

Analysis Grid for Environments Linked to Obesity **ANGELO**

Camperdown March 2011

Chad Foulkes

Acknowledgements and thanks to:

Boyd Swinburn, Steven Allender,
Melanie Nichols and Emma Smitten



Australian Government
Department of Health and Ageing



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what is CO-OPS

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ANGELO

a chat

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WHO Collaborating Centre on Obesity Prevention

CO-OPS Collaboration

The Collaboration of Community-based Obesity Prevention Sites supports community-based obesity prevention initiatives

Goals

To identify and analyse the lessons learnt from a range of community-based obesity prevention initiatives aimed at tackling obesity.

To identify the elements that make community-based obesity prevention initiatives successful and share the knowledge gained with other communities.

The CO-OPS Collaboration

- Key activities:
 - Advice and support service
 - Collaborative network
 - Professional development
 - Evidence and analysis
 - Web site
 - Resources for planning, implementation and evaluation of community-based obesity prevention initiatives





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welcome

The Collaboration of Community-based Obesity Prevention Sites (CO-OPS Collaboration) is an initiative funded by the Australian Government Department of Health and Ageing which aims to support community-based obesity prevention initiatives through a collaborative approach to promoting best practice, knowledge translation and by providing networking opportunities, support and advice.

Our goals

- To identify and analyse the lessons learnt from a range of community-based obesity prevention initiatives aimed at tackling obesity.
- To identify the elements that make community-based obesity prevention initiatives successful and share the knowledge gained with other communities.

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We have the ability to connect you to many other individuals working on community-based obesity prevention initiatives and have access to a wide variety of resources.

For advice and support services please contact our [Knowledge Broker](#) or [Program Evaluator](#).

latest news & events

Evidence-informed public health courses

The Cochrane public health group are coordinating a 2-day short-course: *"An introduction to Evidence-Informed Public Health"* on [Tuesday 5th and Wednesday 6th of April 2011](#). The course is being conducted in collaboration with the Department of Health Victoria and the Victorian Health Promotion Foundation (VicHealth)

[Read more...](#)



register with CO-OPS

Register with the CO-OPS Collaboration to utilise the forum, access our database and download resources.

Why join?

- It's **FREE**
You will join a community of people interested in community-based obesity prevention
- Access to a network of health professionals, researchers and government employees all interested in community-based obesity prevention
- Access to a wide range of resources via our database

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Best Practice Principles for Community-based Obesity Prevention

Version 1.1 July 2009



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Book of case studies for Community-based Obesity Prevention



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- [Eat well be active: Find out what worked](#)
- [California's success with community-based obesity prevention programs](#)
- [The KT4LG study](#)
- [Get to know our members](#)
- [PD opportunity: Engaging and Motivating Schools and Early Childhood Services in Health Promotion](#)

ALSO THIS MONTH

Heart Foundation Conference - Heart to Heart: from Access to Action

The Heart Foundation will host the

WEDNESDAY 2, FEBRUARY 2011

Eat well be active: Find out what worked

South Australia Health is about to release the final evaluation report of the Eat well be active (ewba) Community Programs.

The programs aimed to promote healthy eating and physical activity among children and young people (0-18 years) in two geographically defined communities, in multiple settings using a range of strategies.

ewba successfully implemented and evaluated a multi-strategy, multi-setting community development approach to childhood obesity prevention in South Australia, with evidence of effectiveness in promoting healthy weight.

Mixed-method evaluation included a quasi-experimental design to compare changes observed in ewba intervention and comparison sites.

Key findings include:

