

Policy Department  
Economic and Scientific Policy

Advertising and marketing practices  
on children obesity

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## Executive summary

Childhood obesity and overweight children are serious and widespread problems in developed countries and in particular in the European Union. Many factors influence the diffusion of this epidemic: food advertising is certainly a significant factor.

This study, based on existing data and expertise, assesses several aspects: the problem's dimension, to what extent the exposure to advertising and marketing influences children diet behaviour; existing regulations in food and beverages marketing towards children and the impact of production and distribution on children's obesity.

This paper is committed to presenting a balanced picture of the variety of views supported by professionals in this field.

Several studies indicate that food advertising is associated with preferences among children towards advertised products<sup>1</sup>. According to one of the most important researchers (Lobstein and Dibb, 2005), there is a significant positive correlation between overweight prevalence and the promotion of energy dense foods, and a negative, but weaker correlation with the promotion of healthier foods.

This correlation between advertising and overweight is associative: causal evidence remains to be found; in fact the correlation may be due to other factors such as environmental or social factors encouraging children to become overweight. This brings to the reasonable conclusion that even if there is not yet a clear evidence of this correlation, policy recommendations should be based on the precautionary principle.

Most European countries have specific provisions on advertising as a special protection for children and youth. However, the situation varies from country to country as presented in this study. The most widespread regulations are those regarding television, but in most countries the general rules established by law and by the advertising self-regulation code also apply to internet.

On children's exposure to advertising, available data for France, UK, Italy, Germany and Spain show that, in children airtime, one food commercial every 5 minutes is broadcasted. This means 33,000 commercials per year. About 60% of food advertising is programmed in airtime 4-9 pm and about 40% of big-6 category (Soft drinks, Confectionary, Snacks, Fast food, Conv. Food, Cereals) TV advertising is in children's airtime. In high competitive markets, advertising plays an important role in terms of marketing expenditures. The paper reports contents and treatments of TV advertising and of other marketing tools: promotion, sponsorship, and internet. Innovation in marketing and communication tools, such as packaging, is also treated. In particular, packaging could play a better role in the communication of product features from the nutritional standpoint. The efficacy of this strategy largely depends on education and the information available to parents and young consumers.

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<sup>1</sup> Taras HL, Sallis JF, Patterson TL, Nader PR, Nelson JA (1989) Television's influence on children's diet and physical activity. *J Dev Behav Pediatr*;10:17680. - Coon KA, Tucker KL (2002). Television and children's consumption patterns: A review of the literature. *Minerva Pediatr*; 54:42336.

# 1 Introduction

## 1.1 Definition of childhood obesity and overweight children

According to the UN Convention of Children's Rights, **all persons less than 18 years old are defined as "children"**. Height and weight are considered to be the most useful anthropometrical measures for monitoring nutritional status, such as underweight, overweight and obesity, because they are simple, inexpensive and non invasive.

In particular these two combined parameters provide the Body Mass Index (BMI), calculated as weight (Kg) divided by heights squared ( $m^2$ ), which gives a raw measure of body fat.

$$\text{BMI} = \text{Weight (Kg)} / \text{Height}^2 (m^2)$$

The IOM<sup>1</sup> defines obesity in children as those having a Body Mass Index (BMI) equal to or greater than the 95<sup>th</sup> percentile of the age- and gender-specific BMI charts developed by the Centre for Disease Control and Prevention (CDC)<sup>2</sup>, and showed below<sup>3</sup>.

Overweight children, at risk of obesity, are those having a BMI between the 85<sup>th</sup> and 95<sup>th</sup> percentiles<sup>4</sup>.

In the following paragraphs, data referring to overweight children include those obese, if not otherwise specified.

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<sup>1</sup> IOM, Institute of Medicine, <http://www.iom.edu/>

<sup>2</sup> CDC, Centres for Disease Control and Prevention, <http://www.cdc.gov/>

<sup>3</sup> [www.cdc.gov](http://www.cdc.gov)

<sup>4</sup> WHO is reviewing the development of a new reference for school-age children and adolescents. Until this review is completed, WHO recommends the use of age- and gender-specific BMI for-age percentiles for children in the United States, where overweight is defined as a BMI  $\geq$  85th percentile and obesity as a BMI  $\geq$  95th percentile [H. Nikogosian, T. Lobstein (2007). The challenge of obesity in the WHO European region and the strategies to respond, edited by F.Branca,– 2007, WHO Regional Office for Europe]







## 1.2 Figures on childhood obesity

There is growing public concern over rising levels of obesity among children in many developed countries<sup>5</sup>.

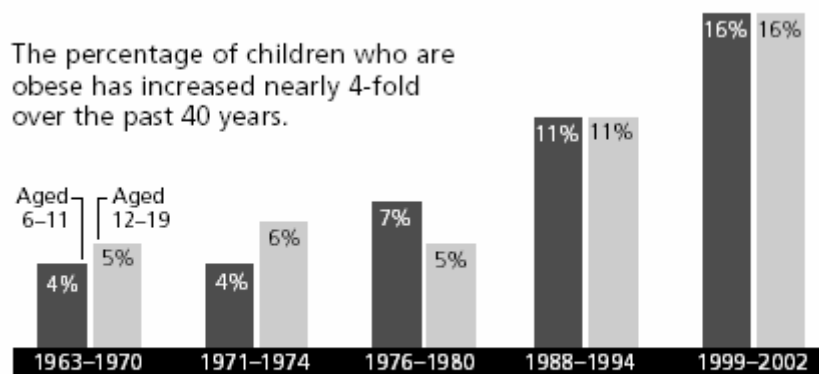
### 1.2.1 International figure: the U.S.A. case

The USA is facing a very serious problem as *obesity rates in children have more than tripled over the past four decades*. In 1963, 4% of children aged 6–11 and 5 percent of children aged 12–19 were obese. Data 40 years later (2003) show that the rate of obesity had risen to approximately 17% for both age groups (figure 1). Do these data refer to USA or global world?

In that period the number of children at risk of obesity has increased by 15%.

