

Overview of the Obesity Problem in Ireland



PROFESSOR TIM O'BRIEN
NUI GALWAY



Overview



- Background to the Problem
- Risk Factors
- Consequences of Obesity
- Some Strategies
- Issues/Challenges
- Recommendations

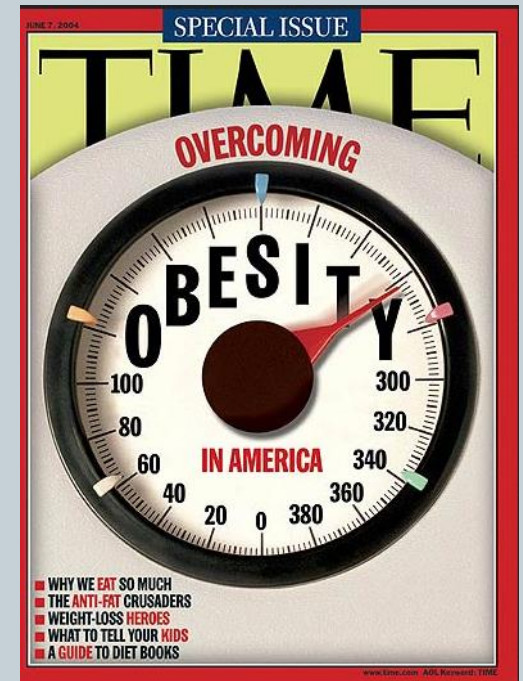


Globesity



Worldwide:

- Global prevalence of child and adult obesity has reached epidemic levels in developed and in developing countries
- Approx. 1.6 billion people overweight worldwide, 400 million adults obese
- Approx . 170 million children worldwide are overweight/obese, 20 million children under age of 5 years overweight; 92 million children are at risk
- By 2015, it's predicted that 2.3 billion adults will be overweight, with over 700 million being obese



(Sources: WHO, 2005; The Lancet, 2008)

Globesity



Ireland:

- 37% of Irish adults overweight, 24% obese
- *Growing Up in Ireland* (GUI) study 2011: Child cohort found 26% of 9 year olds were overweight/obese (19% were overweight, 7% were obese)
- Girls more likely to be defined as being overweight (22%) or obese (8%) than boys (17% and 5%)
- Evident social-class inequalities exist (CSO's measure of SEC)
 - 19% of boys and 18% of girls from professional households are overweight/obese
 - Increases to 29% of boys and 38% of girls from semi-and unskilled social-class households

(Sources: NANS, 2011; *GUI* Study, 2011)

Globesity



- Obesity tracks with fidelity into adulthood
- Social networks and obesity ‘social multiplier effect’
- This may be the first generation of children who may live less long than their parents as a result of the consequences of overweight and type 2 diabetes
- 54% of parents of overweight children and 20% of parents of obese children report that they are ‘about the right’ weight for their height

(Sources: <http://www.safefood.eu/Childhood-Obesity/Facts.aspx>; Growing up in Ireland Study; NEJM)