- Marked improvements in preschool children's weight status in the ewba sites

overview

what is CO-OPS

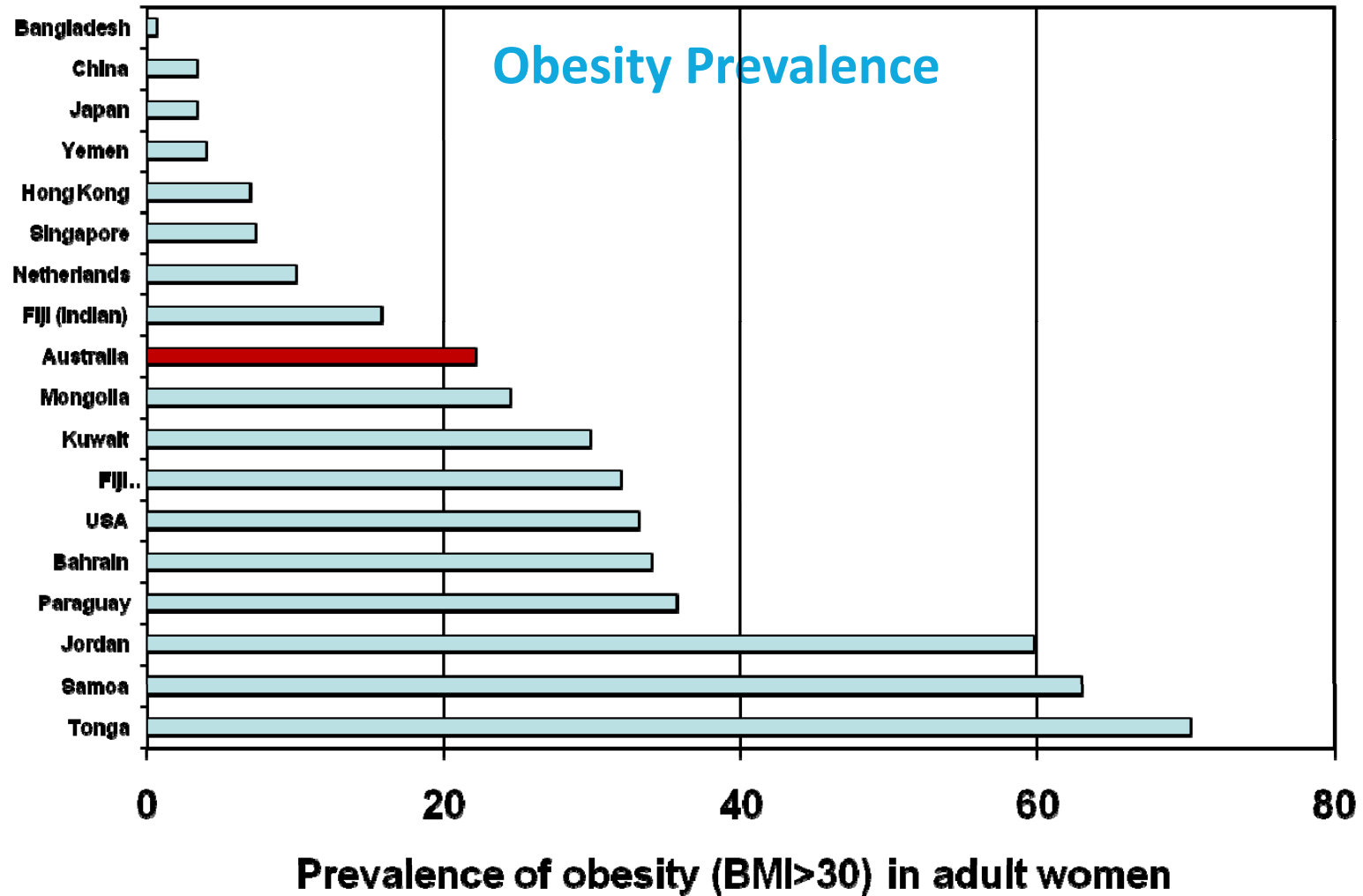
why obesity

