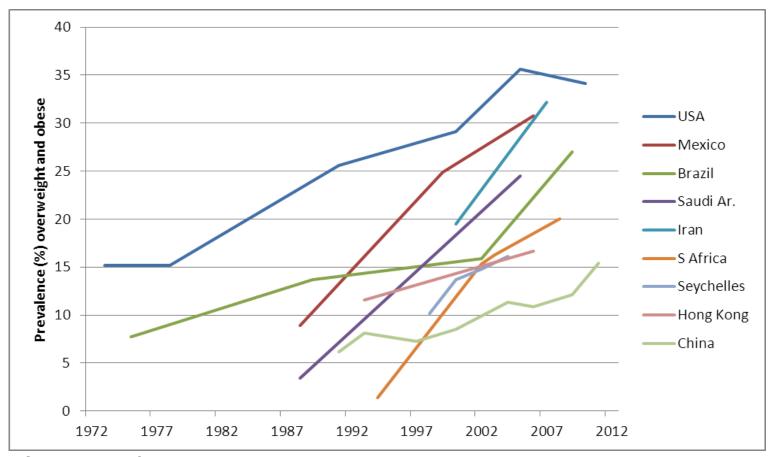


#### **HEALTH EQUITY PILOT PROJECT**

# Rapid review: social inequities in obesity determinants

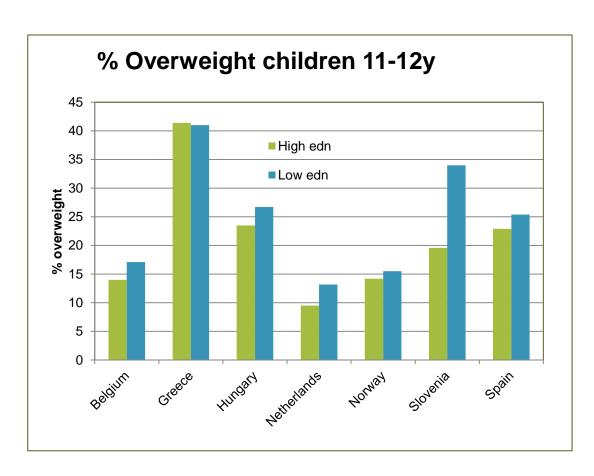
Tim Lobstein
Consultant for the UK Health Forum
Director of Policy, World Obesity Federation

#### Global Trends in Child Obesity, 1972-2012



Source: World Obesity Federation, 2014.



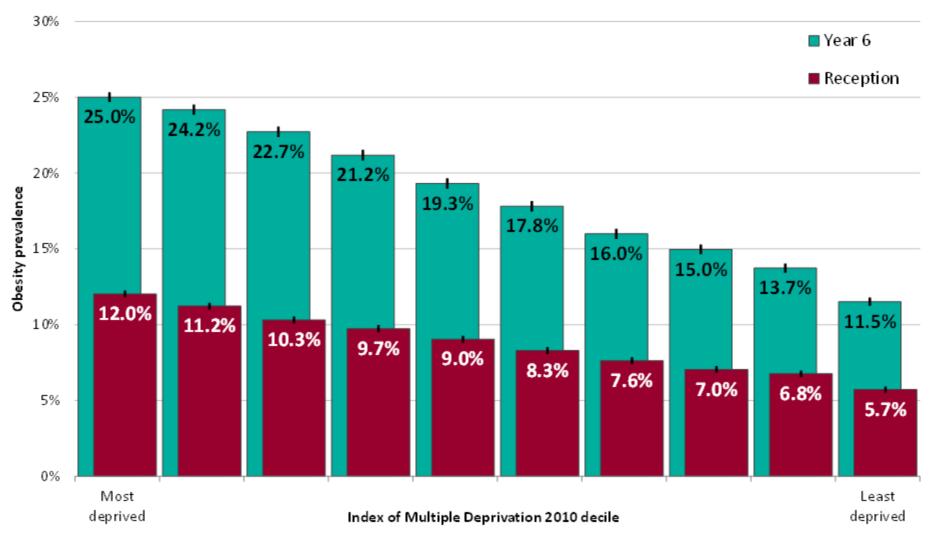


- Social gradient for children in most EU member states
- Slope of gradient varies between member states
- Overall prevalence also varies between member states