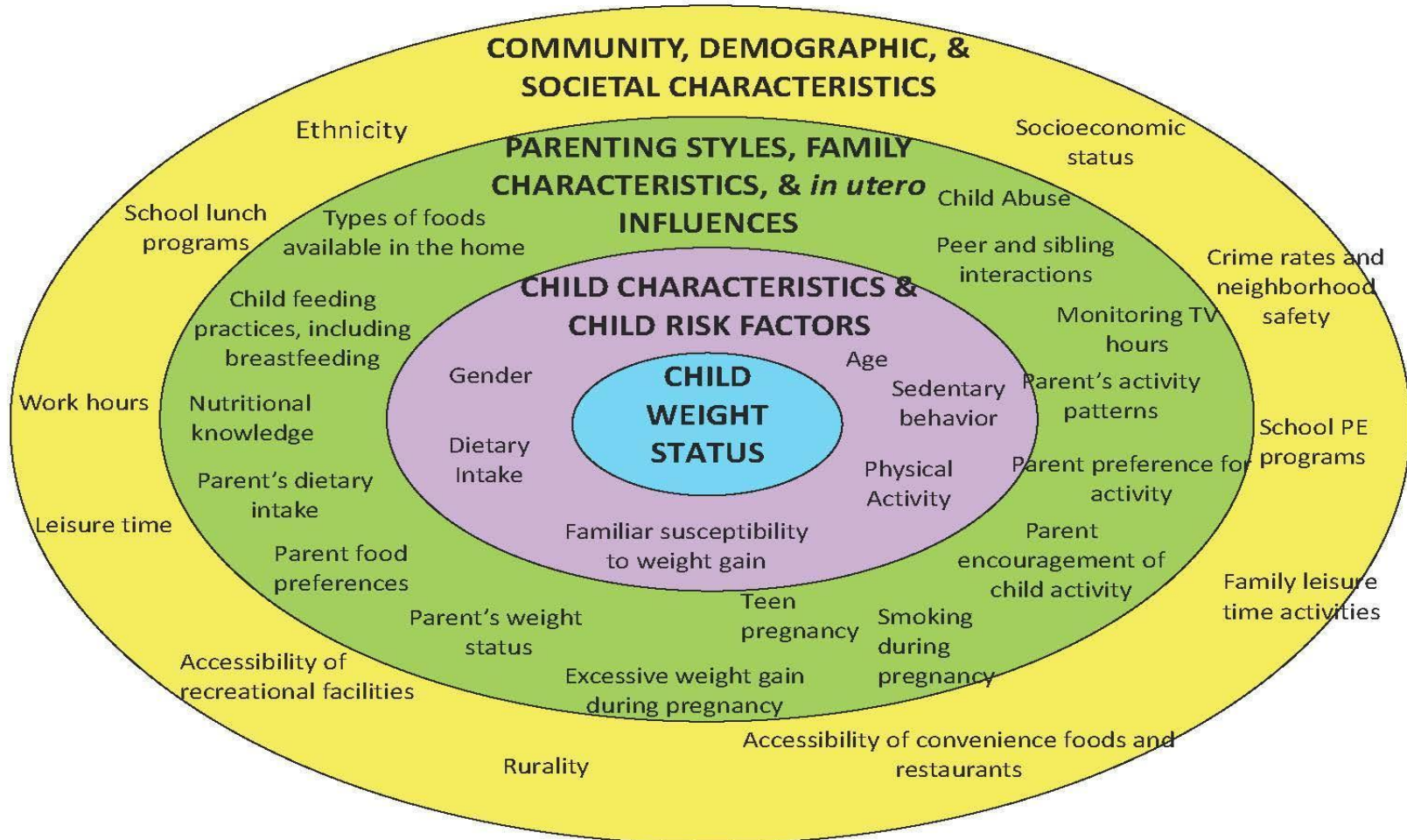
Risk Factors for Child Obesity



- Physical Inactivity:
 - 3/4 children in Northern Ireland do not meet Government Physical Activity Guidelines
 - 4/5 Children in the Republic of Ireland do not meet Government Physical Activity Guidelines
 - Preschool children on the island of Ireland watch an average of 2 hours 9 minutes television a day, 34% of preschool children have a TV in their bedroom
- Poor diet:
 - Many children do not meet the dietary recommendations for fruit and vegetables, saturated fat or sugar
 - 1/5 of the energy intake from a child's diet comes from sugary drinks, biscuits, confectionary, chocolate and cake
- Education level
- Health Literacy and Information
- Family history of overweight/obesity
- Ethnicity

Determinants of Health

Ecological Model of Childhood Overweight



Based on expanded version of Davison & Birch (2001), enhanced by Reed et al, 2011. Obesity in Rural Youth: Looking Beyond Nutrition and Physical Activity. JNE Vol.43, No. 5, Pg. 403.