One of the most recent studies shows that 10 % of pre school children (2-5 years) are obese, and more than 18 million children and youth are obese or at risk.<sup>6</sup>

**Figure 1. Trend of childhood obesity according to IOM data (USA)<sup>7</sup>**



Source: Adapted from Institute of Medicine (IOM), *Food Marketing to Children and Youth: Threat or Opportunity?* December 2006, figure 2-1, p. 2-4.

While these data refer specifically to the USA, it is apparent that childhood obesity has become a worldwide epidemic, particularly in developed and rich countries. Nevertheless, very few studies have investigated the influence of food promotion on children's diet behaviour or childhood obesity<sup>8</sup>.

### 1.2.2 Situation in Europe

Overweight and obesity are serious public health challenges in Europe. 2004 data, collected by the International Obesity Task Force (IOTF), indicate that the prevalence of overweight in children aged 7-11 is in the range 10-20% in most European countries, exceeding 30% in Southern European countries<sup>9</sup>.

<sup>5</sup> S. Livingstone (2006). Does TV advertising make children fat?: what the evidence tells us, London: LSE Research Online, 2006

<sup>6</sup> E. Salinsky (2006). Effects of food marketing to kids: I'm lovin' it?, in: Issue Brief, 2006, Nr. 814

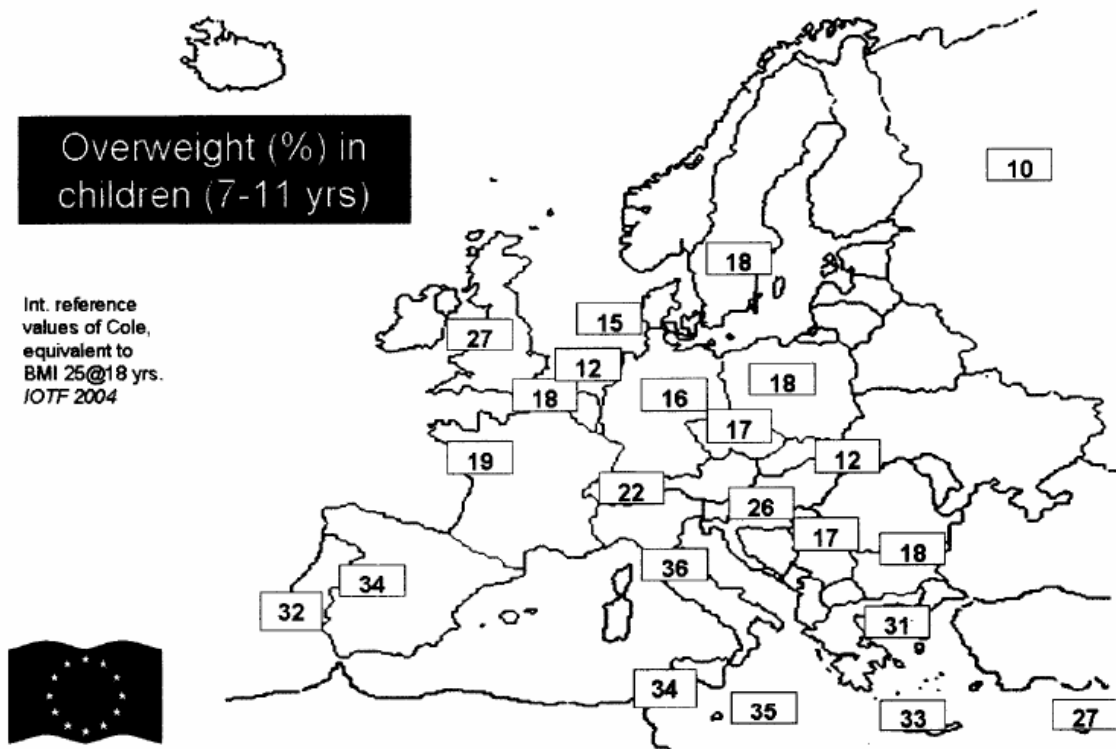
<sup>7</sup> E. Salinsky (2006). Effects of food marketing to kids: I'm lovin' it?, in: Issue Brief, 2006, Nr. 814

<sup>8</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background document n° 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006.

<sup>9</sup> Koletzko, Von Hauner (2006). Nutrition and Health claim, – in: IP/A/ENVI/OF/2005-195, DG internal policies of the union – policy department: economic and scientific policy – Feb 2006



**Figure 2 Percentage of overweight children aged 7-11 years across Europe (IOTF - 2004)<sup>10</sup>**



A study published in 2007 by the WHO Regional Office for Europe confirms these alarming findings<sup>11</sup>. The following data, based on surveys with ending year 1999 or later, taken from the WHO study and summarised below, give evidence of the vastness of the problem in European member states<sup>12</sup>:

**In the European area<sup>13</sup>, approximately 20% of children and adolescents are overweight, and a third of these are obese.**

<sup>10</sup> Koletzko, Von Hauner (2006). Nutrition and Health claim,- in: IP/A/ENVI/OF/2005-195, DG internal policies of the union – policy department: economic and scientific policy – Feb 2006

<sup>11</sup> H. Nikogosian, T. Lobstein (2007). The challenge of obesity in the WHO European region and the strategies to respond, edited by F.Branca,- 2007, WHO Regional Office for Europe

<sup>12</sup> State members of WHO Regional Office for Europe: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia And Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lituania, Luxemburg, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Republic Of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The Former Yugoslav Republic Of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom Of Great Britain And Northern Ireland, Uzbekistan

<sup>13</sup> The WHO European office country

Table 1. Data of surveys for rate of pre-school children overweight<sup>14</sup>

Country, year	% boys	% girls	Age range (years)
Ukraine 2000 (a)	27.8	27.3	0-5
Bosnia and Herzegovina, 2000 (a)	17.1	16.7	0-5
Greece, 2003 (b)	18.1	16.3	2-6
Cyprus, 2004 (b)	12.8	15.6	2-6
Sweden, 2003 (b)	19	18	4

(a) Rates calculated according to the BMI for age standard

(b) Measured height and weight from national data

Among pre-school children the highest rates were found in Ukraine and Bosnia and Herzegovina. Critical too, is the situation of Greece, Cyprus and Sweden.

