

# RESEARCH INTO THE EFFECT OF ADVERTISING ON THE EATING HABITS OF CHILDREN

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**Abstract:** *This paper is devoted to the effect of advertising on the eating habits of children, and presents information about research conducted into this matter in the Czech Republic. Advertising is, along with the influence of the child's family, school and (later) contemporaries, considered one of the principal factors influencing a child's present and future eating habits and its preferences in food selection. For this reason the European Commission, which considers solving the problem of increasing obesity and its associated diseases one of its key priorities, sees more thorough regulation of marketing and advertising aimed at children as one of the possible paths to be taken. Within the framework of preparation of appropriate measures, it therefore initiated the extensive international research project POLMARK (Assessment of POLicy options for MARKeting food and beverages to children), in which Masaryk University participated as representative of the Czech Republic in co-operation with another ten countries. The purpose of this research was not merely to survey the legislation, guidelines and regulations relating to marketing and advertising in the individual member countries, but first and foremost to gather information on the opinions of key individuals and institutions (stakeholders) on this issue. The results will contribute towards the revision of marketing management planned by the European Commission in the year 2010.*

**Keywords:** *children, obesity, eating habits, prevention, advertising, marketing, self-regulation, POLMARK*

## Introduction

Advertising is considered one of the principal factors influencing the present and future eating habits of children, in addition to the influence of the child's family, school and (later) contemporaries. Children are a particularly rewarding target group for marketing and advertising in view of their greater responsiveness and lack of experience and critical thought, and also thanks to the opportunity of indirectly influencing adult consumers through their children. Advertising targeting children is, for this reason, subject to greater restrictions in many countries – either legal restrictions by the state or self-regulation by producers and retailers themselves. The current EU guidelines pro-

hibit any kind of advertising and marketing that would cause moral or physical harm to minors, and stipulate specific tools such as, for example, a prohibition on abusing the trust and inexperience of children and a ban on inciting children to persuade their parents to purchase a particular product. The member states may adopt stricter measures as part of their own legislation, and some have already done so. The European Union has decided to implement a research project to survey the advertising and marketing of food and drinks aimed at children in its member states, with the aim of recommending a common strategy in this area on the basis of the results obtained. Masaryk University has taken part in the project entitled Assessment of POLicy options for MARKeting food and beverages to children (abbreviated to POLMARK) (1) as representative of the Czech Republic in co-operation with another ten EU countries (Belgium, Cyprus, Denmark, France, Great Britain, Ireland, Poland, Slovakia, Spain and Sweden).

In the following text, I will endeavour to summarise the results of this research within the framework of the project in the Czech Republic and to point out a number of important pieces of information relating to the Czech Republic.

## Key factors influencing the prevalence of obesity

The prevalence of overweight and obesity has been rising in the Czech Republic in recent years, as it has in many other EU countries. According to research conducted as part of the project Lifestyle and Obesity, around 52 % of the adult population are of more than normal weight, of which 35 % fall into the category overweight and 17 % into the category obese (2). This trend is continuing to increase, and the Czech Republic finds itself in third place in Europe in terms of the occurrence of obesity, behind Greece and Slovenia. Detailed figures on the occurrence of obesity in the Czech Republic are given in table 1.

Table 1. The occurrence of obesity in the Czech Republic.

<b>Occurrence of obesity (%) BMI <math>\geq</math> 30 kg/m<sup>2</sup></b>		14.4 %	2006	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Adults total	age group 30+	%	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Men	age group 30+	26.8 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Women	age group 30+	30.9 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Children total	age group $\leq$ 5	8.1 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Boys	age group $\leq$ 5	3.5 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Girls	age group $\leq$ 5	4.3 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Adolescents total	age group 14-17	9.0 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Boys	age group 13-15	13.2 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Girls	age group 13-15	6.1%	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>

<sup>1</sup> Branca F., Nikogosian H., Lobstein T.: The challenge of obesity in the WHO European Region and the strategies for response. Denmark. 2007 : 7.

