

## Workshop on ‘Changing nutrition behaviour to improve maternal and fetal health’

### International moves to strengthen food policies

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The present paper considers the need to move from a ‘health education’ approach to dietary health to an approach that focuses on food and nutrition policies at the population level, and especially those policies that avoid widening the inequalities in health between different socio-economic groups and those policies that promote healthy diets among children. Recent moves at the international level include measures to protect children from promotional marketing of fatty and sugary foods and the funding of free fruit for schoolchildren. By improving child health, improvements can be expected in the health of future generations.

#### **Food policy: Inequalities: Obesity: Children: Marketing**

In the early to mid 20th century food policy focused on two sets of factors: those affecting the capacity to increase food output; those ensuring that the food was adequately distributed. In so far as public health policies were concerned with food production, the objectives were to increase the abundance of food and to improve access to this food throughout the population, as a means of addressing the prevailing deficiency diseases and outright hunger among lower-income households. Both the WHO and FAO, which were set up in the reconstruction period following the Second World War, adopted these approaches. Food should be plentiful and cheap.

In the latter half of the 20th century it became apparent, in North America and Western Europe especially, that diseases linked to nutrient deficiency were being replaced by diseases linked to dietary imbalances; in particular, excess fats and sugars and insufficient dietary fibre, fruit and vegetables. The public health response focused on health education and the distribution of health messages in order to encourage individuals to alter their eating and lifestyle patterns. A UK government campaign in the 1970s encapsulated the approach; it was entitled ‘Look After Yourself’ and gave generalised advice to members of the public on how to improve diet, with such advice as ‘In order to avoid obesity it is advisable not to become overweight’<sup>(1)</sup>. The campaign emphasised healthier dietary

choices. No attempt was made to review the strategies for producing, distributing and marketing food.

More recently, there have been moves to reconsider food production policies. As reflected in the international resolutions in Agenda 21 and subsequent statements<sup>(2)</sup>, the relationship between agricultural production and its impact on the surrounding environment is receiving new and more urgent attention. With growing populations and limited land surface, threatened food shortages and global warming the need to take an ecologically-integrated view of food production is gaining ground. At the same time there is increasing awareness that generalised health education messages to the public have not had sufficient impact, with obesity levels far higher now than in the 1980s or before and with diets remaining stubbornly poor (<1% of UK adults eat a diet meeting the five WHO guidelines on fats, sugars, salt and fruit and vegetables)<sup>(3)</sup>.

As a result of these changing circumstances policies to improve health and the food supply have been re-focused. The assumption that providing adequate food was sufficient in itself has given way to an appreciation that the quality of the food supply is important. Food security needs to be matched with nutrition security; the supply of adequate food needs to be matched by measures to ensure that the availability and promotion of health-enhancing food products is adequate and not jeopardised by the supply

**Table 1.** Changing policy strategies for food and nutrition (adapted from World Health Organization<sup>(18)</sup>)

Food security	Nutrition security
Late 20th century model	
Abundance of food through: Increased yields Increased global trading Better processing and storage	Public health dietary targets Health education messages
21st Century model	
Sustainable production methods: Reduced inputs Ecologically sensitive production Reduced risk of food-borne hazards New technologies for yield enhancement	Control of misleading messages Stronger labelling messages Improved nutritional standards Production to meet dietary needs Improved equalities of access

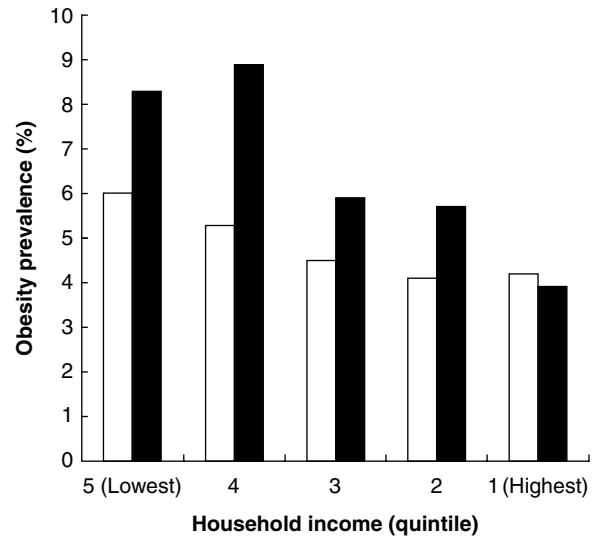
and promotion of foods that can undermine optimal health.