#### Obesity prevalence by deprivation decile

National Child Measurement Programme 2014/15

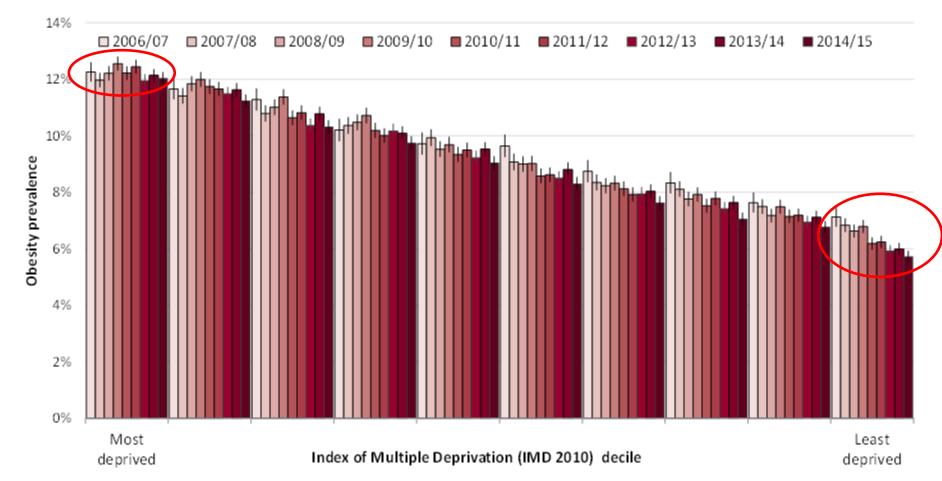




## Obesity prevalence by deprivation decile and year of measurement

National Child Measurement Programme 2006/07 to 2014/15

Children in Reception (aged 4-5 years)

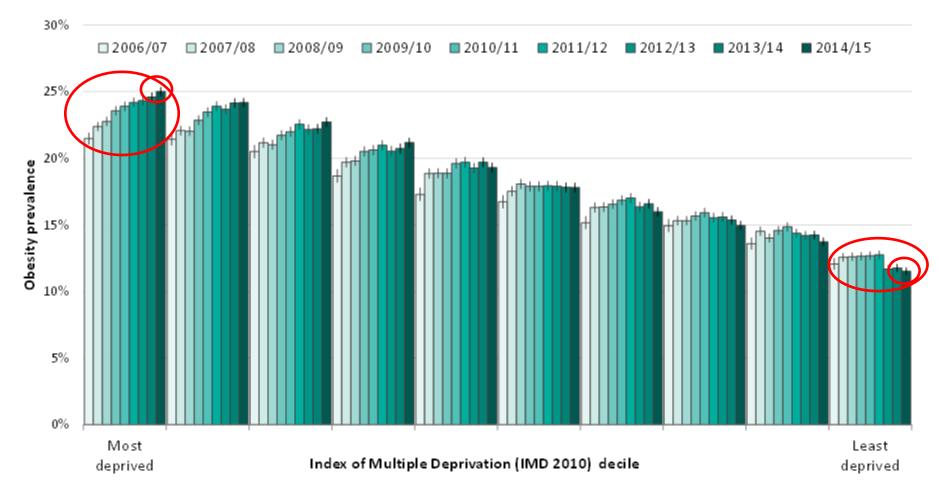




## Obesity prevalence by deprivation decile and year of measurement

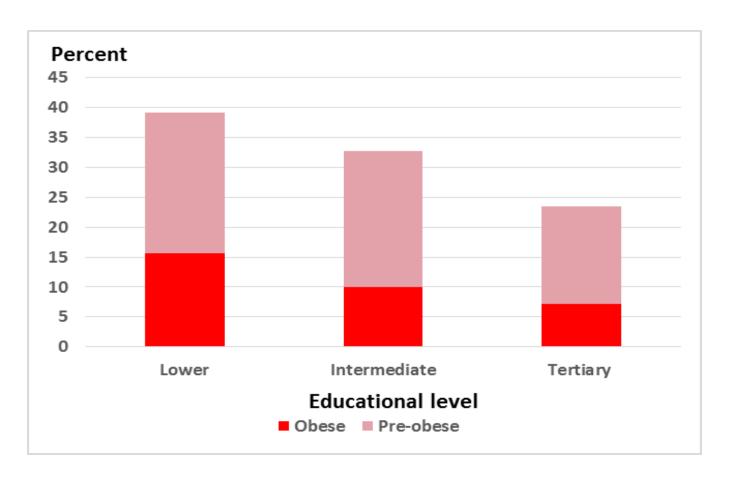
National Child Measurement Programme 2006/07 to 2014/15