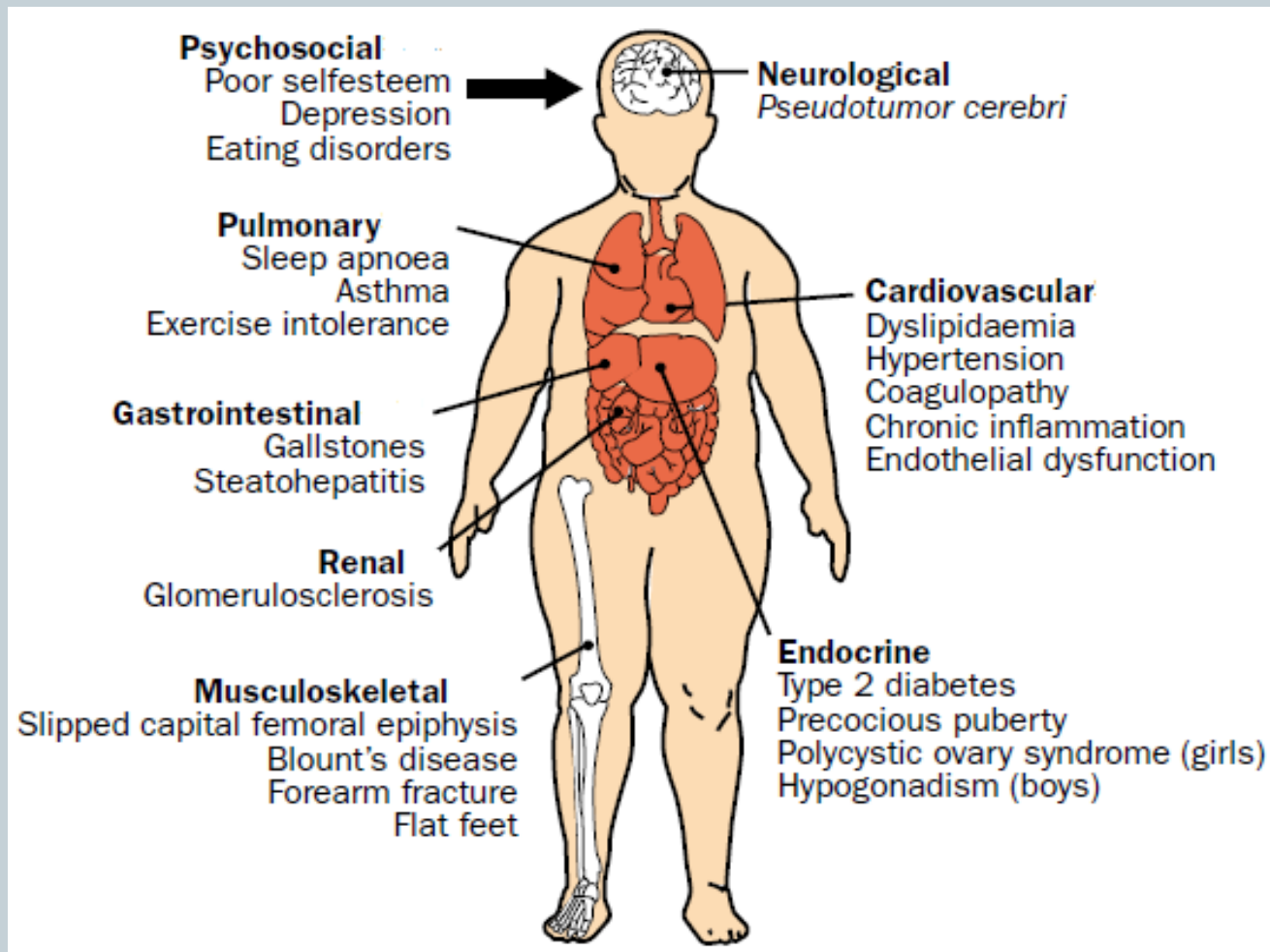
Consequences of Obesity



- Obesity is causally implicated in the development of numerous conditions
- A severely obese person is likely to die 8-10 years earlier than a person of normal weight
- Obese people earn up to 18% less than non-obese individuals
- An obese person incurs 25% higher health expenditures than person of normal weight
- The current global epidemic of overweight and obesity poses significant threats to the health and wellbeing of populations and represents a major challenge for health services

