

## Nudging: choice architecture in a neo-liberal world

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## Nudge

- Idea that positive reinforcement & indirect suggestions might achieve ‘un-forced’ compliance and can positively shape the motives, decisions, attitudes of individuals & groups.

## Nudge

- Part of the increasing colonisation of policy making by BE (behavioural economics) and psychology.
- Thaler & Sunstein (2009:5) *“We argue for self-conscious efforts, by institutions in the private sector and also by government, to steer people’s choices in directions that will improve their lives”.*

## Nudge

- The behaviour of subjects is largely a product of the *‘automatic system’* (Thaler & Sunstein 2009).
- The (ir)rational subject knows what is good for him / her, but routinely fails to act in ways that are effective in achieving it.

## Nudge

- Thaler & Sunstein (2009) - *“A nudge...is any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.”*
- Celebrated example – image of a housefly etched onto urinals in Amsterdam airport.

## Examples of nudging and regulating actions

	Nudging	Regulating
Smoking	Make non-smoking more visible through mass media campaigns communicating that the majority do not smoke and the majority of smokers want to stop	Ban smoking in public places
	Reduce cues for smoking by keeping cigarettes, lighters and ashtrays out of sight	Increase price of cigarettes
Alcohol	Serve drinks in smaller glasses	Regulate pricing through duty or minimum pricing per unit
	Make lower alcohol consumption more visible through highlighting in mass media campaigns that the majority do not drink to excess	Raise the minimum age for purchase of alcohol
Diet	Designate sections of supermarket trolleys for fruit and vegetables	Restrict food advertising in media directed at children
	Make salad rather than chips the default side order	Ban industrially produced trans fatty acids
Physical activity	Make stairs, not lifts, more prominent and attractive in public buildings	Increase duty on petrol year on year (fuel price escalator)
	Make cycling more visible as a means of transport, eg, through city bike hire schemes	Enforce car drop-off exclusion zones around schools

## Nudge - reflections

- Nudging is an important element in the toolkit for PH policy makers.
- There is an emerging evidence-base in relation to its effectiveness.
- HOWEVER...
- No coincidence that nudging has emerged at this point in history.
- Response to socio-political climate – undermining of the regulative state / critiques of the role of the ‘nanny’ state.
- It is congruent with neo-liberal social policy – marketization of every day life; we face the market as individual consumers regardless of social position and power.
- Nudge ignores the social context of people’s lives.
- Nudge ignores ‘policy capture’ by big business.

## Nudge - reflections

- Nudging is congruent with increasing emphasis on lifestyle-ism / life-style drift in health policy (ie. We pay lip service to the social determinants of health in policy documents, and then just exhort the poor to ‘do more’ without changing the social context of disadvantaged people’s lives).
- Nudging might also be considered an intervention induced inequality (because the middle classes have greater agency / self-efficacy than the disadvantaged / poor).

## Nudging - reflections

- Nudging the consumer does not really work (at least on its own).
- Achieving positive health outcomes requires an active state (nudge can be used as a way to legitimate a smaller, less active state).
- Choice architecture is weak when pitted against the ‘consumptive’ environment & master nudgers.
- What about ‘private’ health decisions (eg. binge eating / drinking) when ‘choice architecture’ is only weakly present).
- Food and drinks industry, their ‘commentariat’, co-opted politicians and associated lobbyists – they are the master nudgers...

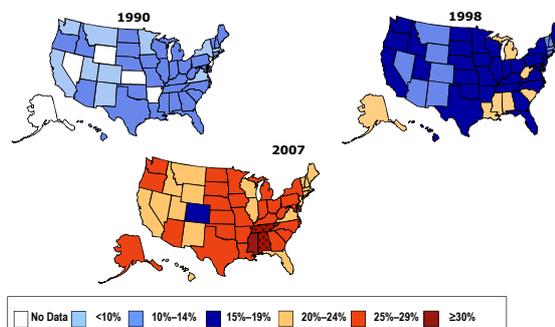
## Is obesity amenable to nudging?