Table 2. Data of surveys for rate of children of primary school age overweight<sup>15</sup>

Country, year	% boys	% girls	Age range (years)
Spain, 1998-2000 (a)	30.2	32.4	6-9
Portugal, 2002-2003 (a)	29.4	33.7	7-9
Slovakia, 2001(a)	13.6	16.8	7-9
France (a)	17.9	18.3	7-9
Switzerland, 2002-2003 (a)	17.0	19.5	6-9
Iceland, 2004 (a)	17.0	20.0	9
Ireland, 2001 (a)	22.5	29.2	4-9
Cyprus, 1999 (a)	19.9	26.3	6-9
Belgium, 2004 (b)	20.3		5-9
Sweden, 2003 (b)	19.5		8
Norway, 2000 (b)	18.5		8-9
Netherlands, 2006 (b)	14.5		2-9

(a) Measured height and weight from national data

(b) National surveys based on self-reported weight and height

<sup>14</sup> H. Nikogosian, T. Lobstein (2007). The challenge of obesity in the WHO European region and the strategies to respond, edited by F.Branca,- 2007, WHO Regional Office for Europe

<sup>15</sup> H. Nikogosian, T. Lobstein (2007). The challenge of obesity in the WHO European region and the strategies to respond, edited by F.Branca,- 2007, WHO Regional Office for Europe

The highest occurrence of overweight among children of primary school age was found in Spain and Portugal. The lowest incidence is in Slovakia, France and Switzerland.

Even though collected data show a more alarming situation in the Mediterranean countries, national surveys based on self-reported weight and height (that means less precise and often underestimated values) found a prevalence of overweight for both genders of 20.3% in Belgium, 19.5% in Sweden, 18.5% in Norway and 14.5 % in the Netherlands.

In terms of gender, studies show that boys are at higher risk: the Pro Children study<sup>16</sup> showed that more boys (17.0%) than girls (14.3%) were overweight.

The highest prevalence of overweight among adolescents was found in Irish girls (27.3%, 9–12 years) and in Spanish boys (31.7%, 10–17 years); the lowest in the Czech Republic (9.0%, both sexes 14–17 years).

Two class of age shows the prevalence of pre-obesity and obesity<sup>17</sup>: the 13- and 15-year-olds: *“among 13-year-olds, up to 34% of boys and 24% of girls were overweight; among 15-year-olds, the corresponding figures were 28% and 31%, respectively. Up to 9% of both 13- and 15-year-old boys were obese, as were 5% of both 13- and 15-year-old girls.”*<sup>18</sup>

Overweight and obesity are on the rise. It has been estimated that by 2010, the number of obese children will rise up to 15 million (does this data refer to EU or global - please also add source of information. IOTF predicts that about 38% of school-age children in the WHO European Region will be overweight by 2010 and that more than a quarter of them will be obese.<sup>19</sup>

### **1.3 The consequences of childhood obesity**

The consequences of childhood obesity are severe, and influence children’s mental, physical, and social well-being.

The most common physical disorders associated with childhood obesity are hypertension, glucose intolerance/insulin resistance, and orthopaedic problems. *E. Salinsky states that “within a decade, it is estimated that more children will have type 2 diabetes than type 1 diabetes”.*<sup>20</sup>

Mental and social problems are also related to this kind of pathology. In fact obese children are stigmatized and discriminated by their peers, often develop low self-esteem and a negative body image, leading sometimes to depression, with implications in terms of increases in health care expenditure.

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<sup>16</sup> Yngve A. Intake of fruit and vegetables in European children and their mother, folate intake in Swedish children and health indicators- Overweight, plasma homocysteine levels and school performance (dissertation) – Stockholm, Karolinska University 2005

<sup>17</sup> Curie C. et al. (2007). Young people health in context. Health behaviour in school aged children (HBSC) study: international report from 2001/2002 survey. Copenhagen, Who regional office for Europe, 2004 (health policy for children and adolescents, no. 4;

[http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601\\_1](http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601_1), accessed 19 march 2007

<sup>18</sup> Curie C. et al. (2007). Young people health in context. Health behaviour in school aged children (HBSC) study: international report from 2001/2002 survey. Copenhagen, Who regional office for Europe, 2004 (health policy for children and adolescents, no. 4;

[http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601\\_1](http://www.euro.who.int/InformationSources/Publications/Catalogue/20040601_1), accessed 19 march 2007

<sup>19</sup> H. Nikogosian, T. Lobstein (2007). The challenge of obesity in the WHO European region and the strategies to respond, edited by F.Branca,– 2007, WHO Regional Office for Europe

<sup>20</sup> E. Salinsky (2006). Effects of food marketing to kids: I’m lovin’ it?, in: Issue Brief, 2006, Nr. 814

The negative effect on health care expenditure associated with childhood obesity have both short- and long-term implications, because even when clinical symptoms of disease do not appear in childhood, social, metabolic, and physiological disorders related to obesity tend to develop in adult life and increase the risk of both premature death and disability.<sup>21</sup>

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<sup>21</sup> E. Salinsky (2006). Effects of food marketing to kids: I'm lovin' it?, in: Issue Brief, 2006, Nr. 814

## 2 Advertising and children's food behaviour

### 2.1 *Influencing factors for childhood obesity*

Data give evidence of the increase in obesity and of its risk of obesity among children. It is not easy to identify the factors influencing obesity.

The USA's Institute of Medicine's (IOM) Committee on Food Marketing and the Diets of Children and Youth observed in their major report to Congress (2005) that children's diets "result from the interplay of many factors all of which, apart from genetic predispositions, have undergone significant transformations over the past three decades".