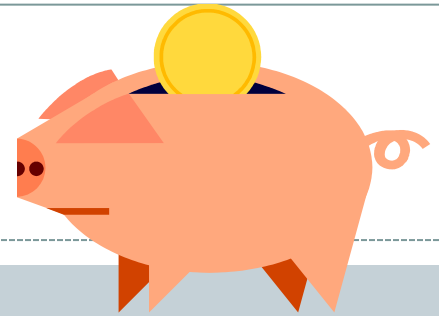
(Sources: Perry et al, 2013; OECD, 2010)

Consequences of Obesity



(Source: adapted from Ebbeling et al., 2002)

Investment in Disease Prevention



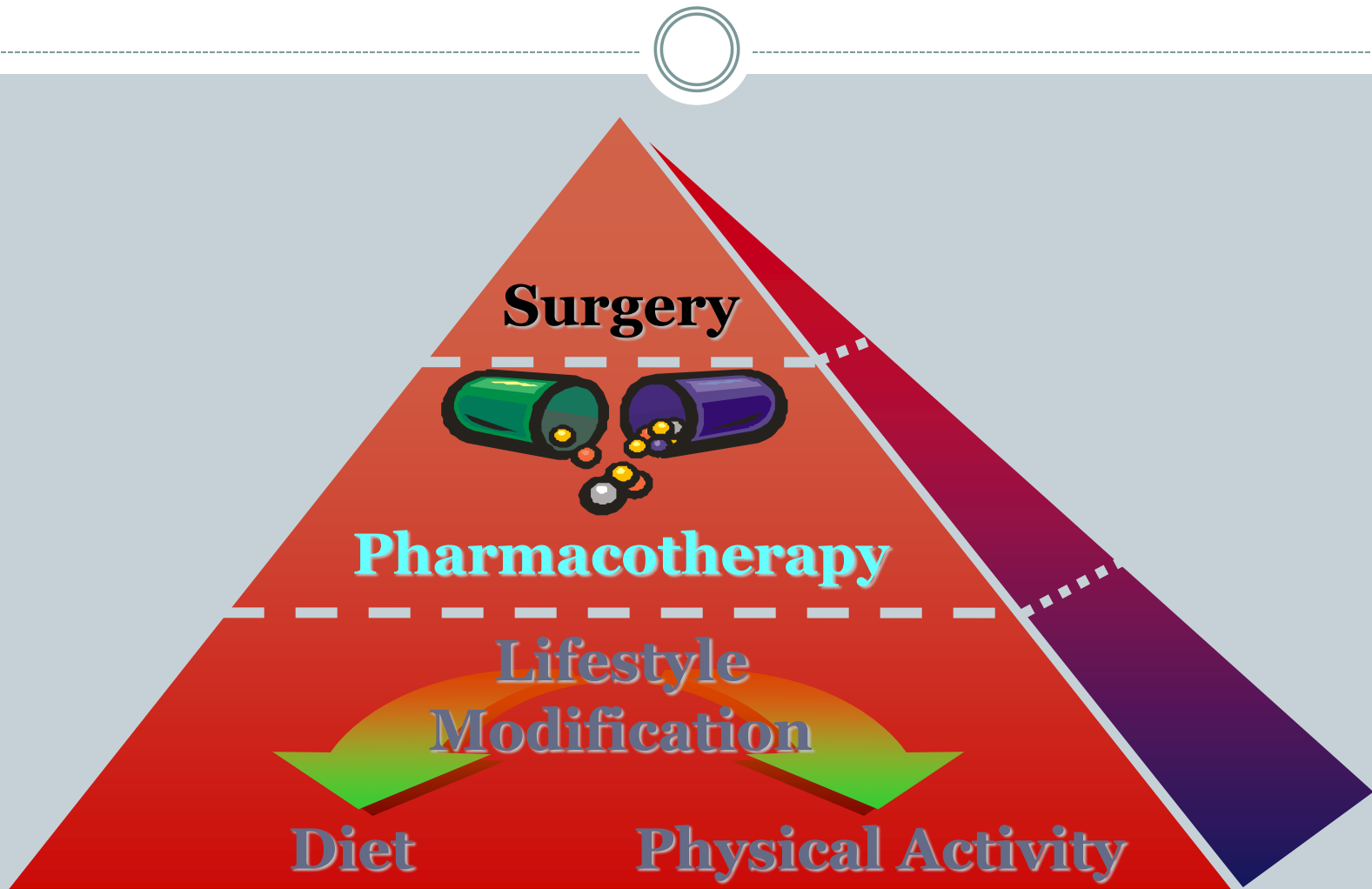
- An investment of \$10 per person per year in proven community-based programs (to increase physical activity, improve nutrition, and prevent smoking and other tobacco use) could save the country more than \$16 billion annually within 5 years.
- This is a return on investment (ROI) of \$5.60 for every \$1.
- Out of the \$16 billion, potential savings include:
 - Medicare = \$5+ billion
 - Medicaid = \$1.9+ billion
 - Private Payers = \$9+ billion

