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'The importance of nutrition in the early years for Fair Society, Healthy Lives

Ruth Bell

'Supporting families of young children to develop healthy eating habits'

Infant and Toddler Forum Study Day

25th October 2012

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The Commission on Social Determinants of Health (CSDH) – Closing the gap in a generation

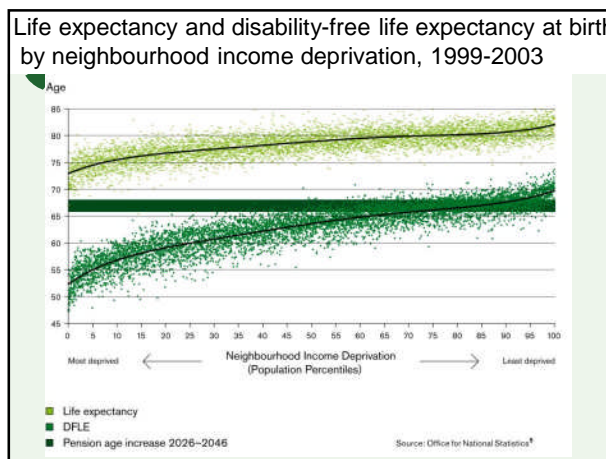
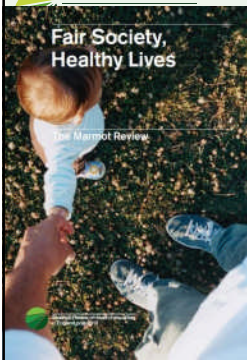
Strategic Review of Health Inequalities in England: The Marmot Review – Fair Society Healthy Lives

Review of Social Determinants of Health and the Health Divide in the WHO European Region

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- Health inequalities
- Fair society, healthy lives
- Nutrition in childhood for healthy lives

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- Fairness at the heart of all policies.
- Health inequalities result from social inequalities – requires action on all the social determinants; the causes of the causes
- Focusing solely on the most disadvantaged will not reduce inequalities sufficiently – action is needed across the social distribution.

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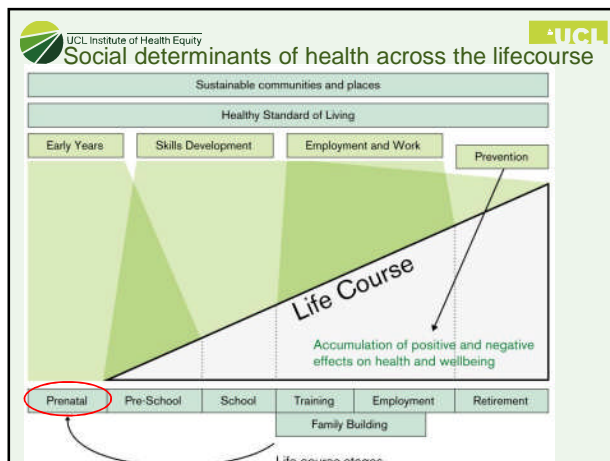
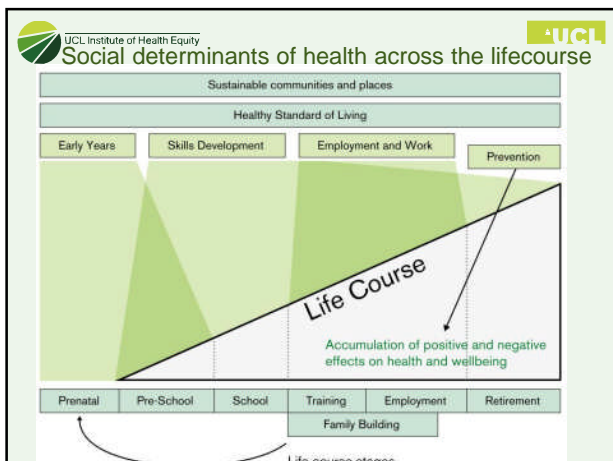
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Fair Society, Healthy Lives:
6 Policy Objectives