ANGELO

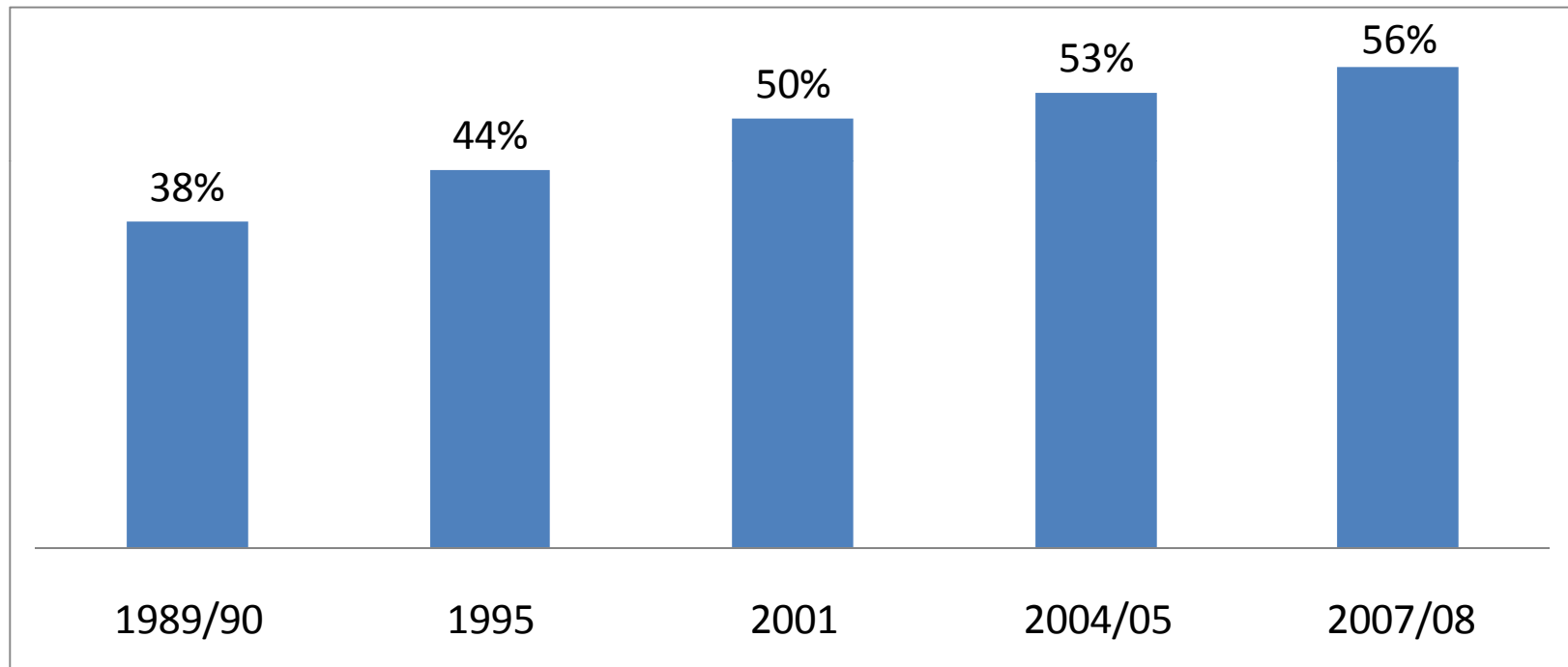
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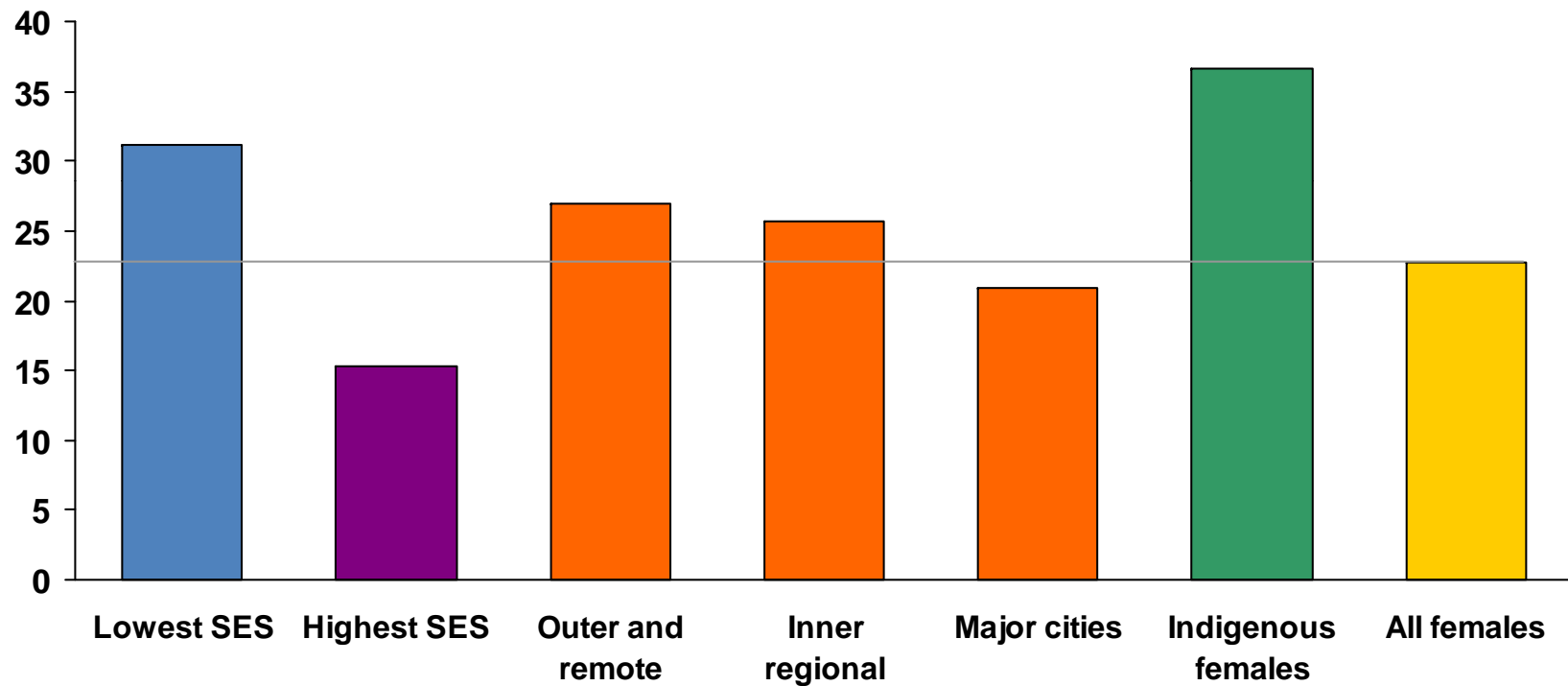
Why obesity?



