Rising levels of obesity in school-age children across Europe are causing increasing concern. The ‘Children, Obesity and associated avoidable Chronic Diseases’ project sought to examine the effects of promotion within food marketing, given the influential role it plays in children’s diets. Method: A questionnaire and data-collection protocol was designed for the national co-ordinators, facilitating standardized responses. Co-ordinators collected data from within 20 European Union countries relating to food promotion to children. Results: Results showed that unhealthy foods such as savoury snacks and confectionary were the most commonly marketed and consumed by children across all countries. Television was found to be the prime promotional medium, with in-school and internet marketing seen as growth areas. Media literacy programmes designed specifically to counterbalance the effects of food marketing to children were reported by only a few of the 20 countries. An ineffective and incoherent pattern of regulation was observed across the countries as few governments imposed tough restrictions with most preferring to persuade industry to voluntarily act with responsibly. Most health, consumer and public interest groups supported food marketing restrictions whilst industry and media groups advocated self-regulation. Conclusion: Recommendations include the amendment of the European Union’s Television Without Frontiers Directive to ban all TV advertising of unhealthy food to children, the adoption of a commonly agreed European Union definition of an ‘unhealthy’ food, and the establishment of a mechanism for pan-European monitoring of the nature and extent of food marketing to children and its regulation.

Keywords: child, marketing, obesity

Introduction

A recent estimate that 20% of school-age children in Europe are carrying excess body fat (with a quarter of these being obese), poses an increasing risk of them developing chronic diseases with a significant likelihood of some having multiple risk factors for cardiovascular diseases, Type 2 diabetes and other co-morbidities before or during early adulthood. These risks are not uniform between European member states with children at particular risk in the countries around the Mediterranean and in the British Isles (see figure 1), although rising prevalence rates are occurring in all countries. Within the enlarged European Union (EU) of 2006, there are estimated to be almost 22 million overweight or obese children (about 30% of all children), and this figure is increasing by around 1.2 million each year. Of these children, 5.1 million are obese, and that figure is rising by some 300,000 children each year.

One European Commission response, is the recently established European Platform for Action on Diet, Physical Activity and Health which provides a common forum for interested parties. One party contributing to this forum, the European Heart Network (EHN), launched ‘Children, Obesity and associated avoidable Chronic Diseases’, a project part funded by the European Commission. Phase 1 of the project (March 2004 to February 2005) involved mapping the policy terrain with two further phases for dissemination and programme development.

Phase 1 focused on one aspect of the cause of obesity—the marketing of food to children, in particular examining ‘promotion’ as a central element within marketing. Its aims were to

(i) Undertake a literature search of relevant existing international evidence.
(ii) Organize EHN national co-ordinators to collect data from the 20 European project countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, The Netherlands, Norway, Portugal, Slovenia, Spain, Sweden and the UK. Information gathered related to food marketing to children, the regulatory environment and measures taken to compensate for any negative effects of the marketing.
(iii) Analyse the data and make recommendations about food marketing to children across Europe.

Methods

Desk research

The literature search focused on existing international reviews to provide the background information about the nature and extent of food marketing to children, and also the scope of relevant regulations.

Data gathering tool design

A specifically designed questionnaire was developed for use by the co-ordinators. After piloting a draft with two co-ordinators, the final version was adopted in May 2004. Guidelines and a Glossary were also developed to ensure standardized responses from co-ordinators.
Co-ordinators accessed a number of sources: the internet, libraries, direct contact with government departments and other organizations, and the use of personal contacts. From these sources, post-1990 reports, studies, surveys and projects on-going at the end of 2004 were gathered from academic journals, government departments, commercial, public interest and market research organizations. Co-ordinators translated summaries of the data and collated all information into the questionnaire.

Data clarification and analysis
A process of data clarification was undertaken to provide confirmation or further details about information supplied, given that meanings may have been lost in translation. Thematic analysis of the data was undertaken and reported in the following sections.

