



## POLMARK report, Czech Republic

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### 1. Obesity prevalence in the Czech Republic

Recent data suggest that the prevalence of obesity in the Czech Republic has risen over the past decades and is now nearly 22 % in men and 25 % in women and overweight population accounts for almost 50 % of the entire population (*HOPE Project*). In the category of extreme obesity, almost 10 % of the Czech population is located, of those at least 0.5 % have an enormous risk of death (*Czech Society for the Study of Obesity*). According to the data of the Centre for Obesity and Health Life Style in the Czech Republic, the Czech Republic occupied the third place of overweight and obesity prevalence, after Greece and Slovenia. The Czech Society for the Study of Obesity reported that 52% of the Czech population are above accepted parameters. There appears to be a north-south gradient in the prevalence of obesity, with higher BMI reported in towns of the North of the Czech Republic. Detailed figures on obesity prevalence in the Czech Republic are shown in table 1.

Table 1. Obesity prevalence in the Czech Republic.

Prevalence of obesity (%) BMI $\geq$ 30 kg/m <sup>2</sup>	14.4 %	2006	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Adults overall age group 30+ years	%	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Males age group 30+ years	26.8 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Females age group 30+ years	30.9 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Children overall - age group $\leq$ 5 years	8.1 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Males age group $\leq$ 5 years	3.5 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Females age group $\leq$ 5 years	4.3 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Adolescents overall - age group 14-17 years	9.0 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Males age group 13-15 years	13.2 %	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>
Females age group 13-15 years	6.1%	2005	WHO <sup>1,2</sup> , HOPE <sup>3</sup>

#### Table Sources:

<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 people's 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.

[http://www.hopeproject.eu/index.php?page-documents&documents\\_map%2FPresentations+Network+of+Networks+Geneve+2008%2F](http://www.hopeproject.eu/index.php?page-documents&documents_map%2FPresentations+Network+of+Networks+Geneve+2008%2F)

## **2. Main risk factors for obesity**

Key risk factors for obesity include socioeconomic status, dietary intake and inadequate physical activity. The following section describes these in the Czech context.

### **2.1. Socioeconomic indicators**

Underlying health determinants of a socioeconomic nature play a major role in causing vulnerability to health risks, including obesity. Indeed, a social gradient in obesity has been demonstrated with individuals in lower socioeconomic groups (lower incomes or lower levels of education) having a higher risk of being obese and thus of suffering from obesity-related diseases. The reasons why these inequalities have arisen and persist include the constraints imposed by low income and educational achievement on food choices, opportunities for recreational exercise, and differential absorption of health promotion messages.

*Income level: In the Czech Republic the poor appear to suffer worse health and die younger than people with higher incomes. For instance, the latter are better able to afford the goods and services that contribute to health, for example, better food and living conditions. Per person gross national income, adjusted for purchasing power parity (PPP), was US\$ 15 600 in 2003, the second lowest per person income in Eur-A. The Eur-A average that year was US\$ 25 388. (WHO - Highlights on health in the Czech Republic 2005).*

*Education level: In 2000, the percentage of school-age children enrolled in secondary schools in the Czech Republic was 88.3 %, slightly below the Eur-A average of 88.5 %. (WHO - Highlights on health in the Czech Republic 2005). (any relation between education levels and obesity in Czech Republic?)*

*Employment: Total unemployment rates reported in the Czech Republic were slightly higher than Eur-A averages in 2001 and 2002, keeping in mind that national rates are based on estimates of people available and seeking employment and that countries have different definitions of labour force and unemployment. At the time being the Czech Republic's rate is growing with accordance of global financial and economic crisis: level of unemployment in CR is by official statistical documents about 7 %. (Basic facts on Czech Republic 2008).*

### **2.2. Physical activity indicators.**

Physical activity is a complex behaviour. A sedentary life style is in the Czech republic culturally learned, more and more confirmed and rewarded. The development of a sedentary life style is the result of a socialization process towards physical inactivity developed in youth and continued into adulthood. In the Czech republic, development of a sedentary life style is reinforced by social inequality.