Investment in Disease Prevention



- A comprehensive prevention strategy would avoid, on an annual basis, 155,000 deaths from chronic disease in Japan, 75,000 in Italy, 70,000 in England, 55,000 in Mexico, and 40,000 in Canada
- The annual cost of such would be US\$ 12 per capita in Mexico, US\$ 19 per capita in Japan and England, US\$ 22 in Italy and US\$ 32 in Canada, with cost per life year gained through prevention is less than US\$ 20,000 in these 5 countries.

Obesity Treatment Pyramid



Evidence-based Behavioural Strategies



- Breastfeed
- Limit sugar-sweetened beverages
- Consume the recommended fruits and vegetables
- Eat daily breakfast
- Limit fast food
- Use appropriate portion size
- Eat meals together as a family
- Limit TV and screen time (incl. keep TV out of children's bedrooms)
- Encourage moderate vigorous physical activity of 60 minutes a day or more
- Combined behavioural lifestyle interventions can help produce significant and clinically meaningful reduction in overweight in children and adolescents

Evidence-based Environmental Strategies



- Environmental prompts (elevator v's stairs)
- Create opportunities for & access to physical activity
- Promote and increase physical activity time at school, trained PE teachers
- Work-site health promotion, education, employee and peer support for physical activity, incentives, and access to exercise facilities
- Supply of nutritious foods, point of purchase strategies
- Healthcare professional trained and provide nutritional counseling

Issues/Challenges



- Social factors
- Investment in prevention, and prevention needs consensus
- Who Pays?
- Efficient interventions exist in main areas of action, but none can solve the problem alone
- Insufficient evidence
- Cost-effective programs for primary and community care are required

Recommendations



- Urgent public health action needed to address the burden overweight/obesity are placing on health services and general economy
- A population-wide approach is required
- Targeted action required to reduce burden placed by the very obese on the health service
- Further research on psychosocial determinants for behaviour change needed
- Conduct obesity prevention research on how effective interventions can be embedded within health, education, care systems to achieve long-term sustainable impacts
- Further research on psychosocial determinants for behaviour change needed
- Strategies to improve clinician family interaction

(Sources: Perry et al, 2013; Luttikhuis et al, 2009;)

It takes a village....Multistakeholder Approach



- Schools
- Churches
- Community Organizations
- Pharmaceutical industry
- Government
- Food and beverage industry
- Employers
- Sports industry
- And Others together....

...To create Healthy Sustainable Communities