Results
Defining unhealthy foods
In order to contextualize the nature of food marketing to children, co-ordinators were asked to report on any working definitions of unhealthy foods existing within each country. In countries where no definitions existed, co-ordinators reported their difficulty in agreeing what was meant by an ‘unhealthy’ food. Within the project there was a general assumption that such foods are high in fat, sugar or salt and that these foods are more likely to contribute to an unhealthy diet, but most countries had no working nutrient criteria which would have assisted such a definition.

Type and amount of food marketing to children
The data showed that food advertisements during children’s TV overwhelmingly promoted ‘unhealthy’ foods, with very little promotion of fruit and vegetables and other ‘healthy’ foods. The extent of unhealthy food marketing to children varied between countries with estimates ranging from 49% in Italy to nearly 100% in Denmark and the UK.

Advertisers spend a large and increasing proportions of their budgets on the food sector, illustrated by the following examples:

(i) In the UK £743 million was spent on food and drinks advertising in 2003,4 with the total amount spent on food marketing increasing.5

(ii) In Germany, 87% of total food advertising spend is on television advertising.6

(iii) In The Netherlands advertising spending by the food industry as a whole grew by 128% between 1994 and 2003.7

Of concern was the volume of food advertising aimed at children. For example within the UK, children viewed an average of five television advertisements per day for Core Category products (food, soft drinks and chain restaurants),8 the vast majority of which were for food items considered to be unhealthy in having a nutritional content high in fat, salt or sugar.9 Across countries, commonly used creative strategies used by food advertisers when targeting children included linking into children’s culture by referencing movies and their characters, and by using child-related appeals to play, fun, action-adventure, humour, magic or fantasy. Many advertisements make use of cartoon or celebrity characters.

Recent UK statistics suggest that though spending on advertising in the food sector may be increasing, the proportion
spent on TV advertisements may be declining. Nonetheless, across countries where data was reported, the vast majority of food promotion was through television, with food promotion through radio, magazines and cinemas taking a low and possibly declining proportion of advertising spending. Schools, on the other hand, represented a growing marketing channel. Strategies included sponsoring events, linking food product purchasing to the provision of educational or sporting equipment often involving token collection schemes, and selling unhealthy food and drink products in vending machines. The Internet was also a new and growing medium, where creative strategies included cartoon-style games, competitions, educational materials and links to food company websites.

Regulation of food marketing to children

Food marketing across Europe is inconsistent, both within and between countries. For the purposes of regulation, there was no commonly held definition of a ‘child’. Even in countries where definitions exist, there is a wide variation between 12 and 21 years. The strength of regulatory approaches ranged from very tough, as seen in Norway and Sweden where TV advertisements targeting children under 12 are banned, to the non-existent, as represented by the absence of controls on company websites in most countries.

Table 1 shows that broadcast advertising received the most legislative attention, with all countries reporting one or more statutory broadcast advertising code, many being based on the EU’s Television Without Frontiers Directive. The voluntary broadcast codes (14 countries) tended to lack specific rules about timing, content and form of marketing campaigns targeted at children, relying instead on non-specific general appeals for media groups to be aware of their moral and ethical responsibilities to vulnerable groups. Non-broadcast forms of advertising targeted at children, such as marketing in schools, sponsorship, internet-based techniques and sales promotions, are less regulated than broadcast advertising. For example, table 1 shows that a quarter of the countries reported no regulation of the internet at all.

Regulation of marketing techniques therefore lacks a comprehensive approach anywhere in Europe with each medium being regarded separately, unlike companies who integrate their marketing strategies. In addition, the regulatory approaches regard each advertisement in isolation with no consideration given to the effect of food marketing as a whole on children’s diets. Thus, apart from the TV advertising bans in Norway and Sweden, there have been no attempts to control the type of food which is advertised, nor the frequency or volume of advertising of particular types of food.