ABS National Health Survey 2007-2008 and previous
Linacre S. Overweight and obesity. Canberra, Australian Bureau of Statistics. 2007

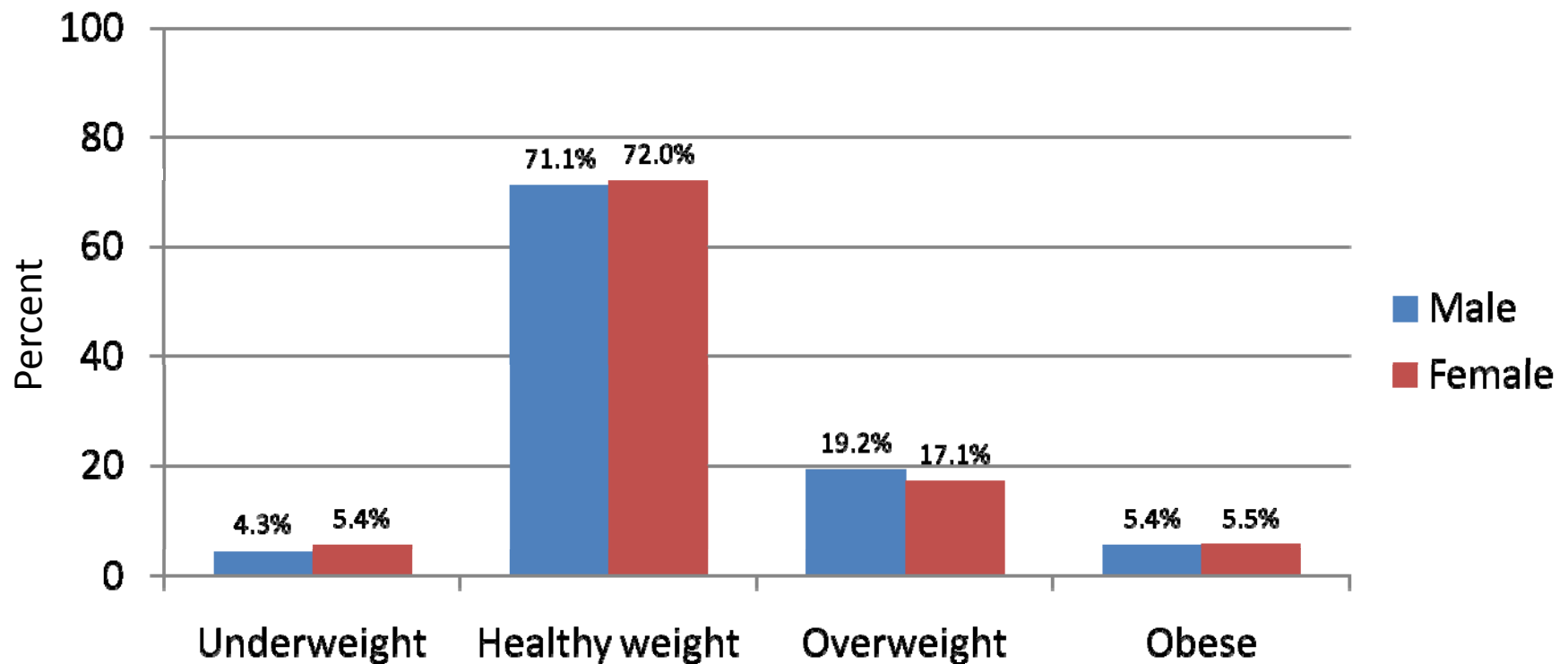
Obesity Prevalence - inequalities

Per cent



Prevention of cardiovascular diseases, diabetes and chronic kidney disease (AHIW 2009, Cat. no. PHE 118)

Secondary School Students



National Secondary Students' Diet and Activity (NaSSDA) survey 2009-10
Must and Strauss. *Int J Obes Relat Metab Disord*. 1999;23 Suppl 2: S2-11

Excess body fat is a risk factor for cancers:

- Convincing evidence
 - Colorectum
 - Kidney
 - Pancreas
 - Oesophagus
 - Endometrium
 - Breast (post-menopausal women)
- Probable evidence
 - Gallbladder
- Limited evidence
 - Liver



World Cancer Research Fund and American Institute for Cancer Research. Food, nutrition, physical activity and the prevention of cancer: a global perspective. Washington DC: AICR. 2007

International Agency for Research on Cancer. Weight control and physical activity. Volume 6. Lyon:IARC. 2002

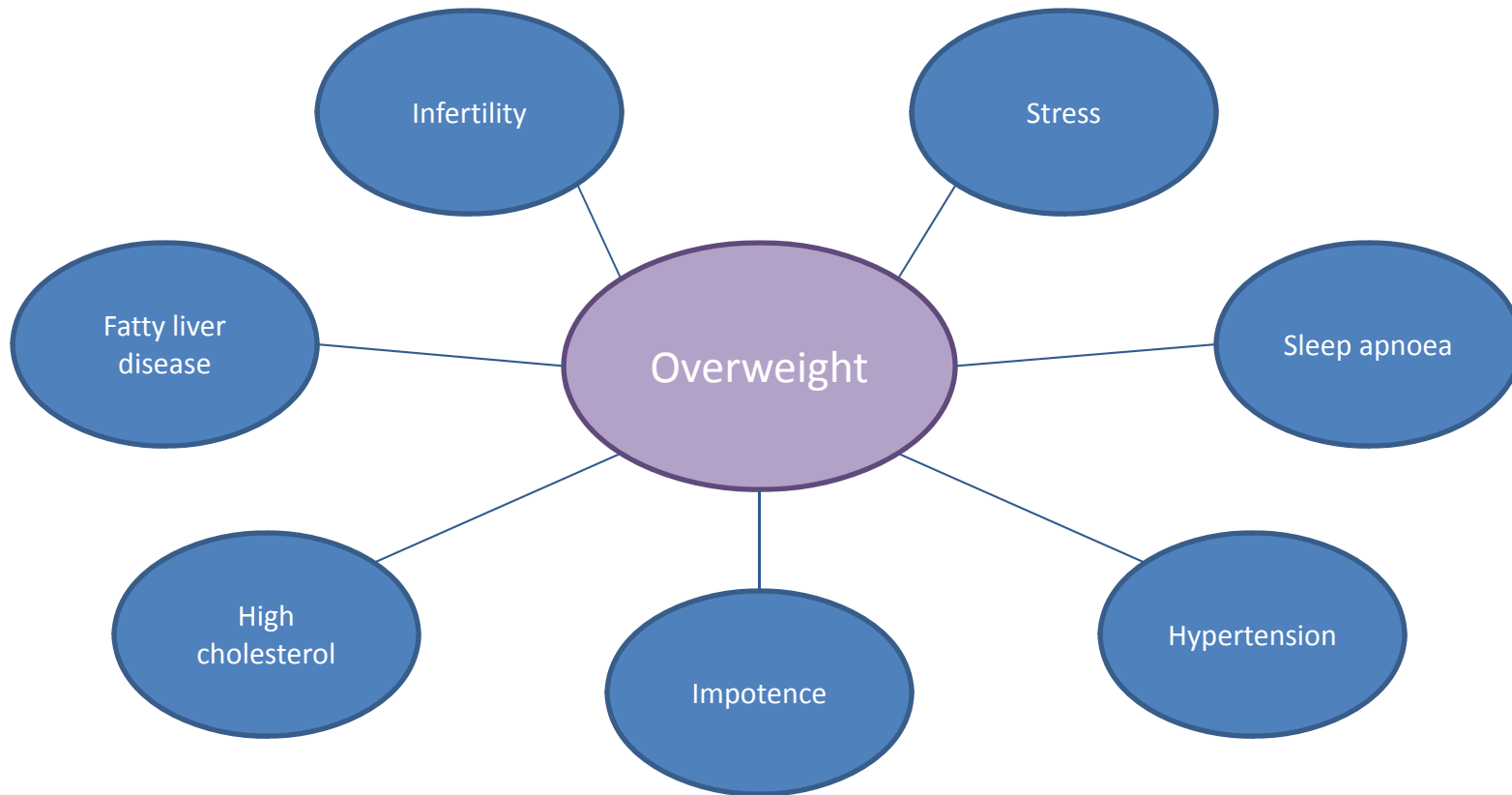
Boyle et al. *Ann Oncol.* 2003;14(7): 973-1005