- Give every child the best start in life**
- Enable all children, young people and adults to maximise their capabilities and have control over their lives**
- Create fair employment and good work for all**
- Ensure healthy standard of living for all**
- Create and develop healthy and sustainable places and communities**
- Strengthen the role and impact of ill health prevention**

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Pre-natal

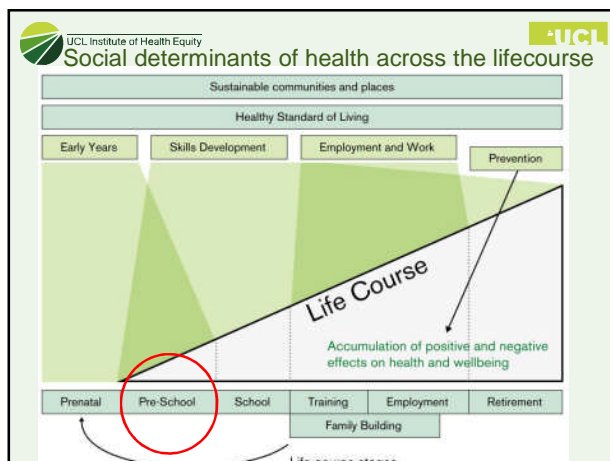
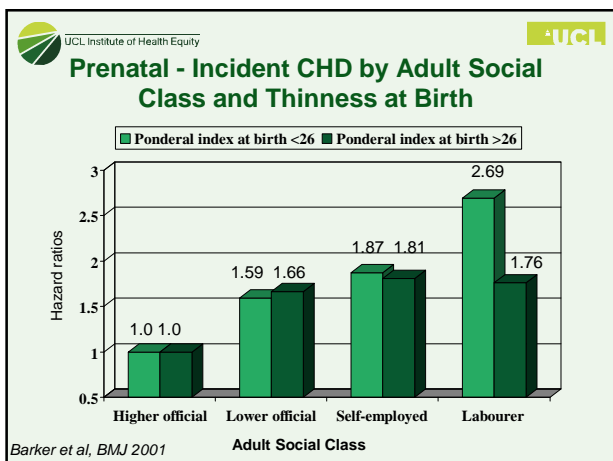
- Maternal malnutrition is associated with poor physical development of the foetus, including essential brain development;
- Low birth weight associated with increased risk of CHD



Teenage motherhood by socioeconomic background

Live births by females aged 15 to 19 as a proportion of the total number of live births by females of all ages

Socioeconomic Background	Percentage of Live Births
Managerial or professional backgrounds	~1.5%
Intermediate backgrounds	~3.5%
Routine or manual backgrounds	~8.5%



Source: Child maternity statistics, ONS, England & Wales, updated Jul 2010





Early life: early child development

- Physical, cognitive/linguistic, social/emotional development are interdependent;
- Highly sensitive to social environment
 - Social gradient in child development outcomes emerge before school
- Lays foundations for future life trajectory
 - Early child development (ECD) has a determining influence on subsequent life chances and health



Nutrition in early childhood matters

- Energy balance and nutritional content, inc micronutrients
- Overweight or obesity in childhood
- Type II diabetes among children
- Dental health in young children
- Rickets
- Cognitive development and behaviour



Breast feeding

- Natural breastfeeding - ideal food for infants' growth and development, also good for mothers' health;
- In 2001 WHO recommended exclusive breastfeeding for the first six months of life on account of its emotional (bonding), nutritional, immunological and other benefits.

Breastfeeding and cognitive development



- Meta-analysis of 20 controlled studies (Anderson et al Am J Clin Nutr 1999, 70. 525-35)
- Breastfeeding associated with higher scores for cognitive development than formula feeding (adjusted for covariants including socioeconomic status, maternal education, duration of breastfeeding inter alia)
- Low birth weight babies had greater benefits than normal weight babies
- Recent study on Millennium Birth Cohort found similar results (Quigley et al, 2011)
- **NOT ALL STUDIES AGREE – MIXED EVIDENCE**