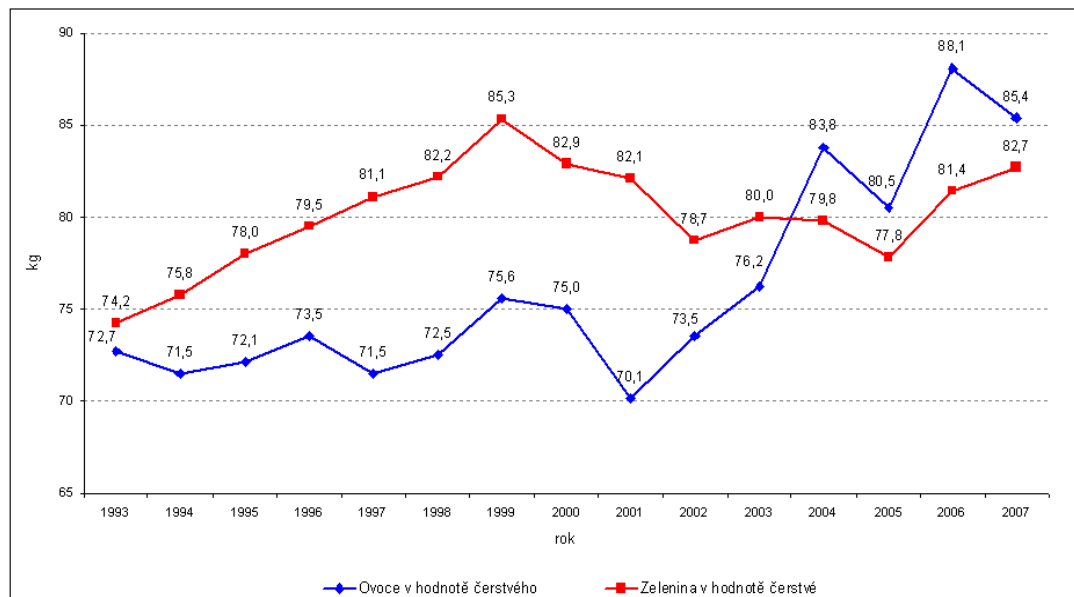
### **2.3. Dietary indicators.**

Diets high in fats, salt and sugar are associated with excessive weight gain, while a healthy, nutrient-dense, balanced diet may be associated with a decreased risk of obesity. Low income groups tend to have relatively high-energy and low-micronutrients diets compared with high income groups, thus putting them at additional risk of weight gain [i, ii, iii]. Obesity prevalence is influenced by low fruit and vegetable consumption (Graph 1).

Graph 1: Consumption of fruits and vegetables in terms of fresh weight, 1993-2007, annual per capita average.

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



fruit fresh (in blue), vegetable fresh (in red)

**Source:**

Czech Statistical Office.

<http://www.czso.cz/csu/2008edicniplan.nsf/engp/3004-08>

**2.4. Breastfeeding.**

WHO strongly recommends that babies should be exclusively breastfed for the first six months of life, continuing breastfeeding for the following two years or even more if possible. This provides continuing protection against diarrhoea and respiratory tract infection that is more common in babies fed formula.

In the Czech Republic, government and medical societies are interested to promote breastfeeding, and between 1993 and 2004 the breastfeeding rate at 3 months has increased from 28.2% to 59.8%.

EUPHIX (European Union Public Health Information System).

Harbers M., Cattaneo A.: Percentage of infants breastfed at 3 months of age in Iceland, Norway, Switzerland and the EU-27, 1989-2004. In: EUPHIX, EUphact. Biltoven: RIVM, <<http://www.euphix.org>> EUphact\ Determinants of health\ Health behaviours\ Breastfeeding, 22 May 2008.

[http://www.euphix.org/object\\_document/o4709n27421.html](http://www.euphix.org/object_document/o4709n27421.html)

Data collection on BF rates is generally inconsistent and incomplete. Definitions and methods are different in many countries. A single standard system for data collection (basic rates and basic practices) does not exist. The Czech Republic is currently revising its 1992 and 1995 national policies to include the four criteria:

- Help mothers to start BF soon after birth.
- Breastfeed exclusively for six months.
- Continue BF up to two years and beyond.
- Implement the Ten Steps for Successful BF.

In the Czech Republic, complete breastfeeding promotion is carried out in an increasing number of Baby Friendly Hospitals (currently 30 out of 116 hospitals). Twenty-three percent of all births occur in Baby Friendly Hospitals.

Protection, promotion and support of breastfeeding in Europe: a blueprint for action 2003.