Health status: indicators from the National Health Interview Surveys. European Commission: Eurostat

<sup>2</sup> Currie C. et al, eds. Young peoples' health in context. Health behaviour in school-aged children (HBSC) study: international report from the 2001/2002 survey. Copenhagen, WHO Regional Office for Europe, 2004 (Health Policy for Children and Adolescents, No. 4; accessed 19 March 2007).

[http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601\\_1](http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601_1)

<sup>3</sup> Hope Project.

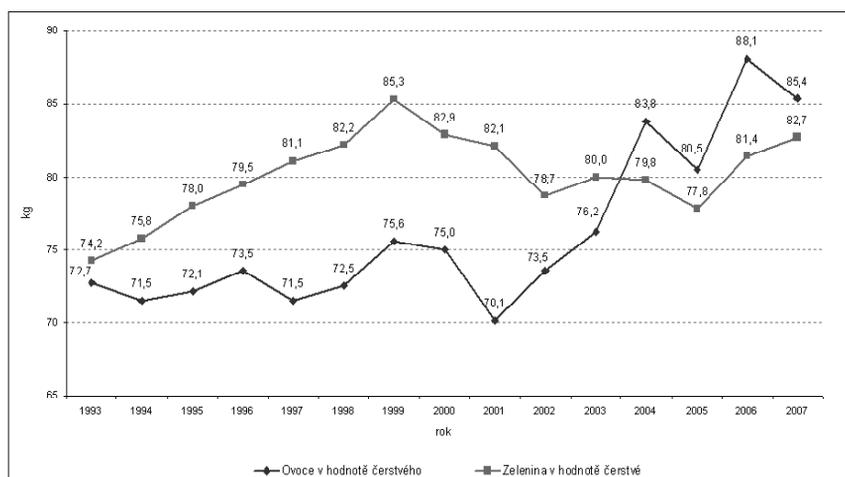
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A whole range of factors (3, 4, 5) play a demonstrable part in the onset of excessive weight and obesity, of which the following four factors are considered the most important.

1. *Socio-economic factors.* A dependency between the occurrence of obesity and membership of lower socio-economic groups has been repeatedly demonstrated. Individual pieces of research show the effect of unemployment, lower income (according to the WHO, the gross national product per person in the Czech Republic in 2003 was the third lowest in the EU), and lower level of education attained (according to the WHO the percentage of children enrolled at secondary school is slightly below the EU average) on the choice of food and on opportunities for sport and recreation.
2. *Physical exercise.* The sedentary lifestyle is culturally and socio-economically conditioned in the Czech Republic, and is the result of the small level of promotion of physical exercise in childhood. This is most evident among the middle-aged and older people, who have retained these habits into adulthood. A lack of physical exercise is, however, also appearing to an increasing extent among children, for whom it can be considered a particularly high-risk factor influencing their future health.
3. *Eating habits.* The consumption of high-energy food rich in fats, carbohydrates and salt, and low in important microelements, is closely associated with excessive weight gain and the risk of obesity. The consumption of fresh fruit and vegetables, on the other hand, has a protective effect (see graph below). Consumption of fresh fruit and vegetables in the Czech Republic is extremely low in comparison to a number of EU countries, though the trend is moderately positive, as is show by the graph (6).

### Graph of fruit and vegetable consumption in the Czech Republic

**Graf 3** Spotřeba ovoce a zeleniny v hodnotě čerstvé v letech 1993 – 2007 (kg/obyvatele)  
*Consumption of fruits and vegetable in terms of fresh weight, 1993 – 2007, annual per capita averages*



Source: The Czech Statistical Office

4. *Breastfeeding.* The WHO strongly recommends that children are exclusively breastfed for at least the first six months of their lives, and that breastfeeding should continue, if possible, until the child reaches the age of two. In addition to increasing the child's resistance to diarrhoea and diseases of the respiratory tract, there is also a proven connection with a reduced tendency to overweight and obesity at a later age.

Thanks to systematic support for breastfeeding from medical experts and the state administration, the percentage of children breastfed at the age of three months increased from 28.2 % to 59.8 % in the Czech Republic between 1993 and 2004 (7). This support is provided by the system of "Baby Friendly Hospitals" – comprised at the present time of 30 of the 116 hospitals in the Czech Republic. 23 % of all children born in the Czech Republic are cared for in these hospitals (8).