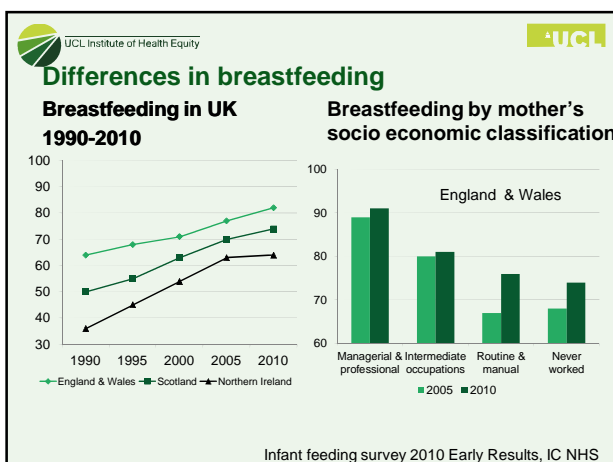
Breastfeeding and childhood obesity

- Systematic review & meta analysis: “breast feeding seems to have a small but consistent protective effect against obesity in children”

Arenz et al IJO 2004, 28, 1247-1256

- Breast feeding is beneficial
- Who breast feeds?



- Many factors impact on women's decision and ability to breastfeed
 - Overweight and obese women are less likely to breastfeed their babies than normal weight women
- Amir & Donath, BMC Pregnancy & Childbirth 2007

- Under nutrition - insufficient calories and nutrients
- Nutritional deficiencies

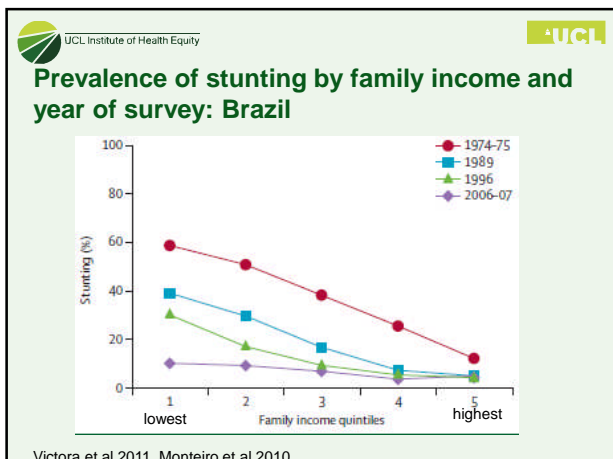
- Under nutrition in children is associated with cognitive deficits;
- Stunted children at risk of not achieving their full development potential

- Child malnutrition – evidence from developing countries**
- Estimated 200 million children under age 5 in low- and middle income countries are at risk of failing to reach their full developmental potential in cognitive, motor and socio-emotional abilities partly due to undernutrition
 - Grantham McGregor et al 2007 Lancet

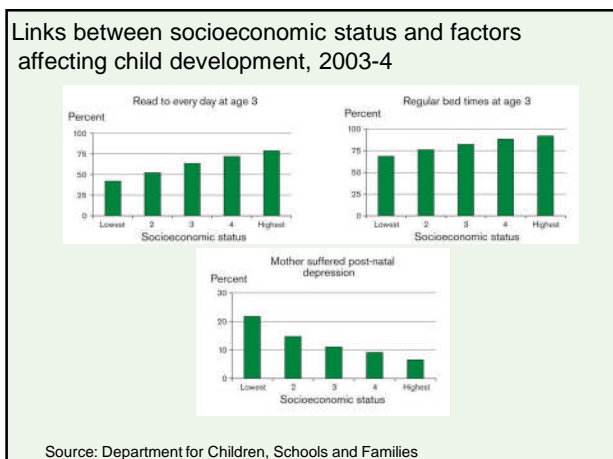
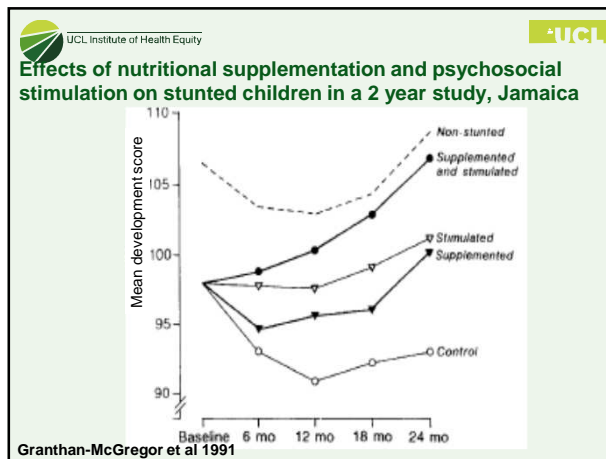
Educational and psychosocial indicators for stunted/non-stunted children in 4 countries
Young Lives Project