Attitudes towards food marketing to children

Reported data showed that health, consumer and other citizen groups acknowledged that obesity had many causes, but food marketing in particular was seen to play a significant role, thus raising the need to protect children in the interests of public health. The Danish Nutrition Council,9 for example, favoured restricting unhealthy food advertising to children as one element within a broader obesity prevention strategy. Similar groups favoured either banning or further restricting the marketing to children of foods high in fat, sugar or salt.

### Table 1 Regulation of food marketing to children by country

<table>
<thead>
<tr>
<th>Regulatory age definition of ‘child’</th>
<th>Broadcast advertising</th>
<th>Non-broadcast advertising</th>
<th>Paid-for Internet advertising</th>
<th>Company websites</th>
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<td>Statutory codes</td>
<td>Voluntary codes</td>
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<td>United Kingdom</td>
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a: codes with specific rules on food marketing.
b: codes with specific rules on food marketing to children.
Public interest groups also recommended other measures including nutrition and media education, taxing unhealthy foods and improving nutrition labelling. On the other hand, the food and advertising industries defended their right to promote their products and they resisted proposed restrictions—attitudes which reflected their commercial aims. They opposed plans to ban food marketing to children, arguing for the removal of bans where they existed, and opposing the tightening of existing restrictions, warning governments that restrictions would harm trade and commerce.

Across the EU, governments’ responses to these conflicting pressures have varied from tough regulations in a few countries to a more 'laissez-faire' approach in the majority of countries. In some countries, such as Germany, Spain and the UK, governments are trying to persuade the food and advertising industry to voluntarily restrict their activities, for example, by 'responsible' self-regulation and by challenging them to introduce social marketing techniques to promote healthier food. Governments in other countries are focusing on restricting food marketing in schools, for example, in Finland, where this influence is perceived as a key area of concern, and Greece, where a lack of agreed definitions for 'healthy' and 'unhealthy' foods is inhibiting efforts to remove unhealthy food products from schools. Where countries have already banned food marketing to children on TV, governments are focusing on other areas, e.g. Norway is advocating a ban on cinema advertising, and Sweden is calling for an international ban on TV advertising to children.

### Counterbalancing measures

Co-ordinators reported counterbalancing measures which although designed to improve children’s health or specifically tackle childhood obesity, nevertheless were also perceived to combat the effects of food marketing to children. Measures reported included fruit and vegetable promotion, general educational measures focusing on food and health, media literacy and physical activity programmes. Fruit and vegetable promotion schemes were reported by most national co-ordinators. Many of these schemes advocated the consumption of at least five portions of fruit or vegetables a day. Many fruit and vegetable promotion schemes operated in schools, offering educational programmes, information and materials, tasting sessions and free or low cost fresh fruit and vegetables.

Most countries had general educational projects and materials addressing health or nutrition standards, often government-run. Education projects run by other organizations, sometimes in collaboration with food companies, were either school-based, or centred round events and competitions. Media literacy programmes were reported as aiming specifically to counterbalance food marketing to children by raising their critical awareness and understanding of advertising. Only two countries, the UK and the Netherlands, reported specifically constructed programmes funded by a mixture of industry, government, advertising and media bodies. Other initiatives, mentioned by a minority of countries, were locally run by consumer or campaign groups.

Most countries reported a variety of measures to promote physical activity—including projects run by or sponsored by food companies. From the companies’ perspective, such projects boosted their public image and deflected attention away from marketing activities which promoted ‘unhealthy’ food.

### Discussion

The marketing of unhealthy food is a factor shown by previous research to have an effect on children’s food consumption patterns, but the findings in this report demonstrate a lack of agreement amongst stakeholders across Europe over what should be done to combat its effect. It is clear that food manufacturers are increasingly using integrated and sophisticated marketing strategies to promote their products directly and indirectly to children, which has also been found in other international research. Global commercial marketing to children of food and drink is dominated by unhealthy products, with television as the prime medium for such advertising. The data here concurs with these findings, but there was some evidence that television is losing its dominance as in-school and internet marketing are growing.

