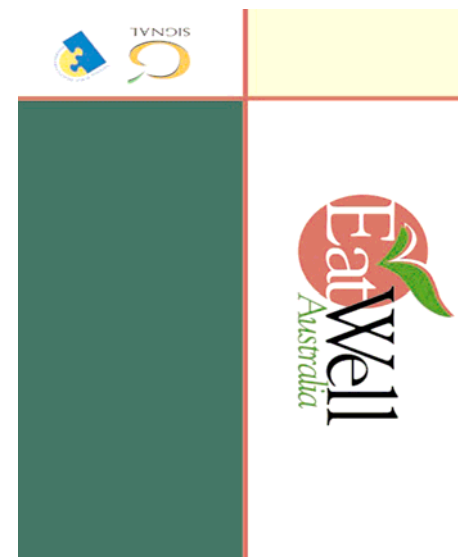
# Eat Well Australia 2000-2010 (EWA)

## 4 key nutrition priority areas:

- prevention of overweight and obesity;
- increasing the consumption of vegetables and fruit;
- promotion of optimal nutrition for women, infants and children; and
- improving nutrition for vulnerable groups.

## Capacity-building initiatives:

- strategic management;
- research and development;
- communication;
- monitoring and evaluation; and
- workforce development.



# South Australia State Food Plan 2004 – 2007

South Australia's Strategic Plan – *“is about improving the wellbeing of South Australians”*

The State Food Plan 2004-2007 has been developed under the leadership of the **Premier's Food Council**. Over 200 **food industry leaders** from throughout the state have been involved in its development.

**Vision – series of dot points**

**Outcomes – health???**

[talks about environmental management systems & outcomes, but does not mention health or nutrition outcomes anywhere! ]

# South Australia State Food Plan 2004 – 2007

## ScoreCard indicators include:

Economic measures – value of the food industry from farm gate to consumers

Environmental measures – sustainable use of natural resources

Social measures – monitor employment, skills development & wage levels

## BUT what about?

### Consumer

- confidence in & support of the SA food system
- support of food production practices, eg animal welfare issues
- knowledge of consumers about:

Food safety; Local food production issues; How to use local foods.

### Health improvements,

- reductions in tooth decay or rates of overweight & obesity

# South Australia State Food Policy ??

## Overweight & Obesity

### Tensions

- criticism of SA foods
  - litigation
- restricted advertising
  - 'bad' food labels

### Opportunities

- promoting SA primary foods
  - selected advertising
  - school education

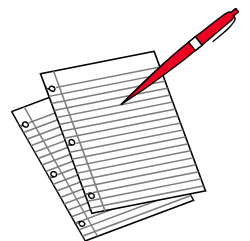
# South Australia State Food Policy ??

## Reporting on food issues

**Diet & nutrition data** – track changes in food patterns, choices, evaluate impact of strategies  
energy consumption per capita  
availability of desirable foods, eg fruit & vegetable

Linking between **food production** and consumption types, range & cost of foods being produced

**Tracking changes** after key campaigns/ events



# South Australia State Food Policy ??

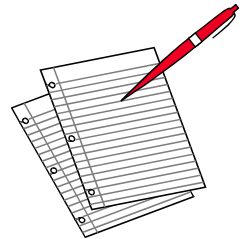
## Food safety

### Food education in schools

- school breakfast programs – avenue to parents
- food curriculum & food safety education
- healthy school canteens

### Responsible food handling training

- mandatory, short course as a pre-requirement for work in the food industry (eg RSA)



# South Australia State Food Policy ??

## **Food industry leadership**

**community-based actions** - developing and promoting products, opportunities, and information that will encourage healthful eating behaviours, while working with local, small businesses

**organisational actions** – employee health; canteens; support programs

| State Food Plan | <b>SA Food Policy ???</b><br>(whole of government)  | Improving wellbeing<br>– Eat Well SA |
|-----------------|---|--------------------------------------|
|                 | Identify linkages across both strategies  |                                      |
|                 | Identify key areas for collaboration: <ul style="list-style-type: none"> <li>■ Overweight &amp; obesity</li> <li>■ Food &amp; safety education</li> </ul> |                                      |
|                 | Linked monitoring & surveillance  |                                      |
|                 | Linked govt. & public reporting   |                                      |
|                 | Demonstrating leadership  |                                      |