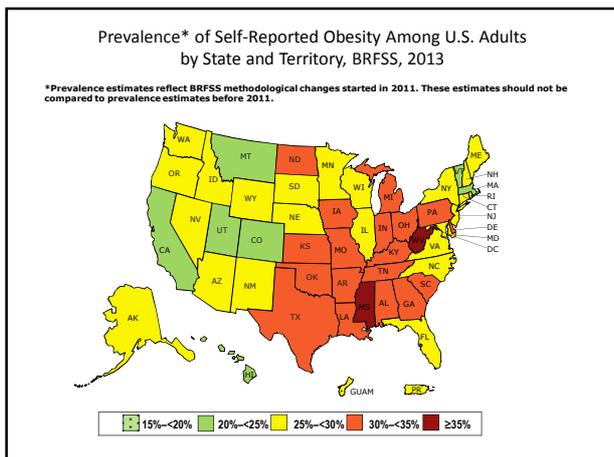
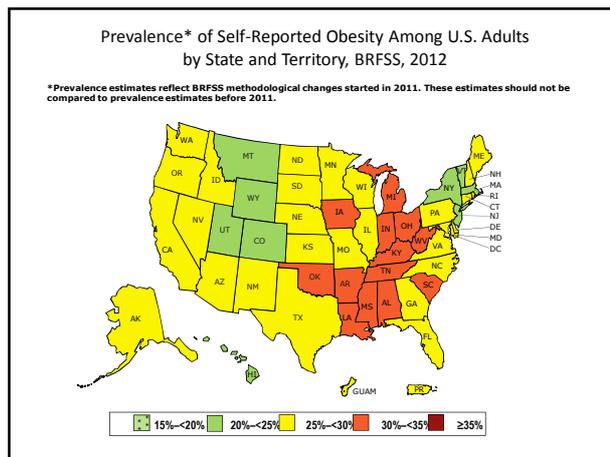
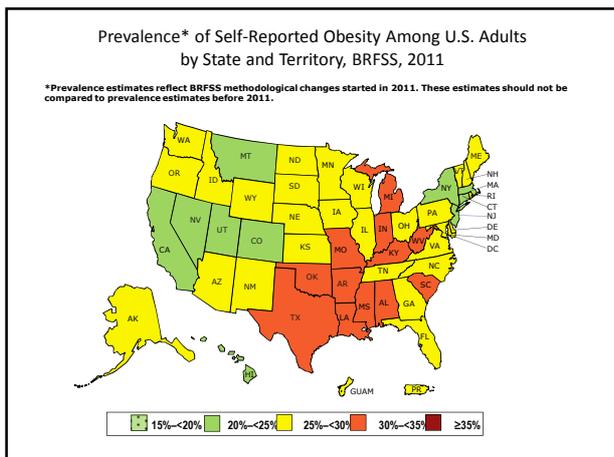
- Pro-nudging lobby would argue for
  - Designate sections of supermarket trolleys for fruit and vegetables
  - Make salad rather than chips the default side order
  - Make stairs, not lifts, more prominent and attractive in public buildings
  - Make cycling more visible as a means of transport, eg, through city bike hire schemes

## Estimates of Obesity

- Lancet Obesity (2011) – epi data from 199 countries showed **1.46bn** adults overweight in 2008.
- Of these, **502m** were obese.
- Wang et al (2011) – predicts **65m** more obese adults in US by 2030, and **11m** more obese adults in UK
- ...leading to **6-8.5m** more cases of diabetes, **5.7-7.3m** more cases of heart disease & stroke, **0.5m** more cancers.
- **26-55m** quality adjusted life years (QALY) lost in US & UK.
- Obesity exists alongside global **malnourishment** - affecting 1bn people (up 80m since 1990)
- 4000 people die every hour as a result of **malnutrition**.
- Raises acute questions about **political economy** of the food supply system.

## Obesity Trends Among U.S. Adults BRFSS (Behavioural Risk Factor Surveillance System), 1990, 1998, 2007





**Foresight Report: Tackling Obesity: Future Choices**

- *“The evidence...provides a powerful challenge to the commonly held assumption that an individual’s weight is a matter solely of personal responsibility or indeed individual choice. Rather, the evidence supports the concept of ‘passive obesity’ (where obesity is encouraged by wider environmental conditions, irrespective of volition)...”*
- Nudging may have a minor, positive role here.
- But how can it impact on the real, fundamental drivers of obesity?

**Foresight Report (2009): causes of obesity**

- Causes are complex, encompassing biology & behaviour, set within a cultural, environmental and social framework.
- For an increasing number of people, obesity is an inevitable (and involuntary) consequence of exposure to modern lifestyles, including changes to work, leisure, transport, food and food sales.
- Successfully tackling obesity is a long term, large scale issue.
- Obesity epidemic cannot be tackled by individuals alone / requires societal approach
- Preventing and reducing obesity, is a global challenge, similar to climate change. It requires partnership between government, science, business & civil society.