## **The effect of advertising on children's eating habits**

The global trend in the increasing prevalence of obesity is already being seen among the child population in European countries. In this regard, however, children are something of a specific group – when trying to encourage weight loss, it is necessary to focus on a healthy diet and an active lifestyle, rather than reducing energy intake or radically reducing the intake of fats and sugars. This goes hand in hand with the limitations imposed by the modern age, in which children tend to engage largely in sedentary activities. When teaching children to eat healthily it is also essential to remember that social factors, such as the influence of the child's family, school and (at a later age) contemporaries, play a large role for children. These social factors also include the influence of advertisements, which to a certain extent give children the chance (at least ostensibly) of measuring up to their idols, and allow them to identify with the majority and achieve a certain social position among their contemporaries.

The effect of advertising on children has been proven quite indisputably in the Czech Republic by numerous pieces of research. In 2006, for example, the study *Czech Children 2006* conducted by the agency Millward Brown was concerned (among other things) with the impact of advertisements on children, and the results showed that the advertising of products for immediate consumption, such as food and drinks, acts as a purchase impulse for more than 50 % of children. Branding (linking a particular advertisement with a brand) works extremely well in this area, particularly for drinks (adverts for Kofola, Sprite, Coca-Cola, etc.). The force of impact of an advertisement changes according to how children's preference for individual types of media changes with their age. Small children (7–11 years-old) are most affected by television advertising, while the effect of media such as the internet, on-line computer games, etc. is noticeably greater at a later age. The trend for advertising "on the web" is even more pronounced in many EU countries. Many types of advertising tool have yet to become widespread in the Czech Republic, such as targeted advertisements sent to children's mobile phones, advertisements on school exercise books and other teaching aids, or the logos of sponsors (producers of sweet food and drinks) on school sports kit, etc. (9). There are, of course, other forms of marketing in addition to this (the most effective) form of media advertising. The placement of sweets at a child's eye-level by the checkout or on the

main aisles of a supermarket, for example, is a common and extremely effective way of drawing attention to these products. A similarly effective method is packaging toys of various kinds or computer games with sweets, or sales campaigns of the “2 plus 1 free” type. A less superficial, and perhaps therefore more “insidious”, marketing method are automatic vending machines of various kinds at places where children tend to go without their parents, such as schools. Here, it is possible either to have an influence on the range of products offered or for the school principal to completely ban such vending machines (though many do not do so for financial reasons). Self-regulatory measures have also begun to be applied in the Czech Republic in this area. This means syndicates (generally international syndicates) of producers agreeing to the voluntary observation of certain principles of advertising and marketing, such as not exposing children up to the age of 12 to advertisements for fatty and salty food or sweet food and drinks. In practice, this particular measure relates primarily to advertisements in schools and the ranges of products offered in school vending machines at the first level of primary school.

## **Possible ways of regulating advertising**

The EU has recently been devoting heightened attention to the increasing occurrence of obesity, evidence of which is provided by many documents, such as the White Book – A Strategy for Europe on Nutrition, Overweight and Obesity Related Issues. The EU sees the regulation of marketing and advertising aimed at children as one possible way of resolving and preventing these problems. For this reason, the European Commission, in co-operation with the International Association for the Study of Obesity, London and a number of other institutions, has initiated research into the situation in advertising and marketing aimed at children in the individual member states of the EU, on the basis of which it should be possible to develop a joint strategy unifying the rules relating to advertising targeting children. The reason for the development of the project was the need for a detailed survey of the situation in the individual countries. The aim of the research was both comparison of legal standards regulating the advertising and marketing of food consumed by children, including ethical codes and voluntary self-regulation, and determination of the views of relevant stakeholders on the current state of regulation and on the issue of whether and how the issue of the marketing and advertising of food and drinks aimed at children should be resolved within the framework of a joint European policy.