Bergstrom et al. *Int J cancer.* 2001;91(3): 421-430

Conditions and Determinants

	Obesity	Poor Nutrition	Physical Inactivity
Osteoarthritis	✓		✓
Coronary Heart Disease	✓	✓	✓
Depression	✓		✓
Type 2 Diabetes	✓	✓	✓
Osteoporosis		✓	✓
Stroke	✓	✓	✓

Additionally...



Measure Up. Department of Health and Ageing. 2010

<http://www.measureup.gov.au/internet/abhi/publishing.nsf/Content/The+link+between+chronic+diseases-lp>

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ANGELO – What is it?

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ANGELO – What is it?

ANGELO is an acronym

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ANalysis

Grid for

Environments

Linked to

Obesity

ANGELO – What is it?

ANGELO is an acronym

ANalysis

Grid for

Environments

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Obesity

...thankfully it's much more than an acronym

ANGELO – What is it?

The ANGELO framework is a tool developed to help communities analyse the environmental influences affecting their physical activity and eating patterns...

...and then to work out which factors they can more readily alter

Moodie, M., 2007, Living in an obeseogenic environment

ANGELO – where it has been used

Population level

Fiji

Tonga

Australia

New Zealand

Pacific Islands

Torres Strait Islands

Settings/sector level

Fast food outlets in
New Zealand

ANGELO – a 4 stage process

1. Sociocultural analyses
2. Stakeholder engagement
3. Workshop & prioritisation
4. Action Plan

ANGELO – Stage 1 of 4

Sociocultural analyses

Sociocultural analyses to identify barriers to:

Healthy eating

-i.e. traditions of over-eating at social occasions

Physical activity

-i.e. expectations for girls to do house-work rather than play sport

ANGELO – Stage 1 of 4

Sociocultural analyses

Sociocultural analyses was undertaken using:

Semi-structured interviews

- Conducted by an interviewer fluent in the language of the participant

Focus groups

- Gender
- Culture

Analysis of peer review literature

ANGELO – Stage 1 of 4

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Sociocultural analyses was undertaken using:

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Focus groups

- Gender
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Analysis of peer review literature

ANGELO – Stage 2 of 4

Stakeholder engagement

Stakeholder engagement:

Governments, agencies, NGO's, community groups and citizens

- Complete ANGELO grid
- Agree on environments to be ranked at the workshop
- Assess information and wording of documents for cultural appropriateness
- Assist in the design of the prioritisation workshop (stage 3)
- Usually continue involvement in a governance or delivery role once interventions commenced
- Participate in the workshop