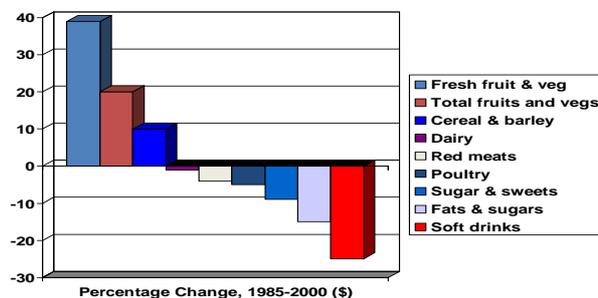
**Causes of obesity**

- Complex, multi-factorial & rooted in social, economic, cultural factors.
- Lang & Rayner (2007) argue that over the last half century:
  - ‘Americanization’ of diet & society;
  - Increasing dominance of car culture; less walking to school / work
  - Numerous technical advances marginalizing daily activity;
  - More commuting / longer distances / heightened fear of crime;
  - Longer working hours;
  - Over-consumption of food;
  - Greater availability of energy dense food;
  - More, cleverer advertising of food /
  - More food ‘on the move’;
  - ‘Grazing’ replacing meal times;
  - Replacement of water by sugary drinks; promotion of sugary drinks
  - Dominance of companies framing what we should buy, what sells;
  - Rise of a culture of consumption / food ‘prized’ as cultural capital;
  - Greater income inequality & social inequality...

### Food, drink & obesity

- Amount of household income spent on food fallen to 10% in the UK (but exceeds 23% in low income households).
- Cheaper food sources tend to be more energy dense & nutrient poor (ie. plentiful calories via sugars and fats, but less vitamins and minerals).
- US data show that cost of fruit and vegetables has increased as a component of food budgets, but cost of fats, oils, starch and sugars have all decreased over time.

Price changes differentially affecting dietary components (US data), 1985-2000. Adapted from Foresight Report.



### Food choices

- Demographic distribution of obesity is likely to be influenced by food cost.
- Cheapest way to 'buy' 100 calories of food via fats, processed starches & sugars.
  - 100 calories of broccoli = 51p, 100 calories of frozen chips = 2p.
  - Quality sausages (high meat/low fat) = 22p per 100 calories; 'value' fatty ones = 4p per 100 calories.
  - Poor quality fish fingers = 12p per 100 calories; 29p per 100 calories for quality fish fingers.
  - Fresh orange = 38p per 100 calories, but 5p per 100 calories from sugary orange squash.
- Among poorest, when reductions in expenditure are called for, food budgets end up squeezed.

### Occupation & physical activity and associations with obesity (US data)

- Church et al (2011) – looked at trends in occupational physical activity over last 5 decades & impact on body weight / obesity. Conducted analysis of energy expenditure in occupations using US Bureau of Labour Statistics and NHANES data.
- In the early 1960's almost half the jobs in private industry in the U.S. required at least moderate intensity physical activity whereas now less than 20% demand this level of energy expenditure.
- 1960–62 to 2003–06 occupation-related daily energy expenditure **decreased** by 142 calories in men.
- Given a baseline weight of 76.9 kg in 1960–02, they estimated that a 142 calories reduction would result in an increase in mean weight to 89.7 kg, - closely matching the mean NHANES weight of 91.8 kg in 2003–06. The results were similar for women.

### Environment, physical activity & obesity (UK data)

- England, av. distance walked pppy for transport purposes fell from **255** miles (1975) to **192** miles (2003).
- Distance cycled fell from **51** miles pppy to **34** miles pppy.
- Car ownership increased substantially, commuting distance increasing.
- 20% of all journeys less than 1 mile are still made by car.
- Increasing evidence of association between average annual hours worked and obesity prevalence.
- Leading experts (eg Steven Blair, USC), argue we have 'designed out' physical activity from our lives...