Children in Year 6 (aged 10-11 years)



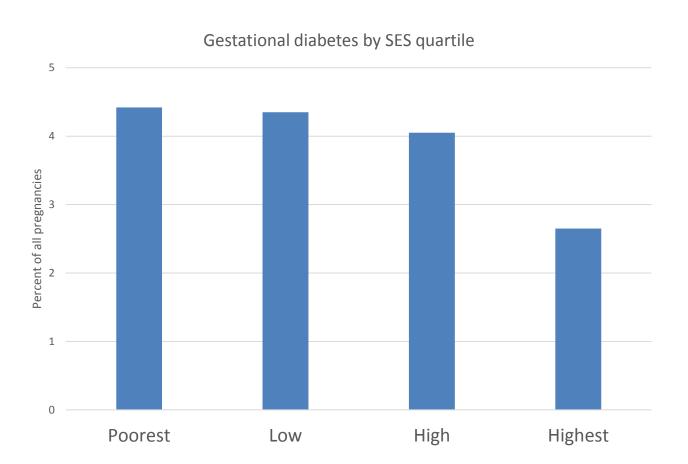
### PART 1: The First 1000 Days

# Women overweight at ages 18-44 by educational attainment level, 2014



Source: Eurostat, [hlth\_ehis\_bm1e], European Health Interview Survey http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hlth\_ehis\_bm1e&lang=en

#### Gestational diabetes



Obesity risk factor	SES gradient?
Pre-pregnancy maternal BMI	Yes
Weight gain in pregnancy	5
Smoking in pregnancy	Yes
Gestational diabetes	Yes
Maternal diet	Yes
Paternal BMI	Yes
Low birth weight	Yes
High birth weight	Ş
Low initiation of breastfeeding	Yes
Short duration exclusive breastfeeding	Yes
Poor home food environment	Yes

# SUPPORT MOTHERS Provide community-based strategies to support exclusive breastfeeding counselling for pregnant and lactating women Peer-to-peer and group counselling to improve exclusive breastfeeding rates, including the implementation of communication campaigns tailored to the local context







Evidence needed: How well interventions reach across populations, and penetrate all members within populations.

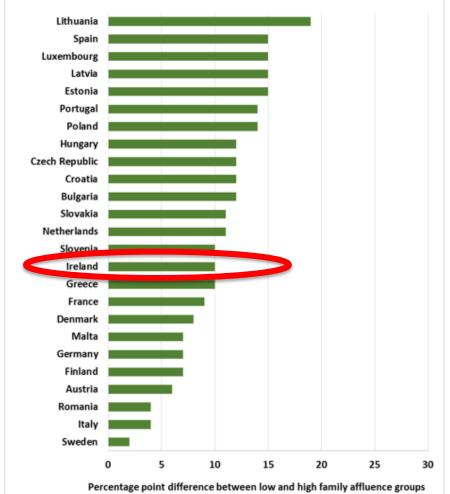
Effectiveness, costs, and sustainability.

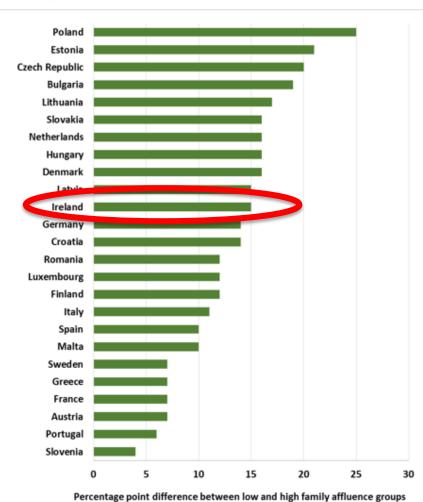
# Part 2: Inequalities in older children

#### SES gradient in dietary patterns

Percentage point difference in <u>fruit</u> consumption between low and high family affluence groups at ages 11, 13 and 15, 2014