[http://www.nut.uoa.gr/Downloads/BreastFeeding/BreastFeeding\\_fp\\_promotion\\_2002\\_a1\\_18\\_en.zip](http://www.nut.uoa.gr/Downloads/BreastFeeding/BreastFeeding_fp_promotion_2002_a1_18_en.zip)

### **3. Legislative acts, regulations and autoregulations with relation and power to influence the prevalence of obesity**

#### Acts:

- Act No. 468/1991 Sb. on carrying radio and TV broadcasting

#### § 6: Duties of keepers by advertisement broadcasting

(1) Keepers are obliged to respect not to insert to broadcast:

- a) advertisement supporting harmful behaviour which can negatively affect their morality, consumers interests, health protection, safety and living environment.
- b) advertisements targeting to children or with children staring, supporting harmful behaviour which can negatively affect their health, psychical or moral development

#### § 6a:

(3) It is forbidden to include advertisement interrupting reporter news, religious programme or programmes for children.

- Act No. 40/1995 Sb. on advertisement regulation and on the change and supplementation Act No. 468/1991 Sb.

In Act No. 40/1995, children are mentioned as follows:

§2c: In relation to persons <18 years, advertisement is not allowed to

- a) support harmful behaviour which can negatively affect their health, psychical or moral development
- b) recommend products or services using their lack of experience and credulity
- c) move their parents to buy products or services
- d) play on their special dependance to their parents and other persons
- e) show them by improper way in emerging situations,

§4: Advertisement of alcoholic beverages,

§5e, §5f : With regards to advertisement of starting BM substitutes

§6a: It is forbidden to include advertisement interrupting reporter news, religious programme or programmes for children.

- Act No. 634/1992 Sb. on the consumer protection.

#### Regulations:

- National action plan against obesity

National action plan against obesity was after two years discussions more or less endorsed in 2007, but actually never came into action. National council for Obesity was last called together in autumn 2007, and then again in June 2009, after installation of new Administrative

government.

Autoregulations:

- Code of Advertising Practise , 2008, Czech advertising standards council (<http://www.rpr.cz>)

Regarding monitoring and evaluation Code of Advertising Practise, this document is formulated by the Czech advertising standards council and does not have the form of legislative regulation - it is the instrument for industrial autoregulation. Observation of the Code is provided by arbitrary commission of the Council, which judges all signals and complaints of any person or corporate body. All information are public and available at web sites of the Council(<http://www.rpr.cz/cz/index.php>). The Code was several times modified (with respect to European legislative and best practise) and the last version is dated 2008.

Voluntary activities in privat sector, if exist, are active in supranational companies rather than in local enterprizes, but all of them could be rather included in the category of industrial autoregulation. These activities are more in the shape of cooperation with national, state or public utility establishment in campaigns for health promotion, healthy nutrition, physical activity etc. Companies are more active in health promotion in TV than in restriction of add in TV.

#### **4. Comments based on the results of interviews with stakeholders.**

Most of Czech respondents, no matter which category are they classed with, think that advertisement and marketing targeted to children are not well (and especially) regulated (Q16), but none the less, they consider already existing legislative acts as sufficient and they understand the situation in the CR more or less comparable with other EU countries (Q1).

Majority of respondents (almost all of them) assume that there is a strong connection between advertisement and increase of children obesity (Q3). In the same time great part of them think of not the increasing consumption of unhealthy food, but of more insufficient physical activity and generally unhealthy life style (Q7) as the main cause of increasing children obesity.

Regarding the question on the influence of TV advertisement to children (Q17), majority of respondents agrees that this way of advertisement strongly influences the selection of food and beverages and increases the amount bought and consumed foods, which are advertised.

Regarding the question 18, TV ads for a soft drink shown 2 a day for a week, between 6pm and 9pm, in average 7,43. Position a product at all checkouts of a supermarket used regularly...6,86. Internet site for brand of potato snacks, with games, average engagement of 15 minutes involvement on the website...6,36, free puzzle with pack of sweetened cereal, promoted on pack with Shrek3...5,64, product placement of soft drink brand in a children's cinema movie...5,36.

Some of the types of advertisement, e.g. school football dresses and shirts, do not exist in the CR. No respondent had met targeting SMS and regarding advertisements at school hand-outs, the last ads were seen at school notebooks issued in 90ths. This was a reason why respondents ignored the questions asking about the impact of ads described above, and have commented only possible impact of regulations in future.