Equally, the health education approach to public policy has been supplemented by more-specific population-based measures to influence the nature of the food supply to improve the availability and promotion of health-enhancing products. These changing policy strategies are summarised in Table 1.

Among the many policy drivers that support the need for a population-based approach to public health is the increasing evidence of inequalities in health according to socio-economic status. Lower-income and lower-educational-attainment groups tend to have a greater prevalence of ill health, including diet-related ill health. In contrast, health education is recognised as having most benefit among those sections of the population who can most easily implement the messages, principally by having access to the resources and skills that a change in personal lifestyle may require, as well as the ability to resist the environmental influences that undermine such changes in lifestyle. Exhortation to improve diets has least effect among lower-income groups, who generally show a poor response to educational materials and lower motivation to make changes and have fewer resources to take up the recommended behaviour<sup>(4,5)</sup>. Health education as a strategy on its own may thus serve to widen the differences in health status between those individuals who can and those individuals who cannot easily make the recommended lifestyle changes.

### Income inequality and obesity

Disparities in obesity prevalence among different social groups are well known. The Health Survey for England has shown year after year that obesity prevalence tends to be higher among lower-income adults, especially women, and is higher among low-income children of both genders (see Fig. 1)<sup>(6)</sup>.



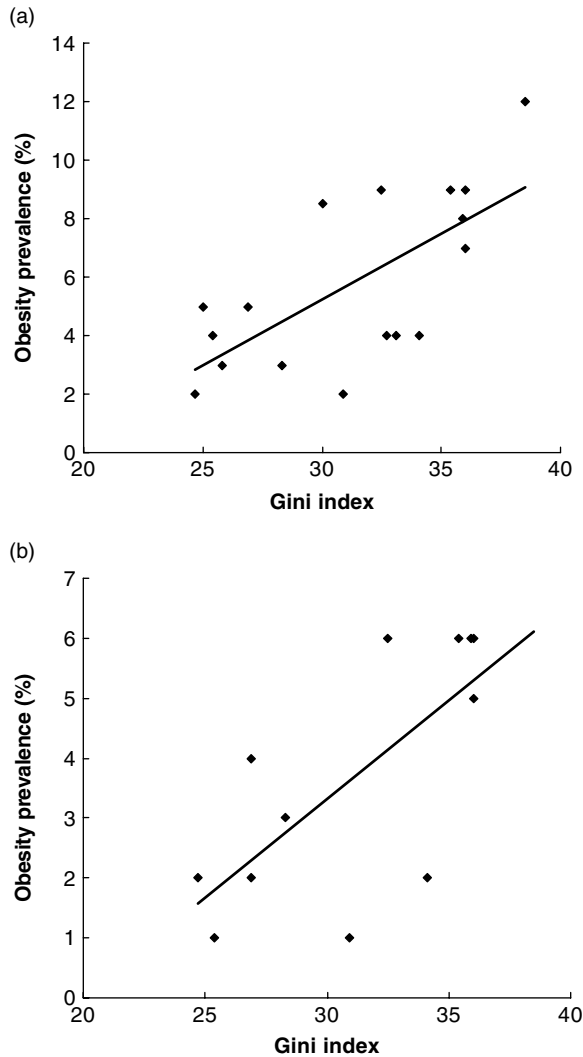
**Fig. 1.** Prevalence of child obesity by quintile of household income in England in 2003. (□), Boys; (■), girls. (From Department of Health<sup>(6)</sup>.)

The clarity with which the childhood data show socio-economic gradients is itself of interest. Adult obesity levels are influenced by the accumulated biological history of the individual over a period of several decades, whereas child obesity is influenced by the experiences of relatively few years. Children reflect the most recent trends in food and physical activity environments; if environments were becoming less obesogenic child obesity might be expected to be reducing and differentials between socio-economic classes to decline, but the reverse is the case. Child obesity is increasing and the gaps between children of different social classes are widening<sup>(7)</sup>.