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ANGELO – Stage 2 of 4

Stakeholder engagement

ANGELO Framework (Analysis Grid for Environments Linked to Obesity)

Environment size Environment type	Micro-environment (settings)		Macro-environment (sectors)	
	Food	Physical Activity	Food	Physical Activity
Physical				
Economic				
Policy				
Socio-cultural				

Swinburn et al Prev Med 1999

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ANGELO – Stage 2 of 4

Stakeholder engagement

ANGELO Framework (Analysis Grid for Environments Linked to Obesity)

Environment size type	Micro-environment (settings)		Macro-environment (sectors)	
	Food	PA Activity	Food	PA Activity
Physical	School canteen	Sports facilities	Government Policy	Sports facilities in the area
Economic				
Policy				
Socio-cultural				

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ANGELO – Stage 2 of 4

Stakeholder engagement

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Environment size Environment type	Micro-environment (settings)		Macro-environment (sectors)	
	Food	PA Activity	Food	PA Activity
Physical	School canteen	Sports facilities	Availability of food	Sports facilities in the area
Economic	School profits from canteen	No funds for sport equipment	Unhealthy food is cheaper	School/Gov not funding facilities
Policy				
Socio-cultural				

Swinburn et al Prev Med 1999

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ANGELO – Stage 2 of 4

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Economic	School profits from canteen	No funds for sport equipment	Unhealthy food is cheaper	School/Gov not funding facilities
Policy	No food provision guidelines	No policy to provide sports equipment	No government policy	No access to other sporting facilities
Socio-cultural				

ANGELO – Stage 2 of 4

Stakeholder engagement

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Policy	No food provision guidelines	No policy to provide sports equipment	No government policy	No access to other sporting facilities
Socio-cultural	Healthy food seen as boring	Students not encouraged to play	Marketing of unhealthy foods	Lack of sporting clubs

Swinburn et al Prev Med 1999

ANGELO – Stage 2 of 4

Stakeholder engagement

List environments for prioritisation

Stakeholders list all environments from the Analysis grid under 4 groupings
knowledge, skills, behaviours and settings

ANGELO – Stage 3 of 4

Workshop & prioritisation

Workshop – Day 1

Information

- Rankings undertaken on each category: behaviour, knowledge, skills, settings
- Rank importance and changeability
- Impact x changeability = total score
- In the case of a tie discussion is needed to choose which is the greater priority
- Priorities now evident in each category

ANGELO – Stage 3 of 4

Workshop & prioritisation

Workshop – Day 2

Prioritisation process

- Rankings undertaken on each environment
- Rank importance and changeability
- Score of importance x changeability = total score
- In the case of a tie discussion ensues to choose to determine the greater priority
- Priorities now evident in each category

Add examples of scoring sheet used in ANGELO processes

ANGELO – Stage 4 of 4

Action Plan

Priorities are turned into objectives (what will be achieved) with a number of strategies (how it will be achieved)

Objective	Strategy
Active Play To significantly increase the amount of active play after school and on weekends	After School Activity Program Redevelopment of three local parks Be Active Arts (an after-school program)
Hot Chips To improve the quality of deep fried takeaway chips	Pilot an incentive program for local retailers encouraging the use of healthy oils and low fat cooking techniques
Happy Healthy Families To pilot a healthy lifestyle program for parents/ carers of children aged 2-12 yrs, focussing on healthy eating, physical activity and parenting skills	Develop a healthy lifestyle group for parents of young children Pilot the program Continue to conduct the program four times per year and evaluate it regularly

ANGELO – what next...

ANGELO processes conducted by Deakin have resulted in interventions which have lasted from 1-5 years.