In other words, there are multiple factors that influence childhood obesity, including individual, social, environmental and cultural factors. All factors are subject to change, and interact with each other in complex ways not yet well understood.<sup>22</sup>

Therefore, at present, there is no clear consensus regarding the range of influences on children's food choice, though these are often taken "to include gender, food costs, birth order, cultural meanings of food, obesity levels, family eating habits, parental regulation of media, parental mediation of advertising, peer norms, pro-health messages and pester power."<sup>23</sup> Moreover, there is no evidence of their relative influence. Many studies focused on food marketing; other studies investigated the assumed causal relation between food promotion and children's food preferences, diet and health.

A recent systematic review of these studies for the Food Standards Agency<sup>24</sup> reported that food promotion has an effect on children's preferences, purchase behaviour and consumption. This effect is independent from other factors and operates at both a brand and category level.

As advertising to children relates to the so called HFSS products (High Fat, Salt and Sugar) children's health is at risk.

### 2.2 *Main advertising typology for children food*

#### 2.2.1 *Food marketing means and methods*

#### **Television is the main channel used in food marketing to reach children.**

Undeniably, in order to support brand strategies, the industry has reinforced the marketing mix by combining television with merchandising, 'tie-ins' and point-of-sale activity<sup>25</sup>.

As a result, they employ of new forms of advertising, which bypass parental control and target children directly. These new marketing tools include internet promotion (using interactive games, free downloads, blogs and chatter bots), SMS texting to children's cell phones, product promotions in schools and preschools and brand advertising in educational materials, advertising in public areas such as, onscreen advertising in public transport and interactive electronic hoardings (billboards).

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<sup>22</sup> Does TV advertising make children fat?: what the evidence tells us, S. Livingstone, London: LSE Research Online, 2006, 10 p.

<sup>23</sup> E. Salinsky (2006). Effects of food marketing to kids: I'm lovin' it?, in: Issue Brief, 2006, Nr. 814

<sup>24</sup> Hasting e al (2003). Review of research on the effects of food promotion to children. Final report. Prepared for the Food Standards Agency, London (22.09.2003).

<sup>25</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background document no 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006

Examples of the variety of ways in which advertising messages about food and beverage products may be delivered have been listed by Dr. Lobstein<sup>(26)</sup> and are reported in the tables below. Chapter 5 elaborates further on the creative execution regarding food advertising.

**Table 3. Examples of media and methods used to market food and beverages<sup>27</sup>**

**Broadcast**

- *TV and radio advertising*
- *TV and radio programme sponsorship*
- *TV programme product placement*

**No broadcast**

- *Cinema advertising*
- *Film product placement*
- *Posters and advertising boards*
- *Print media: magazines and comic books*
- *Branded books e.g. counting books for preschoolers*
- *Internet: e.g. email clubs, chat rooms, free ring tones*
- *Web sites: e.g. puzzles, interactive games*
- *Promotional sales by telephone*
- *Text messaging to mobile phone*
- *Direct marketing: e.g. home catalogues, mail shots, leafleting*
- *Sponsorship of events and venues*
- *Sponsorship of teams and sports ‘heroes’*
- *Cross branding of logos on household goods*
- *Branded toys: e.g. fast food store as a playhouse*
- *Branded computer games, product placement in computer games*

**In store**

- *On shelf displays*
- *Displays at checkout till*
- *Special offers and pricing incentives*
- *Purchase linked gifts, toys and collectibles*
- *Free samples and tastings*

**On or in the product**

- *Product formulation: colours and shapes*
- *Product portions: e.g. ‘King’ size*
- *In pack promotions: e.g. gifts, vouchers*
- *On pack promotions: e.g. games, puzzles, vouchers*
- *Packaging design: imagery, colours, play shapes*

**In school**

- *Sponsorship of educational materials and equipment*
- *Vending machines in schools and youth clubs*
- *School participation in promotion and sampling schemes*

<sup>26</sup> T. Lobstein (2006). Marketing to children: understanding the need for international standards, International Obesity Taskforce/International Association for the Study of Obesity London, 2006

<sup>27</sup> T. Lobstein (2006). Marketing to children: understanding the need for international standards, International Obesity Taskforce/International Association for the Study of Obesity London, 2006

**Table 4. Examples of new directions for marketing foods and beverages<sup>28</sup>**

**On screen advertising in buses and trains**

These have already been tested in several locations in Europe and the USA. Screens are positioned to catch the attention of passengers, and may be backed up with aural messages over a loudspeaker system. External screens on the sides of buses have also been installed.

**On screen advertising in stores**

Supermarkets are exploring digital options for conveying information and marketing messages on shelf edges, at the end of aisles and at the checkout, and may have messages designed to target young people (cartoons, film images, music). The electronics company Siemens announced in December 2005 that it is developing disposable flat screen technology that it says could display animations on product packaging.

**Hyper Tag technology**

This allows mobile phone users to download material directly to their mobile phone handsets and PDAs (e.g. Palm Pilot) from electronically-chipped posters or advertisements in trains, buses at stations or in shops etc. By enabling the infrared or Bluetooth ports, the user receives a phone number, reminder prompt, game, logo, picture or ringtone.

**Interactive digital billboards**

Large-scale electronic billboards are equipped with the resolution of a cinema screen and can use built-in cameras to interact with people on the ground, recognising colour and movement and able to adapt its messages according to the weather, with special sensors recognising rain, wind and heat.

**Chat bots**

A chatterbot (also chatbot, chatterbox) is an artificial intelligence software programme that attempts to maintain a conversation with a person. Most chatter bots do not attempt meaningful dialogue but pick up cue words or phrases from the user, allowing them to use pre-prepared or pre-calculated responses to move the conversation on in an apparently meaningful way without requiring them to know what they are talking about.

Wikipedia reports that malicious chatter bots are frequently used to fill chat rooms with spam and advertising, or to entice people into revealing personal information, such as bank account numbers (<http://en.wikipedia.org/wiki/Chatbot>). Many companies, including Coca-Cola and Burger King, have begun using chatter bots to represent them on their websites or to build them into automated telephone services

**Blogs**

Blogs (web logs) are web sites used to record information, news etc of specialist interest to users. They are becoming a tool of potential interest to marketers: soft drinks firm Dr Pepper has launched its own blog ([www.ragingcow.com](http://www.ragingcow.com)) to promote its flavoured milk brand Raging Cow, and offers promotional items, samples, gift certificates, etc to other blogs that refer to the company site.