Strategies used to counterbalance this effect included fruit and vegetable promotion, and food, health and physical activity education programmes. Media literacy programmes, often held up by the food industry as the means by which children can be helped to a critical understanding of advertising, were found in only a handful of countries and very few had been evaluated. None had been designed and implemented as an integrated programme.

The attitudes of stakeholders revealed varying levels of responsibility with regard to food marketing to children. There was widespread agreement amongst health, consumer and other public interest groups that food marketing to children should be restricted across Europe. These views juxtaposed with those of the food and media industries which, whilst recognizing the vulnerability of children, argued that self-regulation was more effective than statutory restrictions which would only limit economic growth. Government responses to these debates varied between some adopting tough restrictions and others who sought to persuade industry to act responsibly.

The World Health Organisation review of the global regulatory environment for the marketing of food to children found an imbalance between richer countries where regulation tended to focus on television advertising and in-school marketing, and poorer countries where there was little regulation. Previous research has highlighted the ineffectiveness of self-regulatory codes based on the International Chamber of Commerce (ICC) Codes of Practice, which have dominated the European regulatory framework relating to children and advertising. The ICC recently reviewed its codes to provide a framework guiding food and drink advertising to children. Whilst this accepts children as worthy of ‘careful treatment’ and states that commercial communications must be legal, decent, honest and truthful, it recommends that control of children’s food choices should rest with parents rather than via statutory regulation.

This study concurred with previous research in showing that most European countries have an incoherent patchwork of legal and voluntary controls. This situation compromises the efforts of some countries who have strong national regulations but who are nevertheless powerless to prevent commercial communications arriving in their country from beyond their borders. For example, Sweden and Norway have statutorily banned TV advertising to children but receive advertisements on cable and satellite TV broadcast from other countries. The first recommendation to remedy these inconsistencies would be the amendment of the EU’s Television Without Frontiers Directive to bring about a ban all TV advertising of unhealthy food to children. Such a move would protect the effect of bans within individual countries and extend this protection to the rest of Europe’s children. Additional measures to control ‘unhealthy’ food marketing in schools and on the Internet are also needed.

The absence of an agreed method for defining an ‘unhealthy’ food or even a food that is ‘high in fat, sugar or salt’ restricted the ability of the project to provide pan-European definitions. In order to put any future measures in place to protect children throughout Europe from the marketing of
‘unhealthy’ foods, the second recommendation is that the EU needs a common definition of an ‘unhealthy’ food. The need for such a development has also been noted in relation to how the EU regulates nutrition and health claims and reviews the existing labelling directive. Nutrient profiling (currently under development in the UK and France) would allow such definitions to be agreed.

In gathering data for this project, coordinators found that information was hard to locate or was buried within reports written for other purposes. In relation to finding out about the type and amount of food marketing in each country for example little research existed. Much of the research that did exist was produced by commercial bodies who were unwilling to make information publicly available. For this reason, the information presented should be regarded as representative rather than comprehensive. Provision of accurate EU-wide information is an essential precursor to effective policy making, and the final recommendation of the research is that effective structures and procedures should be established for pan-European monitoring of the nature and extent of food marketing to children and its regulation.

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Conflicts of interest: None declared.

Key points

- Most of the food marketed to children in Europe is regarded as ‘unhealthy’, with television as the prime medium for such advertising although in-school and internet marketing are growing.
- Most countries have an incoherent patchwork of legal and voluntary controls on broadcast and non-broadcast advertising.
- In the face of rising obesity levels across Europe, public health organizations argue to protect children from the influence of ‘unhealthy’ food marketing, however, few countries have introduced comprehensive policies to address this.
- Implications for public health policy and practice relate to the need to amend the EU TV without Frontiers Directive to prohibit ‘unhealthy’ food advertising to children, to develop a common EU definition of an ‘unhealthy’ food, and to establish effective structures for monitoring food marketing to children.

References


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