Interventions implement the action plans

ANGELO – recap

- ANGELO stands for ANalysis Grid for Environments Linked to Obesity
- ANGELO exists to help communities analyse the environmental influences affecting their physical activity and eating patterns
- ANGELO is a four stage process
 1. Sociocultural analyses
 2. Stakeholder engagement
 3. Workshop & prioritisation
 4. Action Plan

ANGELO – summary

At the end of the ANGELO process there are:

- Community identified environments for change and set priorities
- Agencies have community developed action plans and agreement from participants on what to implement
- Researchers get settings in which to research

ANGELO – in other health settings

ANGELO in other health settings

- Smoking
- Alcohol & other drugs
- Sun-smart

ANGELO – in other settings

ANGELO in contested public spaces

- Natural Resource Management
- Environmental Policy making
- Local infrastructure issues
- Land-use planning

ANGELO – Stage 2 of 4

Stakeholder engagement

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References

- Moodie, M., 2007, Living in an obeseogenic environment, *Nutridate*, Volume 18, Number 4, August 2007
- Simmons, A., Mavoa, H., M, Bell, A. C., de Courten, M., Schaaf, D., Schultz, J., *et al.* (2009). Creating community action plans for obesity prevention using the ANGELO (Analysis Grids for Elements Linked to Obesity) Framework. *Health Promotion International*; doi: 10.1093/heapro/dap029
- Swinburn, B., Egger, G. and Raza, F. (1999). Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Preventive Medicine* 29(6 Pt 1): 563-70
- Prevention of cardiovascular diseases, diabetes and chronic kidney disease (AHIW 2009, Cat. no. PHE 118)

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Tools and resources available to your work

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welcome

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latest news & events

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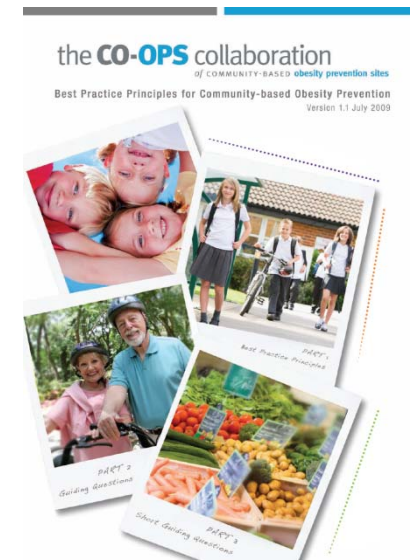
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- Access to a network of health professionals, researchers and government employees all interested in community-based obesity

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Best Practice Principles for Community-based Obesity Prevention

- Best practice processes for...
 - Engaging communities
 - Program design and planning
 - Implementation and sustainability
 - Evaluation
 - Governance and transparency



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Search the CO-OPS Resource Library

Search

General Resource Type

Evaluation

Resource Category

Impact / Outcome Evaluation

Topic

(please select)

Age Group

Birth to 5 years (preschool)

Referenced In Best Practice Principles

Key Topics

Nutrition

GO...

What is the CO-OPS Resource library?

The CO-OPS library is an online collection of resources to support community-based obesity prevention. These include tools for planning, implementation and evaluation of community-based obesity prevention activities and a range of supporting documents. The purpose of the library is to support new, emerging and existing projects to easily find the resources they need and hopefully avoid unnecessary

http://www.co-ops.net.au/Pages/Public/Resource_Library.aspx

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Search the CO-OPS Resource Library

Search Results (8 Resources)

- ewba - Family Day Care Questionnaire**
Assessment of nutrition and physical activity environments, policy and practices in family day care settings.
- ewba - Long Day Care Questionnaire**
Assessment of nutrition and physical activity environments, policy and practices in long day care centres.
- ewba - Preschool Questionnaire**
Assessment of nutrition and physical activity environments, policy and practices in preschools.
- Family Day Care Environment Audit**
A self-completed survey for family day care providers. Investigates factors in the physical, policy, socio-cultural and economic environments related to healthy eating and active play.
- Kindergarten (Preschool) Environment Audit**
A self-completed survey for teachers of 4-yr old kindergarten. Investigates factors in the physical, policy, socio-cultural and economic environments related to healthy eating and active play.
- Long Day Care Environment Audit**
A self-completed survey for directors of long day care centres. Investigates factors in the physical, policy, socio-cultural and economic environments related to healthy eating and active play.
- Parent Survey - Computer Assisted Telephone Interview**
Telephone-administered survey of parents of primary school children. Behaviours, home environment and socio-demographic variables.
- Young Children's Eating and Activity Survey**
Brief parent-completed survey of eating and activity behaviours for preschool aged children.

http://www.co-ops.net.au/Pages/Public/Resource_Library.aspx

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