### Obesity & Policy

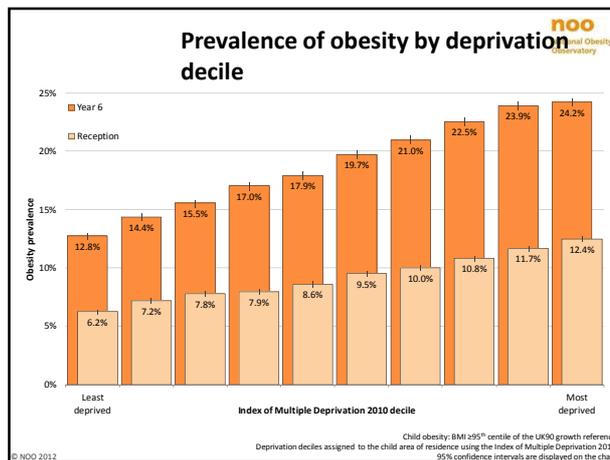
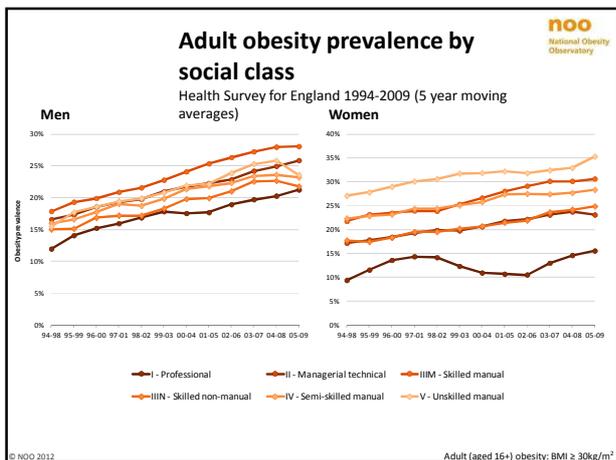
- Key focus in UK/Europe/US BUT obesity continues to rise.
- Growing awareness tackling obesity cuts across & requires action across numerous sectors (agriculture, manufacturing, retail, education, culture, trade, economics, health).
- Little evidence of sustained work across 'policy boxes' / no comprehensive set of solutions.
- Other policies can work against tackling obesity.
- Powerful tendency to limit action to '**choice-based & personalised measures**', ignores structural determinants.
- Reflects well known tendency in PH to acknowledge the 'upstream' determinants of a problem but then policy concentrates on the 'downstream'...**lifestyle drift**.
- Result – policy cacophony in obesity (Lang & Rayner 2007).

### Obesity & Policy

- Lang & Raynor (2007):
  - “What is the point of Department of Health recommending reductions in fat consumption if agriculture continues to pour out excess fat? If transport policy makes it hard to build exercise into daily lives? If farm policies produce copious sugar and fat (and subsidize the production of these). If the sugar industry continues to market sugary drinks and fatty food as ‘fun’ to children?”

### Nudge

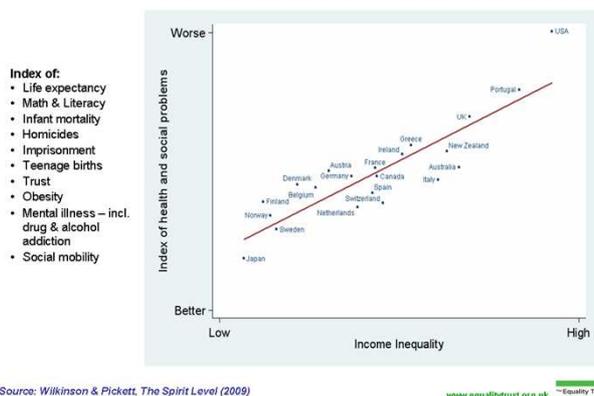
- What can nudging people not to select chips via ‘choice architecture’ do in relation to these global trends...?
- Also, what can nudge do – and why is it silent – on one of the most pressing PH challenges in obesity – the social gradient in obesity.

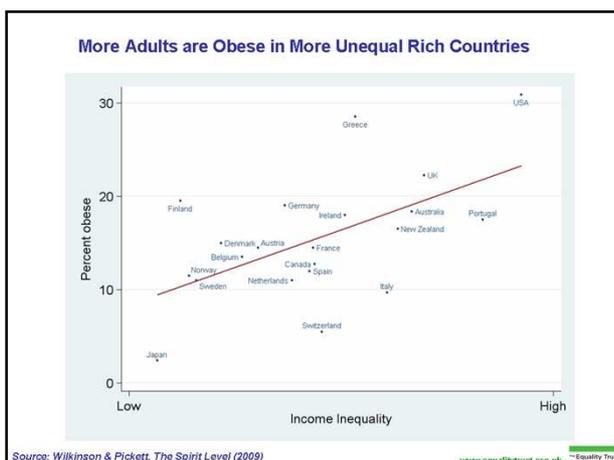


### Current Trends – Social Class

- Why this trend?
- Pickett et al - above a basic threshold (eg\$10-15K per annum), obesity & diabetes are linked to **indicators of (income) inequalities** within nations (eg. GINI index).
- Congruent with Marmot & Wilkinson thesis that health inequalities are associated with the degree of relative social inequality (as measured by income).
- They explain this as a consequence of the psychosocial impact of living in a hierarchical / unequal society.
- Wilkinson & Pickett (2009) *The Spirit Level: Why More Equal Societies Almost Always do Better*. Penguin, London.