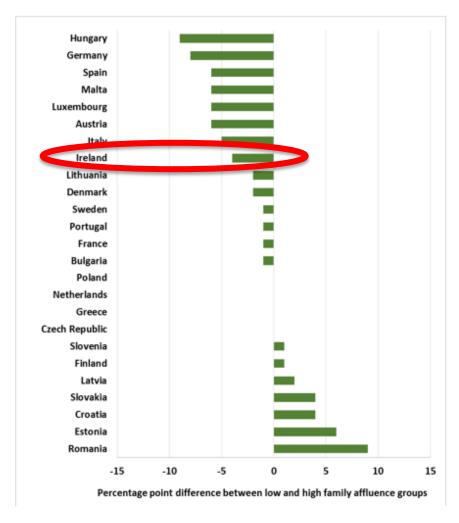


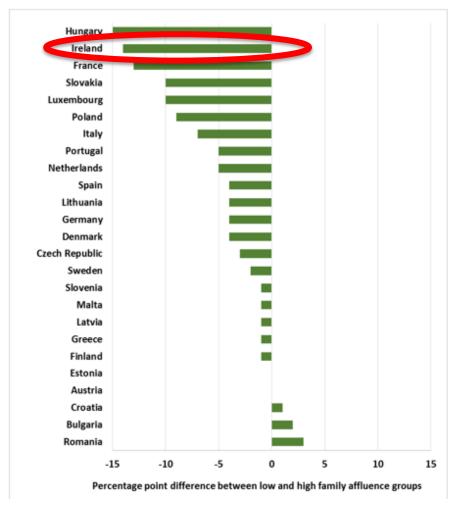




### Difference in <u>sugar-sweetened beverage</u> consumption between low and high family affluence groups at ages 11, 13 and 15, 2014

Boys Girls



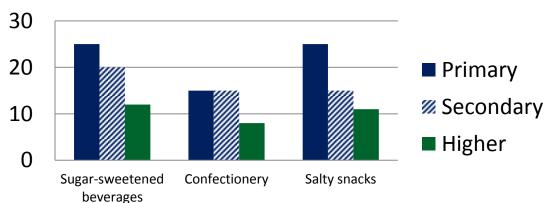


#### Warning:

We do now know if a targeted intervention in a low SES population lowers the SES gradient. If applied to everyone it might be even more effective in higher SES groups. E.g. 'healthy eating' leaflets for parents.

Need to know about differential risk levels (exposure, sensitivity) and the reach of an intervention across population groups, penetration within groups, sustainability of intervention and sustainability of effects.

- Taxes on unhealthy products:
  - Good evidence from Mexico that taxes on high-sugar drinks and snacks lowered consumption, especially for higher consumers and especially for lower SES groups. SES Children???
  - Good evidence from Hungary that taxes lowered consumption,
     especially for higher consumers and lower. SES ☑ Children???

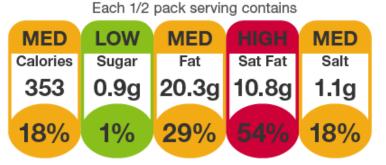


#### Product reformulation

- Voluntary reformulation: Evidence from Netherlands of modest reformulation of children's products can be sustained, reduces intake of sugar, salt, and affects higher level consumers. SES???
- Co-regulatory reformulation (e.g. PHE salt targets). Benefits greatest for highest consumers. *Children??? SES???*

- Front of pack nutrient labelling
  - Impact depends on the format: evidence from UK and France showing colour coding is better understood by low SES groups than other formats. *Children*???





of your guideline daily amount

Source: Food Standards Agency

 Junk food marketing: TV advertising restrictions on unhealthy products

Reduces exposure, especially for those most highly exposed.

Children ✓ SES???



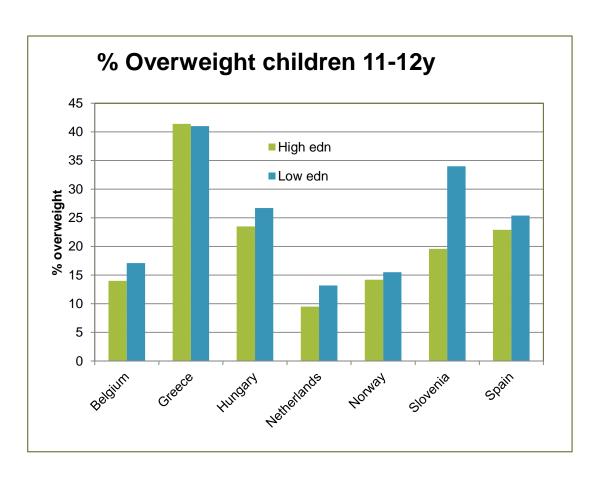
- School based interventions: health education, school meals, free fruit, physical activity
  - Work better in younger children. Needs parental involvement.
     Should be sustained over several years. Effects small.
  - SES data weak: some show no change to health gradient, some show steeper gradient (benefit greater in higher SES families).
     Children ☑ SES ☒

- Social marketing campaigns
  - UK <u>Change4Life</u> health impact not measured. Higher recall of campaign in higher SES groups. <u>Five-a-day</u> and <u>salt awareness</u> mixed results. <u>Children???</u> SES ⊠??



