Food security: why should we care? Links with obesity



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Obesity, SES and food insecurity

- In wealthy countries:
 - Higher obesity prevalence in lower SES
 - Especially in women, sometimes in men & children
 - Higher obesity prevalence with food insecurity
 - In women only (20-40% higher risk)
 - Higher thinness prevalence with extreme poverty
 - Often associated with mental health problems, substance abuse etc

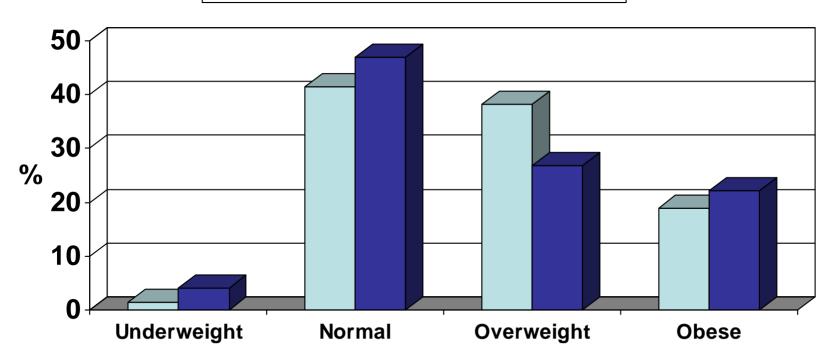
C Burns, Literature review VicHealth, 2004





National Nutrition Survey 1995 (women)





Wood et al, Monash University 2000





The obesity/food insecurity paradox

- Individual factors
 - Lack of knowledge and/or skills??
 - Restraint/disinhibition cycles
- Economic environment
 - 'Cheaper' foods: more energy dense and highly palatable
- Physical environment
 - ED foods are more available
 - Reduced recreation, active transport opportunities
- Socio-cultural environment
 - ED foods marketed to lower income populations
 - S-C norms (behaviours, values, attitudes)

Drewnowski, 2004, Reidpath 2002, Burns 2004





Obesity prevention interventions

Aims

- To reduce unhealthy weight gain
- To reduce SES inequalities with obesity
- Do no harm



Colac's Be Active Eat Well



- Whole-of-community demonstration program in Colac, Vic (rural, pop 11,000)
- Funded for 4 years
 - Dept of Human Services, Victoria
 - 1y planning, 3y intervention
 - Target group: 4-11 years
 - Regional sample comparison group
- Capacity-building approach
 - Create skills, structures, leadership, resources to promote healthy eating and physical activity









Less weight and waist gain in intervention group over 3y



Adjusted for confounders: age, gender, height, duration of follow up Sanigorski et al Int J Obesity 2008



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What about SES and Safety?

- Measures: 4 of SES, 5 of anthropometry
- The intervention appeared to be equitable
 - Comparison children
 - Low SES gained more weight
 - Colac children
 - No relationship of weight change with SES
- The intervention appeared to be safe
 - No differences in:
 - Underweight, dieting, body size perceptions, self esteem etc

Sanigorski et al Int J Obesity



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Conclusions

- Low SES and food insecurity is related to higher risk of obesity (women)
- Potentially bi-directional relationships
 - Multiple mechanisms
 - Vicious cycles
- Interventions need to address obesity and inequalities
 - Whole-of-community approaches are showing promise