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<sup>28</sup> T. Lobstein (2006). Marketing to children: understanding the need for international standards, International Obesity Taskforce/International Association for the Study of Obesity London, 2006



### 2.2.2 Food marketing messages

The prevailing food and beverage marketing messages to children and youth have been focused on products that are high in total calories, sugar, salt, and fat and low in nutrients; there is no official definition of unhealthy food, but the above-mentioned group of food is commonly identified as HFSS (High Fat, Salt and Sugar)<sup>29</sup>. The advertised diet contrasts sharply with the one recommended by public health organizations; while correct diet behaviour gets little promotional support.<sup>30</sup>

### 2.3 Assessment of the influence of advertising on childhood obesity

In recent years many studies has been conducted in order to establish whether or not there is evidence of a direct and strong relationship between the increasing rate of overweight and obesity in children and food marketing to children. This conclusion will provide the information necessary for new policy making at national, European or world level to regulate marketing to children.

International health's organizations in particular have commissioned reports that try to give a systematic review of the studies conducted at a national level.

The most interesting and reliable results of these works are summarised in the last report of IOFT<sup>31</sup> and are reported in the following paragraphs.

Advertising to children is dominated by food promotion. As mentioned before, advertising generally is on soft drinks, pre-sugared, cereals, confectionary, snacks and fast food restaurants, generating adverse effects on energy intake.

The high intake of energy-dense, low-nutrient foods and of sugar sweetened beverages is related with chronic diseases such as obesity.<sup>32</sup>

A significant positive correlation was found between overweight prevalence and the promotion of energy-dense foods, but there is no evidence that it may be due only to this factor. On the contrary, the negative, but weaker, correlation with the promotion of healthier foods may suggest a potential benefit for healthy food marketing actions which may actually counter obesity.<sup>33</sup>

Children's nutritional knowledge, food preferences, purchasing and purchase related behaviour, consumption, and diet and health status are influenced by advertising. Several studies indicate that there is a favourable attitude towards advertised products.<sup>34</sup>

***“Even exposure to advertisements as brief as 30 seconds long can significantly influence the food preferences made by children as young as two years old”.***<sup>35</sup>

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<sup>29</sup> A. Matthews et al. (2005). The marketing of unhealthy food to children in Europe, European Heart Network, 2005

<sup>30</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background document no 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006

<sup>31</sup> T. Lobstein (2006). Marketing to children: understanding the need for international standards, International Obesity Taskforce/International Association for the Study of Obesity London, 2006

<sup>32</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background documents no 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006.

<sup>33</sup> Lobstein T, Dibb S (2005). Evidence of a possible link between obesogenic food advertising and child overweight. *Obesity Reviews*, 6:203–208.

<sup>34</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background documents no 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006.

The influence of food promotion on children's behaviour is independent of other factors and causes both brand switching and category effects.

Even though a link was found, there is no evidence, indeed, to prove that advertising has a direct effect on children's diet, and on obesity.

Focusing on the effects of television advertising, a relation between adiposity and television advertising was confirmed but the evidence is not sufficient to support a causal relationship<sup>36</sup>.

The results indicate that there is evidence of a relationship between children food marketing and children behaviour, but it is not sufficiently clear whether there is a relation between overweight or obesity in childhood and children food marketing.

This leads to a reasonable conclusion, that even if there is not yet evidence of this correlation, policy-makers must develop recommendations based on the precautionary principle. This conclusion is supported by international marketing organizations<sup>37</sup>, which has criticized the approach of health organizations in the past.

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<sup>35</sup> Borzekowski DL, Robinson TN (2001). The 30second effect: An experiment revealing the impact of television commercials on food preferences of preschoolers. *J Am Diet Assoc*;101:426.

<sup>36</sup> Hastings et al. (2006). The extent, nature and effects of food promotion to children: A review of the evidence. Background documents no 1, WHO Forum and Technical Meeting on the marketing of food and non-alcoholic beverages to children, Lysebu (Oslo), Norway, 25 May 2006.

<sup>37</sup> S. Livingstone (2006). Does TV advertising make children fat?: what the evidence tells us, London: LSE Research Online, 2006

### **3 Self regulation of media service providers and companies**

Firstly, within the process of advertising construction including strategy, creativity, production and media planning, media themselves are only the means for broadcasting/publishing the ad and they are not involved in the development of communication. In other words, media (i.e. TV, press, outdoors, radio, Internet) are the tools, the instruments and the ways thanks to which the message is on air. They are not responsible for the quality of the message itself; they are paid to vehicle the ad and do not have any role in its development or in the results that an ad is able to create. For example, advertising for cars shows the products, their technical and qualitative assets, the value of the brand and financial opportunities for customers: can we consider media responsible for car accidents? With respect to the food market, advertising usually has the goal to show the quality of the products and the creative treatment (this point will be dealt with in detail later on in this document) is always based on positive values and symbols; thereby, media are not in the condition to oppose the broadcasting/publishing of food advertising.

It is true that most European countries have their own self regulation advertising code whose goal is the warranty of honest, true and right advertising and that each self regulation code is binding for all the actors (companies, agencies, professionals, media, and dealers) who have accepted it directly or through a professional association. It is also true that all the codes give only general provisions for the quality of advertising, paying special attention to form, content and the respect of national laws.

To conclude this introduction, it is possible to highlight the following aspects:

- a. media do not have a specific self regulation code;
- b. with respect to commercials/advertising targeted to children/minors, media must respect the specific national provisions established by the law of each country.

#### **3.1 National regulations**

Most European countries have specific provisions as a special protection for minors from advertising. However, it is important to say that the situation is quite different from one country to another not only for the kind of specific norms but also for the meaning and interpretation of the concept of child/minor and the definition of advertising.

It seems that only Ireland defines a child as a person between 6 and 16. Sweden defines a young person as a person who has not reached the age of 21. In all countries except Austria, a minor has not yet reached the age of 18; in Austria, the age limit is 19.

