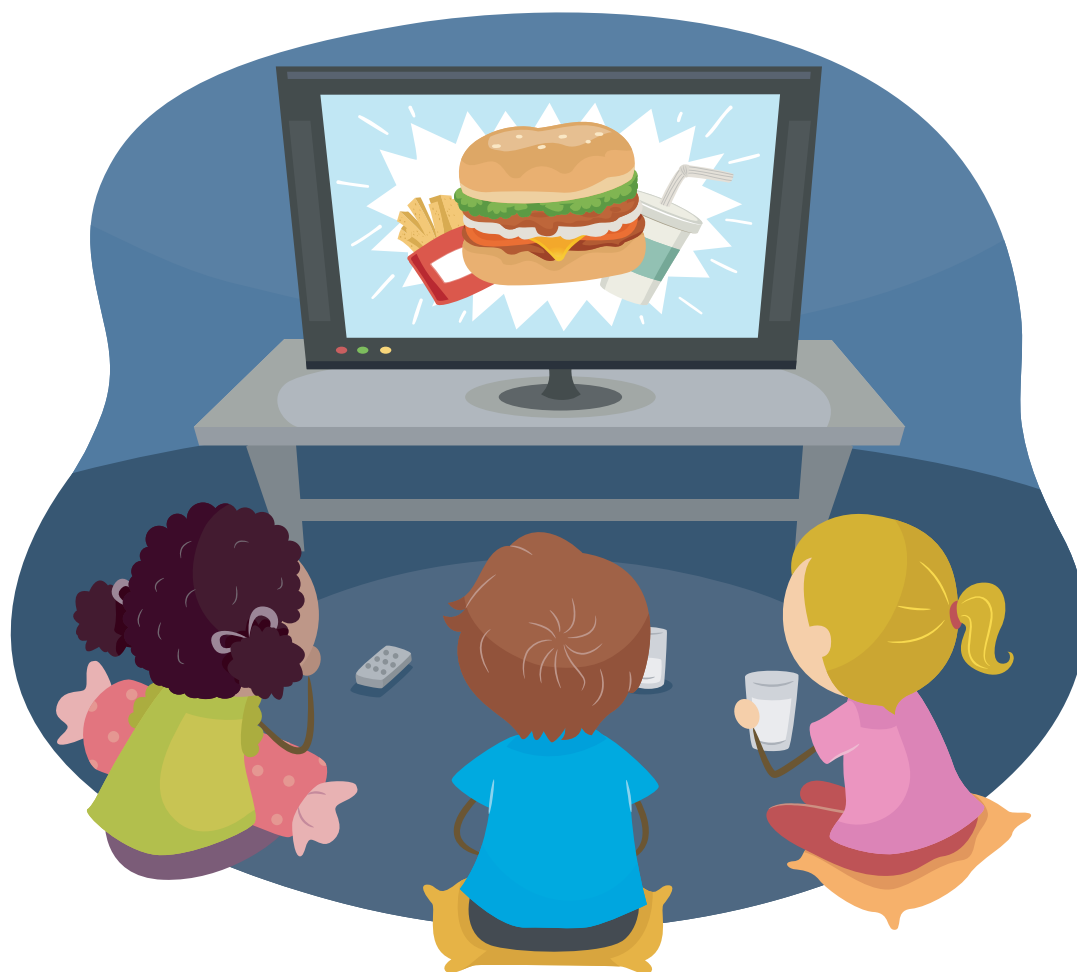


MONITORING FOOD AND BEVERAGE MARKETING TO CHILDREN VIA TELEVISION IN THE KYRGYZ REPUBLIC



Abstract

This report summarizes the results of a 2018 survey of food and beverage marketing to children via television in the Kyrgyz Republic. It explores the extent and nature of children's exposure to marketing for food high in saturated fat, free sugars and/or salt via television in the country. The study results can be used by policy-makers to restrict and regulate marketing of food high in saturated fat, free sugars and/or salt both on television and in other media.

Keywords

CHILDREN

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Monitoring food and beverage marketing to children via television in the Kyrgyz Republic

Key findings 2019

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Abbreviations

| | |
|--------------|---|
| COSI | Childhood Obesity Surveillance Initiative |
| HFSS | high in saturated fats, trans fats, free sugars and/or salt |
| NCDs | noncommunicable diseases |
| WHO | World Health Organization |
| WHO NP model | WHO Regional Office for Europe nutrient profile model |



1. Background

Childhood obesity is one of the greatest public health challenges of the 21st century. It is estimated that up to 200 million school-age children worldwide have overweight, of which 40–50 million are classified as having obesity (1).

The Kyrgyz Republic has no official national data on the prevalence of childhood obesity and children's diet. However, the "Interepid" study showed that families report excessive consumption of salt (39.8%), sugar (54.3%) and animal fats (96.1%), while insufficient consumption of fresh vegetables and fruits was mentioned by 53.3% of respondents (2, 3). A recent surveillance study of noncommunicable disease (NCD) risk factors conducted in the Kyrgyz Republic found that the prevalence of overweight was 33.1%, while the obesity rate was 23.1% (4).ⁱ A recent WHO European Childhood Obesity Surveillance Initiative (COSI) study in neighbouring Kazakhstan revealed that 6% of children aged 8–9 years already had obesity (5); it may be expected that similar results will be obtained in the Kyrgyz Republic, where the field work for the first national COSI survey was completed in 2018.