There were two parts to the research conducted within the POLMARK project. The first was a comparison of the legal standards regulating the advertising and marketing of food consumed by children, including ethical codes and voluntary self-regulation applied by producers, advertising providers and the media in individual states. The second part took in questionnaire research in the form of personal interviews with key individuals and institutions (stakeholders). More than 100 interviews were planned in total, with around ten in each country. Fifteen interviews were conducted in the Czech Republic. The results will be published in a joint final report after all the data has been processed. This international comparative study will be used as a basis for decision-making by the European Commission in matters relating to the regulation of marketing and advertising.

The legislation relating to the advertising and marketing of food and drinks targeting children in the Czech Republic is stipulated by Act 468/1991 Sb. on the operation of radio and television broadcasting (*Section 6 The obligations of operators during the broadcasting of advertisements (1) Operators are obliged to ensure that the following are not included in the broadcasting of advertisements:*

- a) advertisements promoting behaviour threatening the morals or interests of the consumer or the interests of health protection, safety or the environment;*
- b) advertisements designed for children, or advertisements in which children appear, that promote behaviour threatening their health or psychological or moral development; Section 6a (3) Interrupting news reports, religious programmes or programmes for children with advertisements is not permitted.)*

and Act 40/1995 Sb. on the regulation of advertising and on the amendment and supplementation of Act 468/1991 Sb. on the operation of radio and television broadcasting in the wording of later regulations.

Other general provisions can be found in Act 634/1992 Sb. on the protection of the consumer.

The Code of Advertising Practice updated in 2008 and issued by the Advertising Council (10) can undoubtedly be considered the principal aspect of self-regulation. This code gives a detailed specification of the legislation and expands on it, and is respected by practically all commissioners of advertisements and producers.

The personal interviews with key individuals and institutions (stakeholders), selected on the basis of a methodology prepared by an international team within the framework of the project in such a way that all the categories given below were represented, were conducted in 2008 and 2009.

The selected categories of stakeholders were:

1. expert scientists and academics
2. consumer organisations
3. medical organisations and patient organisations
4. producers and retailers of food and drinks
5. creators and producers of advertisements
6. government officials
7. child and teacher organisations
8. the media
9. other (politicians, economists, psychologists, etc.)

The questions posed to the respondents related to their views on the present situation in advertising and marketing in the Czech Republic, the legislative regulation, industrial self-regulation, and the connection between advertising and lifestyle and nutrition. We asked them for their views on types of advertisement and their effect on children, whether and how to restrict advertising for children, and how they see the real possibilities for regulation.

The results of these interviews can be summarised in a number of basic points. We saw four basic attitudes from respondents corresponding to the above categories:

1. Medical professionals and academics, organisations promoting health and consumer organisations (categories 1, 2 and 3) would generally welcome a greater amount of regulation (legal and self-regulatory) and limitations on advertising, particularly advertising for excessively sweet, fatty and salty food and drinks. They also emphasise the importance of universal nutritional education for children and their parents.
2. Producers (category 4) agree with an extension of self-regulation, particularly among smaller producers who are not, as yet, engaged in supranational self-regulatory activities, though they believe that the current level of legal regulation is adequate. They also consider the consistent expansion of complete and truthful labelling of foodstuffs, comprehensible to the consumer, to be desirable.
3. Commissioners of advertisements, the media and children's organisations, teacher organisations and parent organisations (categories 5, 7 and 8) prefer education and instruction of children in the family and at school leading to responsible consumer behaviour and critical assessment of advertising campaigns and the marketing behaviour of producers to legal regulation. They support legal regulation in situations over which parents do not have direct control (the sale of food in schools, the internet, targeted SMS text message advertising).
4. Government organisations (categories 6 and 9) support self-regulation. They consider the current legislation adequate, but point to the problem of its enforceability, as jurisdiction in this area is divided between a number of entities. They generally prefer the educational influence of the family promoting a healthy lifestyle, and agree with legal regulation only in situations in which parents cannot intervene (school cafeterias, vending machines, the internet, targeted SMS text messages).