Advertising is usually defined as a business, craft or profession carried on in order to promote the supply of goods and services, in return for payment aimed at the promotion of goods and services; but most countries (France, Greece, Iceland, Ireland, Liechtenstein, Spain, and UK) have no definition at all.

The following table shows the current situation for a selection of countries in relation to TV advertising, which is considered the key media.

**Table 5. National regulations for TV advertising<sup>38</sup>**

	Television
Belgium	Ban on advertisement in children's programmes of less than 30 minutes. Obligation to warn for harmful contents. Ban on Tele-shopping 15 minutes before and after programmes intended for children.
Denmark	Advertisements must not mislead children as to the size, value, type, durability, performance or the skill to use the products. Ban on Tele-shopping.
Germany	Ban on advertisement making a direct offer to children. No link to children's programmes. Tele-shopping must not induce minors to purchase.
Greece	Ban on advertisement for children's products. Ban on advertisement for toys (7-22) and total ban for war toys. Tele-shopping forbidden.
Italy	It is prohibited to insert adverts in cartoons.
Norway	Ban on advertisement targeting minors. Ban on advertising 10 minutes before and after programmes intended for children. Ban on sponsoring programmes intended for children.
Sweden	Ban on advertisement addressed to children under 12.
France	Adverts cannot urge children to put themselves in a situation that could cause them a prejudice or present a product in such a way that an improper or dangerous use of the product is suggested. Advertisements should not suggest that the possession or use of a product might give children physical, social or psychological superiority over those who do not own or use such product.

It is important to highlight that the above-mentioned regulations concern national channels: other channels available in each country (satellite channels, pay per view) are not subjected<sup>39</sup>.

With respect to the other media, it is possible to point out the following:

- Three countries only (France, Italy, and Spain) have specific provisions for the protection of minors from print media, aiming at protecting them from harmful contents, violent message and bad influence.
- In most countries, the general rules established by the law and by the self-regulation code of advertising also apply to the Internet. Moreover:
  - Denmark: there must be a clear distinction between advertising and access to purchase. Children must not purchase or conclude agreements.
  - France: advertising must be honest, loyal and decent.
  - Italy: advertising must respect minor's sensitivity.

<sup>38</sup> Source: [ec.europa.eu/avpolicy/docs/library/studies/finalised/studpdf/tab\\_li.pdf](http://ec.europa.eu/avpolicy/docs/library/studies/finalised/studpdf/tab_li.pdf)

<sup>39</sup> Source: [ec.europa.eu/avpolicy/docs/library/studies/finalised/studpdf/tab\\_li.pdf](http://ec.europa.eu/avpolicy/docs/library/studies/finalised/studpdf/tab_li.pdf)

With respect to the national legislation for television, it is possible to conclude that there are many differences, going from total ban to absolute freedom, while other media are not regulated.

### ***3.2 Corporate self regulation***

As published by the Italian on-line advertising magazine (Pubblicità Italia, Pubblico Today; 15 and 16 December 2007), the most important advertising big spenders in Europe (Burger King, Coca Cola, Danone, Ferrero, General Mills, Kellogg, Kraft, Mars, Nestlé, PepsiCo, Unilever) have recently signed an agreement for regulating advertising targeted to children, approving the EU request made by the European Commissioner, Markos Kyprianou. By the end of 2008, these companies will not support any form of advertising in spaces where more of 50% of audience consists of children below 12 years. These companies will not plan communication activities in elementary schools if not directly invited by the schools themselves. The agreement does not concern food products with scientifically tested nutritional standards and in line with national and international dietary provisions.

## 4 Advertising expenditure and exposure time

### 4.1 Advertising expenditure

Food is the main sector in Europe in terms of advertising expenditure, with about 1,400 billion EUR invested in 2005.<sup>40</sup>

It is more important than other sectors with a high level of advertising expenditure, such as automotive (about 1,000 billion Euro), telecommunications or toiletries (about 800 billion Euro each).<sup>41</sup>

In terms of value, food represents about 20% of the total advertising expenditure in Europe.

In terms of media mix in the food sector, television takes about 85% of total expenditure; press takes 10%, whereas the rest goes to outdoor and radio.

In the last years, e-pub (publicity in the Internet) has become increasingly important; in 2006, 8 billion EUR have been invested in the main European countries (UK, Germany, France, The Netherlands, Italy and Spain), 15% of which was spent in the food market.

Advertising expenditure of HFSS products differ amongst European countries as each country has a specific and unique food culture that influences the consumption of food products. For example, in Italy per capita consumption of confectionery is 25,5 kg; in UK it is 58,5 kg.; in Spain per capita consumption of chocolate is 3,4 kg per year; in Germany it is 9,8 kg.<sup>42</sup>

Total core category advertising expenditure is more than 600 million EUR in UK, about 250 million EUR in Italy and Germany, about 200 million EUR in France. The tables below give an overview of total advertising expenditure per sector and the media mix per sector in 2005.

**Table 6. Total advertising expenditure per sector in 2005 (x 1000 EUR)<sup>43</sup>**

Category	UK	ITALY	GERMANY	FRANCE
Soft drinks	90,000	107,000	85,000	75,000
Confectionary	150,000	60,000	90,000	80,000
Snacks	30,000	15,000	18,000	12,000
Fast food	90,000	22,000	33,000	30,000
Conv. food	180,000	65,000	60,000	55,000
Cereals	70,000	15,000	25,000	22,000

<sup>40</sup> Source NASA - data revalued by Eumedia

<sup>41</sup> Source NASA - data revalued by Eumedia

<sup>42</sup> Source NASA - data revalue by Eumedia

<sup>43</sup> Source: NASA - data revalued by Eumedia

**Table 7. Media mix for each sector in 2005 (%)<sup>44</sup>**

Category	UK				ITALY				GERMANY				FRANCE			
	TV	Pr	Rd	Od	TV	Pr	Rd	Od	TV	Pr	Rd	Od	TV	Pr	Rd	Od
Soft drinks	78	11	9	2	95	1	4	-	90	3	3	4	81	9	5	5
Confectionary	77	12	8	3	90	4	-	10	88	4	5	3	83	2	3	12
Snacks	72	11	8	9	85	2	10	3	87	3	5	5	88	2	6	4
Fast food	73	13	6	8	82	-	10	8	84	6	5	5	78	5	11	6
Conv. food	72	10	7	11	88	5	-	7	89	4	2	5	87	3	3	7
Cereals	78	11	5	6	90	10	-	-	90	3	-	7	89	1	10	-

On table 7, TV: Television; Pr: Press; Rd: Radio; Od: Outdoors advertising-huge posters.