### Other disparities and inequalities

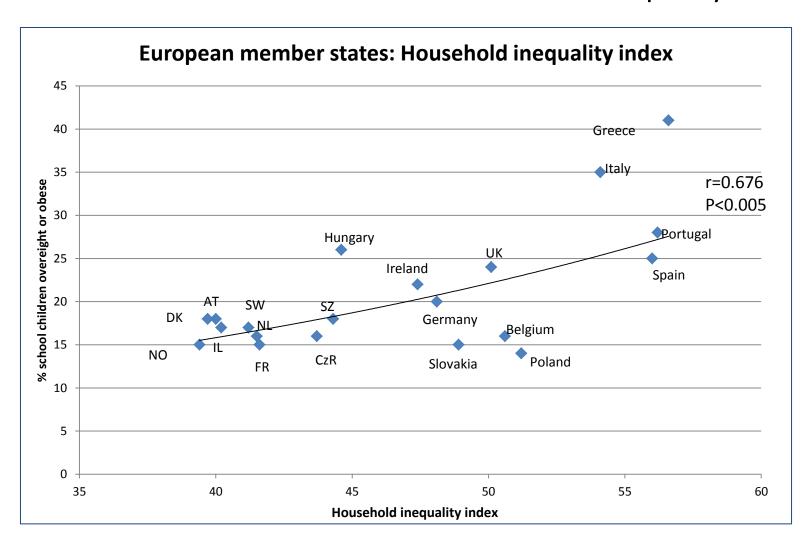
- Gender adults and children
- Age stages in childhood
- Ethnicity
- Urban rural
- ...
- National wealth inequity



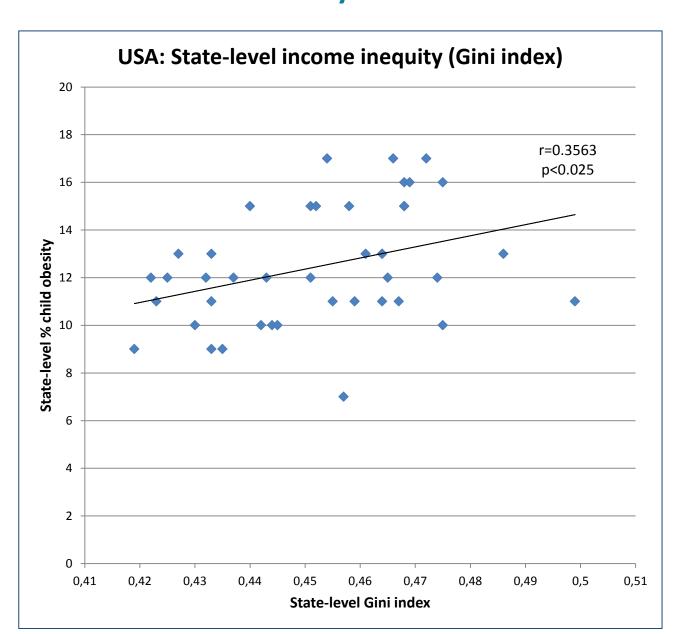
- Social gradient for children in most EU member states
- Slope of gradient varies between member states
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#### Wealth inequity and child obesity

Countries with different levels of income equality



### U.S. States with Higher Income Inequity have Higher Child Obesity Rates



#### 3 conclusions

- 1. Remarkably poor evidence base for such important policies.
- 2. Education / information has limited impact. Food environments (price, availability, promotion) affect behaviour: the more the environment is changed, the more behaviour will change.
- 3. Market interventions and fiscal interventions are justified.

Bonus conclusion: Public (especially parents) will support interventions.

#### Thank you!

#### **HEALTH EQUITY PILOT PROJECT**



#### **Disclaimer**

'The information and views set out in this presentation are those of the author and do not reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein.'