	Ethiopia	India	Peru	Vietnam
Grade deficit (in years) between stunted and non-stunted	-0.9*	-0.3*	-0.5*	-0.4*
Writing skills: % children who write without difficulty (deficit % points)	-18.1*	-7.0*	-13.4*	-6.8*
Reading skills: % children who read without difficulty (deficit % points)	-15.6*	-2.5	-2.3	-5.4*

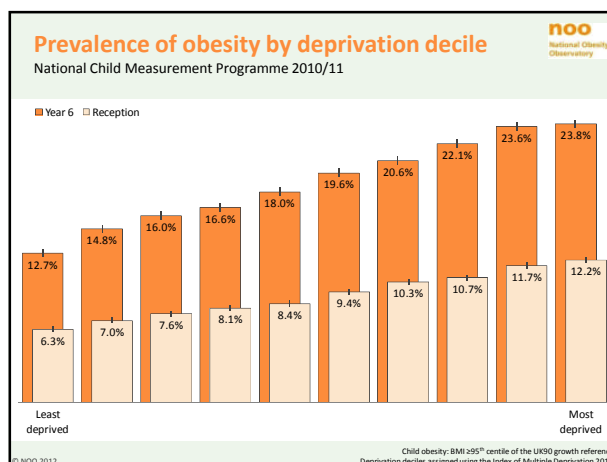
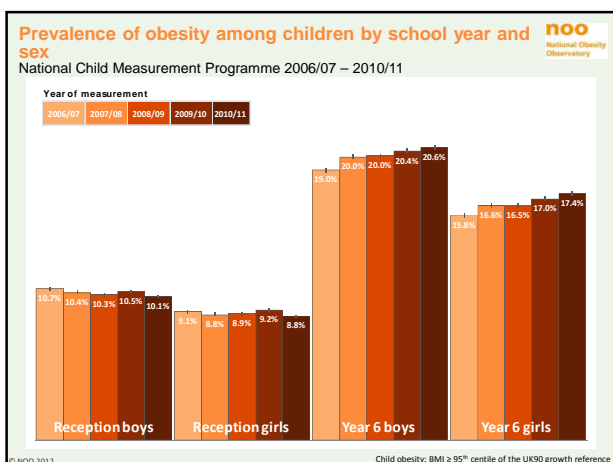
Source: Young Lives Policy Brief 5, 2008



- Evidence from some studies on effects of diet or food supplementation on learning and behaviour in children show that nutrition in early childhood is related to the cognitive ability of children in the short and long term
- Evidence is mixed
- More evidence needed



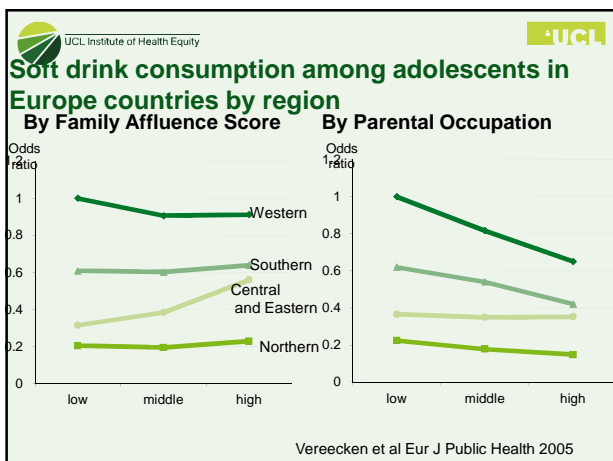
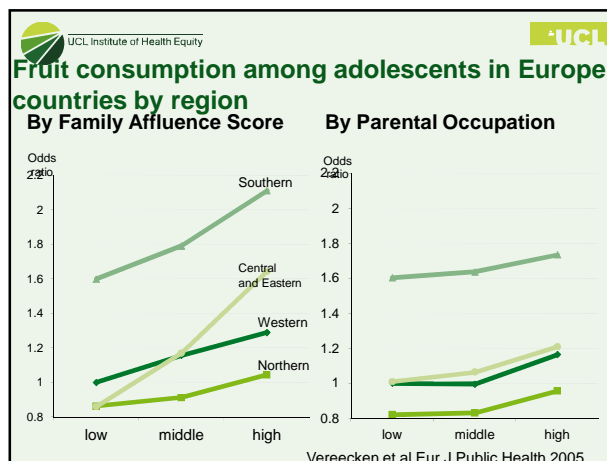
- Primary school**
- Emerging evidence on association between diet and school attainment, school attendance
 - e.g. Belot & James 2011 evaluation of Jamie Oliver's 'Feed me better' campaign