Regardless of category, the majority of respondents think that advertising and marketing targeting children is not excessively regulated in the Czech Republic, though they consider the legislation adequate and consider the situation in the Czech Republic more or less comparable with that in other EU countries.

The majority also believe, however, that there is a close correlation between advertising and the increase in child obesity, though a considerable number also consider the principal cause of increasing child obesity to be not so much greater consumption of unhealthy foods as a lack of physical exercise, an unhealthy lifestyle and poor upbringing within the family.

In terms of the influence of television advertising on children, the majority of respondents agree that this type of advertisement has a significant influence on the choice of food and drinks and increases the amount of food promoted by this type of advertising that is actually purchased and consumed. The respondents do not consider other types of advertising particularly effective.

The views held by individual types of stakeholder differ as to whether advertising should be regulated or not, and if so whether universally or merely partially. Many hold the view that further regulation over and above the existing legal regulation would not prove

effective. Even those supporting regulation (categories 1, 2 and 3) tend to favour industrial self-regulation, considering it more effective, more flexible and, to a certain extent, more enforceable than legal regulation. They are in favour of stricter legal regulation only where self-regulation fails or in cases in which parents can take no action or have no control, particularly where advertising is most intensive – television programmes for small children, advertising in schools (and primarily the associated sale of food and drinks in schools), advertising on the internet and unsolicited SMS text messages targeting children. They add that such regulation already operates and functions to a certain extent in the Czech Republic, both on the basis of the existing legislation (though not formulated specifically for children) and on the basis of the Code of Advertising Practice – the self-regulatory code respected by practically all commissioners of advertisements without exception.

## Conclusion

The research conducted within the POLMARK project in the Czech Republic shows that the attitudes of the public and the experts considering these topics tend, with certain exceptions, to be liberal, and give greatest support to industrial self-regulation. They either hold a rather cautious attitude towards legislative regulation, or reject it completely. Advertising and marketing aimed at children represents an exception to this to a considerable extent. In this area, those taking part in the research agree on the necessity of regulating and monitoring advertising to a greater or lesser extent, even by means of legal measures. They do not, however, consider such regulation a fundamental means of fighting obesity or as protection against excessive advertising. Of far greater importance, according to respondents, is the education given to children within the family and at school, health education, a healthy lifestyle and a healthy diet, media instruction aimed at responsible consumer behaviour, and the cultivation of the capacity for critical thought.

### Note

The project was financed by the European Union within the framework of the Public Health Programme, and coordinated by Dr. Tim Lobstein (The International Association for the Study of Obesity, London). The research coordinator in the Czech Republic was Prof. Derflerová Brázdová.

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## VÝZKUM VLIVU REKLAMY NA STRAVOVACÍ NÁVYKY DĚTÍ

**Abstrakt:** Článek je věnován problematice působení reklamy na stravovací návyky dětí a informuje o výzkumu, který byl v této věci v ČR prováděn. Právě reklama je, kromě vlivu rodiny, školy a později vrstevníků, považována za jeden z hlavních faktorů, který ovlivňuje aktuální i budoucí způsob stravování dětí a jejich preference při výběru stravy. Proto také Evropská komise, která považuje za jednu z hlavních priorit řešení problému narůstající obezity a s ní souvisejících chorob, vidí jako jednu z možných cest právě důslednější regulaci marketingu a reklamy zaměřených na děti. V rámci přípravy vhodných opatření iniciovala proto rozsáhlý mezinárodní výzkumný projekt POLMARK (Assessment of POLicy options for MARKeting food and beverages to children), kterého se Masarykova univerzita zúčastnila jako zástupce ČR ve spolupráci s dalšími 10 zeměmi. Účelem výzkumu bylo nejen zmapovat právní úpravy, směrnice a regulace marketingu a reklamy v jednotlivých členských zemích, ale především získat informace o názorech klíčových zainteresovaných osob a institucí (stakeholderů) na tuto problematiku. Výsledky přispějí k revizi řízení marketingu plánované Evropskou komisí v roce 2010.

**Klíčová slova:** děti, obezita, stravovací návyky, prevence, reklama, marketing, autoregulace, POLMARK