#### **4.2 Children's exposure to advertising**

The average daily time spent by children watching television is about 3 hours. The highest exposure to television is about 6 hours, made by those children living in working families with middle/low economic level and where both parents are out of home most of the day. It is quite obvious that this cluster of children is the less protected against advertising; moreover, their way of living is sedentary and the risk of obesity is very high.

A marketing research committed by Italian Association of Consumers (Cooperativa di Consumatori - COOP) shows that one food commercial every 5 minutes is broadcasted in children airtime in Italy, whereas a commercial is aired every 10 minutes in the other European countries. This means 33,000 commercials per year. About 60% of food advertising is programmed in airtime 4-9 pm and about 40% of big 6-category TV advertising is in children's airtime.

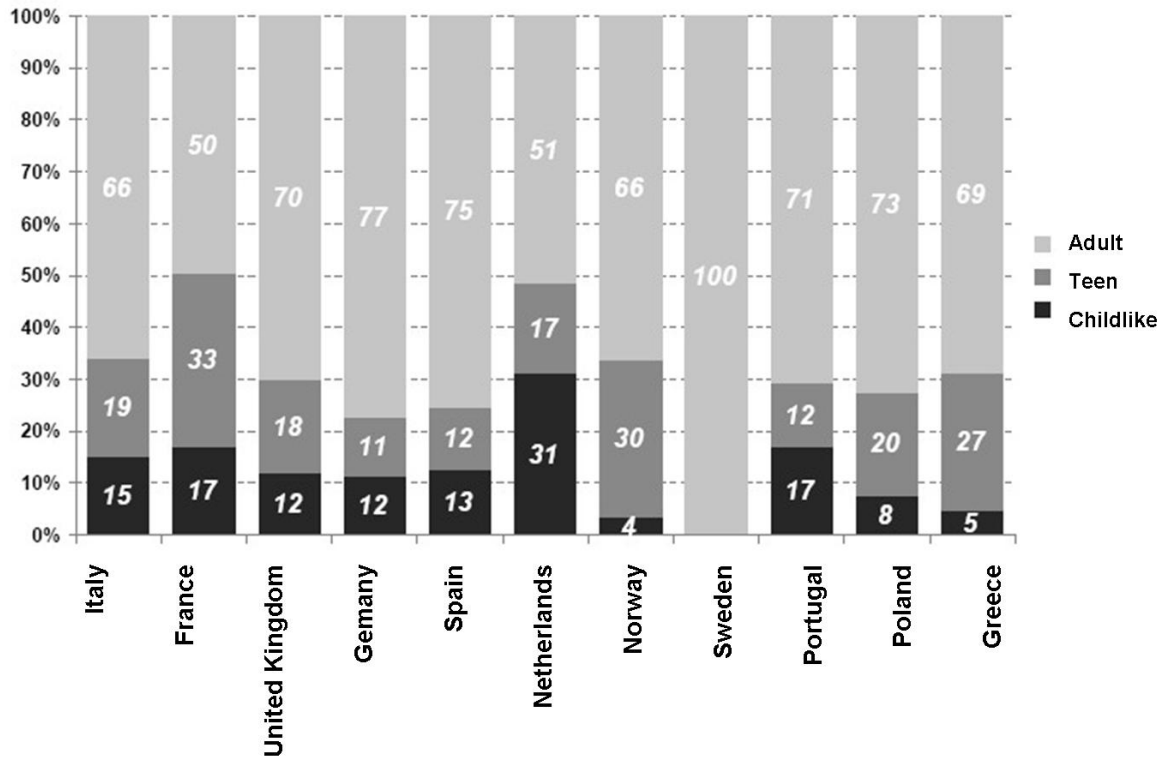
Consequently, children watch an average of 29 commercials per day and in the period 2 pm-6 pm, 60% of these commercials (17) are for big-6 products, whereas the rest is for toys (20%) and other products. In the airtime 2 pm – 9 pm, 40% of commercials is for big-6 products. Minors and teenagers are an important target group for food advertising as shown in the following chart.

<sup>44</sup> Source: NASA - data revalued by Eumedia



Figure 3<sup>45</sup>

TV commercials target range



It seems that there is no market research about children exposure to other media (outdoor, print, cinema, radio, Internet) to allow for a complete picture. However, it is clear that children's exposure to TV advertising is quite high. Many studies show that children over 4 are able to distinguish advertising from programmes as well as reality from fiction, but a scientific approach is lacking to prove how much advertising influences their perception, creates latent needs or encourages consumption. Therefore it is possible to say that marketing/advertising to children is certainly one of the causes of children's obesity. Nevertheless, it is not the only one and it is not possible to measure its weight in comparison to the other personal and social factors (lifestyle, family situation, food culture, etc.)<sup>46</sup>.

<sup>45</sup> "In bocca al lupo" – food advertising and minors, marketing research developed by Marina D'Amato, sociology teacher at Sapienza University, Rome. Commissioned by COOP Italia

<sup>46</sup> "In bocca al lupo" – food advertising and minors, marketing research developed by Marina D'Amato, sociology teacher at University La Sapienza, Rome. Committed by COOP Italia.

## 5 Creative executions

### 5.1 General considerations

In highly competitive markets, where there is a wide range of products, products themselves are quite undifferentiated in consumers' perception and the price/quality ratio is a must, the brand/product name becomes a means for building a competitive advantage and a strong relationship with trade and consumers, especially towards young consumers. This is the reason why advertising plays such an important role in terms of marketing expenditure.