The same can be said for comparisons on an international scale. Studies of an association between national measures of inequalities and national health statistics have reported a close link; greater inequality in wealth distribution is associated with greater prevalence of ill health, including obesity and type 2 diabetes<sup>(8)</sup>. The relationship is particularly noticeable for children; using the Gini index (which measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution)<sup>(9,10)</sup> as a measure of unequal wealth distribution, a close association has been shown between this measure and the prevalence of obesity among adolescents and younger children in European member states (see Fig. 2).

These findings strengthen the need to ensure that international policies to improve public health are not unwittingly increasing health inequalities. Measures to improve the population's health, especially the health of children, need to be designed to avoid widening the socio-economic inequalities.

The WHO has published a series of reports and resolutions that aim to strengthen national and international policies to improve population health. For children especially they have promoted exclusive breast-feeding through



**Fig. 2.** Income inequality in European member states and obesity prevalence among children aged 5–11 years (seventeen countries available; (a) and adolescents aged 12–17 years (twelve countries available; (b)). Gini index<sup>(9,10)</sup> spans from 0 (absolutely equal distribution of wealth) to 100 (all wealth held by one individual). (From International Obesity TaskForce<sup>(19)</sup> and World Health Organization<sup>(20)</sup>.)

a variety of measures, including the encouragement of ‘baby-friendly hospitals’<sup>(11)</sup> and the distribution of an International Code of Marketing of Breast-Milk Substitutes<sup>(12)</sup>, designed to protect mothers and babies from commercial pressure to bottle-feed. More recently, the WHO has urged member states to consider measures to limit children’s television viewing, promote plentiful fruit and vegetable consumption and restrict the consumption of energy-dense micronutrient-poor foods (e.g. snacks, soft drinks)<sup>(13)</sup>. The WHO is now drafting recommendations for measures to restrict the marketing of fatty and sugary foods to children, following the publication of a Code on Marketing of Food and Beverages to Children, launched in 2008 by two non-governmental bodies, Consumers International and the International Association for the Study of Obesity<sup>(14)</sup>.

### Protecting children from food marketing

Food policies also featured in the WHO European Region’s ministerial meeting on obesity, held in 2006. The outcome was the adoption of a Charter on Counteracting Obesity, which specifically called on member states to reverse the trend in child obesity by 2015, to make healthy food choices more available and affordable to lower-income groups, to improve nutritional labelling, to improve food-quality standards, to promote greater consumption of fruit and vegetables and to restrict the marketing of food products to children<sup>(15)</sup>.

The European Commission’s White Paper on diet and health has also addressed the issue of marketing to children, but has suggested a purely voluntary approach<sup>(16)</sup>. However, it should be noted that substantial moves have already been taken by several European member states. For example, Norway and Sweden have maintained a ban on all advertising to children <12 years old for several decades, the Republic of Ireland introduced a ban on celebrities promoting products on children’s television in 2004 and is considering a wider ban on the promotion of food products to children, Latvia banned additives in children’s school food in 2005 (an indirect way of restricting the sales of fatty and sugary foods), France required health warnings to be included with all food product advertisements in 2006 and the UK imposed a series of measures to limit exposure to fatty sugary food advertising during children’s television in 2007.

It should also be noted that while the section of the European Commission concerned with health (the Directorate-General for Health and Consumer Protection) may be hesitating to introduce measures to protect children’s diets, the section concerned with agriculture (the Directorate-General for Agriculture and Rural Development) announced in 2008 that it will provide €90 × 10<sup>6</sup> annually to assist the provision of free fruit to schoolchildren in all member states<sup>(17)</sup>.

These measures all acknowledge that it is not sufficient to rely on health education alone to improve health behaviour, that behaviour is shaped by the environment and that measures to improve the environment by making it more conducive to making healthy choices, and especially controlling the food economy and its marketing practices, are required in order to tackle diet-related ill health such as obesity, diabetes and heart disease. These moves to control the market are frequently resisted by commercial operators and bring public health proponents into conflict with free-market supporters. Current public health strategy can draw extensively on the experiences gained from previous moves to control the marketing of tobacco products, milk substitutes for infants and alcoholic drinks.

Last, it should be noted that by improving food policies directed towards children a series of gains can be made for all stages of the life course. Children themselves benefit as they grow into healthier adults. Better-nourished children will as young adults have healthier pregnancies and healthier babies. Children with a better understanding of a healthy diet will pass on their knowledge to the next generation and beyond as they take the role of caring grandparents.

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