Particular stakeholders differ in their opinions regarding ads should be regulated, and if so, all of them or only the part. Many stakeholders think that more regulations in addition to existing one are no more efficient. Even those who support regulation (categories 1, 2, 3), tend to the opinion that industrial autoregulation is more efficient, flexible and in some aspects even easier to be enforced. Only in situations, where autoregulation fails, stakeholders agree with legislative adjustment (questions 20, 25).

Majority of respondents judge the industrial autoregulation to be one of the most efficient, but only in cases when the responsible persons (as e.g. parents are) are not able to act and/or control, ask for more strict legislative regulation. This is especially true for cases, where the ads take effect most intensively: TV ads aimed to children, ads in schools (and connected sale of foods and drinks at schools), ads on Internet, unmasked SMS aimed to children (question 21). All of stakeholders in the same breath add that this regulation in the Czech republic exists and functionates. It works on the basis of legislative arrangement, although not specifically formulated for children, and also on the basis of Advertisement Code (autoregulative arrangement respected by all ads submitters without exceptions).

Category of health professionals, health supporting organizations and consumers organizations as well (category No. 1, 2, 3: academic experts, public health advocates and consumer advocates) would greet in general with higher quantity of regulations, legislative and autoregulative, restriction of ads for too sweet, fatty and salty foods and drinks. In the same time emphasize the necessity of broad nutritional education of children and their parents.

Category of producers (No. 4: food producers, caterers and retailers) agrees with distension of autoregulation, especially within smaller producers, who are still not a part of international autoregulative activities. They assume legislative regulations as adequate. They also see as desirable the distension of complete, true and comprehensible food labeling.

Category of ads sumitters, media, childrens, teachers and parents organizations ( No. 5, 7, 8: advertisers and advertising advocates, children, family and school advocates, media organisations) prefer more education, knowledge and culture for legislative regulations, which has to take place in families and schools and are focused on responsible consumer's behaviour, on critical assessing of ads campaigns and marketing actions of producers. They support legislative regulations in situations which are not under direct control of parents (food sale at schools, internet, targeted SMS ads).

Czech governmental organizations (category No. 6, 9: government officers and regulators) support autoregulation, they consider Czech acts and legislation to be sufficient, but feel the problem with actual enforcement, because the competences are delimitated between several subjects. They prefer educational influence of families to support healthy life style in general, and only there where the parents are powerless to act, agree with legislative regulation (school canteens, vending machines, internet, targeted SMS).

## **5. Conclusions.**

Interviews conducting in the Czech republic has shown that majority of respondents understand the increasing prevalence of childrens obesity as public health problem and many of them agree with partial arrangements of marketing and ads environment, mainly by autoregulations. Only in specific cases they agree with legislative regulations, in cases when

there is a hope that it will assist to decrease the obesity prevalence. These changes are not considered to be actually the key resolution in the combat against obesity and almost all respondents highlight the necessity to concentrate to the main risk factors of obesity, among which are, beside socioeconomic factors, nutrition and physical activity.

In this context there is usefull to mention the impact of school education and knowledge, which play together with family treatment significant role. In the Czech republic is currently in progress the reform of school educational programmes. Schools are responsible themselves for creation and formulation the programmes, based on Frame educational programme, which contents more then before many elements and recommendations derived from WHO programme Health 21. By this way school programmes now content subjects e.g. health education, education for healthy life style and healthy nutrition. There is also the course called medial education, focused on consumer behaviour, critical assessment of ads activities etc. Educational aspects are (by stakeholders) believed to be in power to influence - in long term horizont – opinions and attitudes of population and consequently also prevalence of obesity and connected diseases.

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<sup>i</sup> World Health Organization. Diet, nutrition and the prevention of chronic diseases. Report of the joint WHO/FAO expert consultation. WHO Technical Report Series, No. 916. Geneva: World Health Organization, 2003.

<sup>ii</sup> World Health Organization. Chapter 5. Dietary determinants of obesity. In: Branca F, Nikogosian H, Lobstein T (eds), The challenge of obesity in the European Region and the strategies for response. Copenhagen: World Health Organization Regional Office for Europe, 2007

<sup>iii</sup> Branca F, Nikogosian H, Lobstein T (eds). The challenge of obesity in the European Region and the strategies for response. Copenhagen: World Health Organization Regional Office for Europe 2007. (<http://www.euro.who.int/document/E90711.pdf>)