Advertising supports the brand/product awareness through the communication of its positive features – both in terms of its “recipe” and composition and in terms of its qualitative value – communicating the positive plus and not the negative minus. The final result is a tasty, rich, palatable product, whereas the “promise” conveys several ideas or sensations:

- a general “goodness” of the product, for example a wonderful taste (snack);
- a nutritional help: some products cannot be renounced because they are an important means for children nutrition (breakfast cereals, snack);
- a status symbol: food as a moment for socialization inside and outside the family (fast food, prepared food) or a means for being a member of a “tribe” (chips and salted snacks).

### 5.2 Contents and treatments of TV advertising

In the Big-6 categories and in the food market in general, creative approaches are generally based on one or the combination of the following:

- the quality of ingredients/taste: genuineness and naturalness of ingredients make a product appealing;
- nutritional values and “nourishing capability”; and
- association with symbolic models: the consumption of the product makes the consumer similar to people/situations shown in advertising.

At the same time, creative treatments are calibrated towards the ideal consumer of the product and developed through the following features:

- cartoon: products are connected with a typical children's world and there is usually an interaction between the hero and the children;
- life style: product is a means for having good time, a tool for creating a network of friends, for making your way of living up to date or fashionable; and
- the happy family: product as a means for spending time with the family.

Some examples: one of the most important European confectionary company (Ferrero) patterns advertising of most of its snacks (Duplo, Fiesta, Tronky) as follows. A part of the commercial focuses on the quality of ingredients; another part focuses on the consumption situation and the benefit of eating the product while showing, at the same time, the self imaged consumer (who we would like to be when we use a product or ideal target group). The third part is the promise: a safe and good product that can be eaten by children with mothers' permission.

Kellogg's Breakfast cereals show cartoon heroes that are the friend of the child. Eating cereals makes the child as strong as the heroes, because the product is healthy and helpful for their diet.

Coca Cola invites consumers to discover the Coca Cola side of life - a world full of colours, good time and music - through showing the trip of a young man into a magical reality.

In conclusion, creative approaches and treatments of HFSS products (and of food products in general) aim at promoting the quality of products, persuading consumers of the fact that product consumption is always positive. There is no mention about the problems that their wrong use or abuse can create nor a warning for correct consumption.

### **5.3 Other marketing tools: promotions, sponsorships, the Internet**

Promotions, sponsorship, point of sale materials can improve the relationship between the brand/product and consumers through traditional systems as well as:

- gift in pack/gift in products (toys, badges, accessories);
- collection and prizes (travels, movies, music); and
- co-marketing operations (amusement parks, films).

For example, in the fast food market, the most important chains (McDonalds, Burger King) always run promotional activities targeted to children through:

- special menus in special packs that link up food with a gift (Simpsons, Scooby Doo, Walt Disney's pets); or
- the possibility to win prizes (journey to Disneyland, DVD of famous cartoon movies, free tickets for cinemas).

During the last few years, a new and standard promotional approach based on charity or co-marketing with no-profit organizations has been widely used. This is a way to enhance and to prove the involvement of the brand/product in the social life, in order to persuade children that the brand/products themselves are good and making children part of something helpful and positive.

For example, Loacker (one of the most important confectionary companies in Italy) was the first company in Italy to use ecological packs approved by WWF, whose logo was printed on the packaging itself.

The “social” approach is also frequently used for sponsorship; in this case, the brand/product is the promoter of special activities that do not seem to have a commercial benefit.

For example, Coca Cola has organized and sponsored a soccer championship addressed to schools in Italy.

The Internet is a powerful means for creating communication activities addressed to children/minors and it usually happens through advergame. This approach can draw attention to a product/brand in a playful way and for an extended period.

The structure is always the same: creating a situation connected to product/brand personality for proposing an entertainment moment giving cartoon-style games and competitions links to food company websites and educational contents which appeals to schools.

### **5.4 Innovative distribution channel: vending machines**

There is ongoing research on new and innovative distribution channels, capable of reaching young consumers out from the traditional channels and far from parental control.

Vending machines (which are a new means in some countries while already established in others) enable covering locations attended by children/minors (schools, underground stations, etc.) as well as encouraging the consumption of products.

## **5.5 Packaging**

The role of the packaging and packs is a form of advertising. Packaging is a marketing tool to communicate the brand/ product and its features. From a creative point of view, they always contain the brand/product name, colours and other items drawing the attention to the quality (ingredients, end results, etc.).

Packaging could have a better role in the communication of product features, such as nutritional features of the contents of “dangerous” ingredients, if they were printed in a more understandable way. Many consumers do not know the meaning behind amounts of fats or carbohydrates as mentioned in the nutritional tables on the packaging.

## **6 Conclusion and recommendations**

First of all, as stated in §2.3, even if there is not yet evidence of any direct and causal relation between overweight or obesity in childhood and children food marketing, it is necessary that policy-makers develop recommendations based on the precautionary principle.

There is not yet a uniform approach to the problem of marketing and minors/children, causing heterogeneous and uncoordinated policies. It seems necessary to draw the attention to television and also to the other media used to reach children. Since advertising does indeed influence children's behaviour, advertisers should adopt an educational approach to advertising geared to children, leveraging their powerful communication tools to address and encourage positive nutritional behaviour.

A similar educational approach can be found in the automotive market where advertisements promote the use of seat belts or encourage no drinking when driving as the suggestion as "if you drink do not drive".

In the meantime, national governments have developed many social campaigns to stimulate safer behaviour in drivers.

In the food market, advertising is only aimed at promoting brand-products; therefore, the definition of unhealthy products is also important to widen a better food culture, by providing a more effective nutrition education and promoting a general educational focus on food and health, as well as physical activity.

Furthermore, there is no official definition of unhealthy food, but this group of foods is commonly identified as HFSS (High Fat, Salt and Sugar). Therefore, it seems especially important to establish a definition of HFSS products – or better – of unhealthy food products, and to build a list of unhealthy products, bearing in mind that such unhealthy products do not always correspond to a brand. For example, cheese is not unhealthy by itself, but its abuse supplies too much fat to our body.

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