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Adolescence

- Poor eating habits in adolescence may persist into adulthood;
- Risk of CVD & diabetes in adult life



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How easy is it to ensure our children eat well?

The eatwell plate

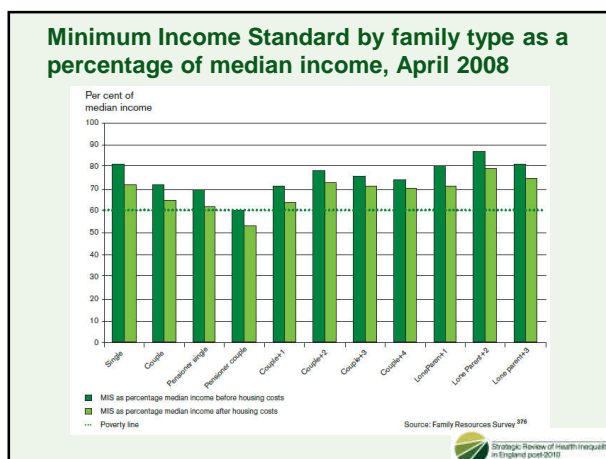
Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.

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Marmot Review: 6 Policy Objectives

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People on low incomes report skipping meals

- Recent YouGov survey commissioned by Elizabeth Finn Care among people in low income households (less than £20,000)
- Due to their financial situation, almost a quarter (23%) have had to skip meals
- one in three (33%) said they were concerned that this year would see them forced in to choosing between 'heating and eating'

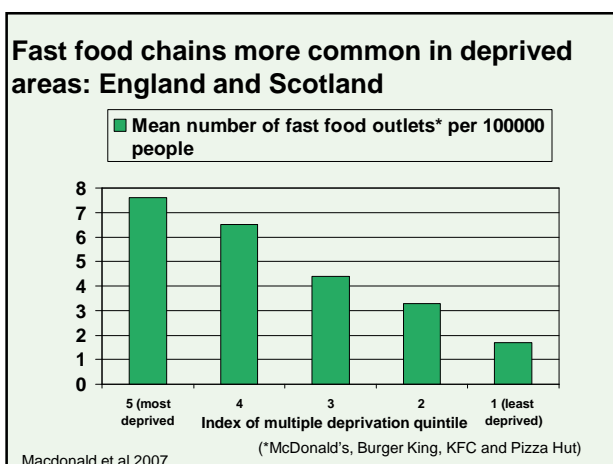
(Source: Elizabeth Finn Care)

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Action on the wider determinants - to tackle health inequalities

- “Every sector a health sector”
- Local authorities, Health and Social Services, Voluntary Sector have a key role to play at local level
- Empower individuals and communities – create the conditions for people to take responsibility

www.marmotreview.org

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Policy choices to improve childhood nutrition

- Standards for food in schools and children's centres
- Advertising of food and drink to children
- Town planning
- Taxation
- ...

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A Fair Society

Conditions in which individuals & communities:

Have control over their lives

and

Participate fully in society



Website www.marmotreview.org  Strategic Review of Health Inequalities in England post-2010