### Health and Social Problems are Worse in More Unequal Countries



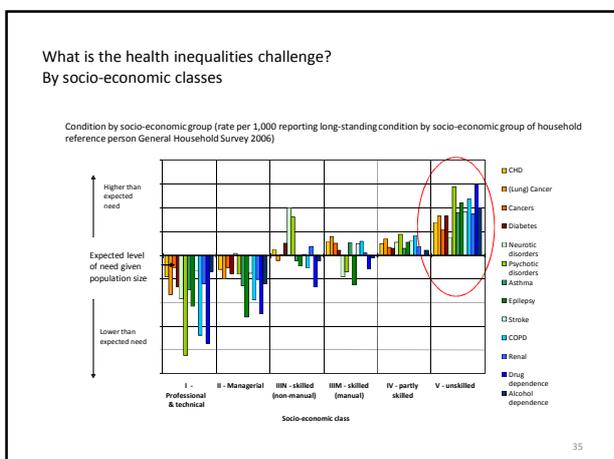
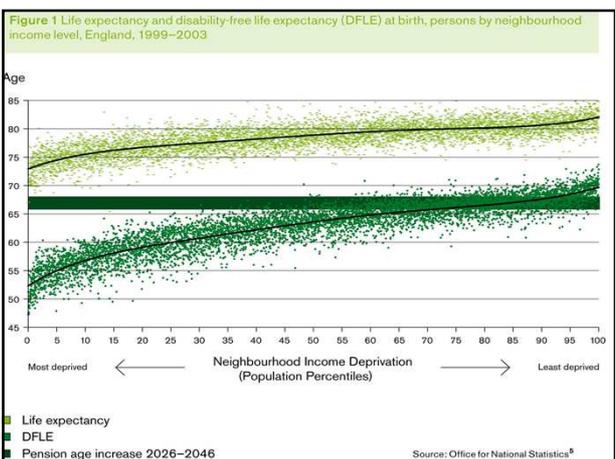


### Work, Obesity and Disadvantage

- US studies show **time**, **demands of work**, **inflexible shift patterns** etc are increasingly pertinent re. food choices.
- Inglis et al (2005) **health consciousness**, **time available** for food preparation, and **demands of work whilst caring for family** – were reported as **barriers** to healthy eating by w/c women.
- W/c families **spend least amount of time preparing food**, most likely to **rely on pre-packaged meals**, have to juggle a volume of **competing demands**.
- Many studies report **'spill over'** - competing demands from work, versus promoting healthy eating. Those in inflexible jobs (less well paid, less autonomy) – shown to have an impact on reliance on pre-packaged meals, less likely to prioritise health.
- Nudging??**

### Social gradient in exercise

- Farrell et al (2013)** – SES gradient in physical inactivity, using Active People Survey.
- Results show **high levels** of physical inactivity – 20% of females , 17% males had done no PA over 30 minutes duration in the last 4 weeks. 10% do not walk continuously for 5 minutes over 4 weeks.
- Education, household income & local area deprivation** are all independently & strongly associated with inactivity, controlling for availability of physical recreation facilities, weather & geography.
- Local area facilities and geographical factors explain very little of the variation in physical inactivity in England.
- Income gradient increases with age, more financially costly forms of physical activity are associated with larger socioeconomic position differences - financial and cultural barriers need to be overcome.
- Even when opportunities for free exercise existed, these were taken up less frequently by those in lower SES groups



### Summary

- Where does this leave nudge?
- It over-emphasises the potential of agency
- It under-emphasises the structural & the social...including industry.
- It has little to say about inequality & the socially distributed nature of agency – the pressing issue of our time.
- It is appropriately congruent with neo-liberal politics.
- ...but it does allow the new lifestyle gurus - behavioural science entrepreneurs - a new platform for their wares.