Childhood obesity has immediate negative impacts on children's health and well-being; it also presents longer-term risks for adult populations. Globally, overweight and obesity are today among the top five risk factors for mortality. It is estimated that 44% of diabetes, 23% of coronary heart disease, and between 7% and 41% of cancers are associated with overweight and obesity (1). Children with obesity are more likely to develop NCDs such as diabetes and cardiovascular disease, and to do so at a younger age. Moreover, older children with obesity are more likely to develop adverse conditions such as sleep apnoea, increased risk of fractures, hypertension, various forms of cancer, and insulin resistance. Childhood obesity is also associated with an increased risk of emotional problems; adolescents

with weight problems tend to have much lower self-esteem and lower academic performance, and are less popular among their peers (6). Depression, anxiety and obsessive-compulsive disorders can also occur as a result of childhood obesity (1).

Beyond the health risks linked to obesity, the longer-term economic consequences are enormous, both for families and for health systems. Direct health costs resulting from obesity include preventive, diagnostic and treatment services. European countries spend 2–8% of their health budgets on obesity-related activities, representing up to 0.6% of their gross domestic product (1). Preventing childhood obesity appears to be the only feasible option (7).

The determinants of childhood obesity are numerous and work at the individual, family and environmental levels. It has been demonstrated that changing availability, affordability and promotion of products high in saturated fats, trans fats, free sugars and/or salt (HFSS) have contributed (along with physical inactivity) to energy imbalance and the development of obesity (7, 8–10).

A systematic review conducted by WHO in 2008 produced strong evidence that marketing of HFSS food products has a significant impact on children's knowledge, preferences and consumption of certain foods that result in weight gain (11). At the same time, a number of international studies have found that HFSS products such as sweet breakfast cereals, soft drinks, confectionery, biscuits, savoury snacks, ready meals and fast food are most frequently advertised and often use techniques designed to appeal to children and adolescents. On the basis of this evidence, in May 2010 WHO Member States endorsed Resolution WHA 63.14, which called for restrictions on the marketing of food and nonalcoholic beverages to children. The WHO

ⁱ This study, conducted in collaboration with the World Health Organization (WHO), was part of WHO's STEPwise approach to surveillance of noncommunicable diseases (STEPS).

Set of Recommendations on the Marketing of Food and Non-Alcoholic Beverages to Children, which subsequently emerged, urges Member States to impose comprehensive restrictions on the marketing of HFSS food products to children in all media, including digital media, and to gradually fill in gaps that currently exist in the legislation (12).

Since then, several more documents have endorsed the Set of Recommendations, calling for stronger action to end the marketing of HFSS products to children. These include, notably, the Vienna Declaration on nutrition and NCDs, the WHO European Food and Nutrition Action Plan, and the Report of the WHO Commission on ending childhood obesity (13–15).

WHO recommends that “all policy frameworks include a monitoring system for tracing the progress towards the national policy goals” (12). WHO recommends that monitoring assesses exposure (quantity, frequency, and coverage of marketing of unhealthy foods to children) and power (use of specific marketing methods) (12).

Most of the existing data on food and beverage marketing come from high-income English-speaking countries, particularly Australia, the United Kingdom and the United States (16–19). To achieve a greater balance, WHO has recently been working with countries

to expand the evidence base in other parts of the world and to inform policy development in these countries.

In 1998 the Law of the Kyrgyz Republic “On Advertising” was adopted. However, even with subsequent amendments and additions, this law still does not regulate marketing of foods and beverages targeted at children, except for a ban on advertising of alcohol and tobacco products. The Kyrgyz Republic has no official information on food marketing, elucidating (for example) what type of marketing is used to appeal to children, the capacity of such marketing, and the extent to which advertised products comply with the WHO Regional Office for Europe nutrient profile model (WHO NP model) for children. No studies have been published with an assessment of the impact of TV advertising on the health of children and adolescents.

In light of the above, the aim of this analysis is to study the nature of TV marketing of HFSS products to children and adolescents and to quantify the extent its impact on them. The findings of this study, implemented in accordance with the protocol developed by the WHO Regional Office for Europe (20), will be of interest to policy-makers, researchers, public health professionals and action groups not only in the WHO European Region but in other countries all around the world.

2. Methods

2.1 Preparatory stage

The study protocol was developed on the basis of a methodology previously used in several other countries (21–23); it was devised in collaboration with experts from the WHO Regional Office for Europe and coordinated by consultants from the National Research Center for Preventive Medicine of the Ministry of Health of the Russian Federation. The preparatory phase comprised development of the protocol and a two-day training session for key participants in Bishkek, capital of the Kyrgyz Republic, which covered the main components of the study.

2.2 Data sampling

TV channels in the Kyrgyz Republic can be divided into two groups: federal channels, which are accessible throughout the country and included in the basic television package; and regional and cable channels, which are only accessible in certain regions of the country, have smaller audiences, and often broadcast on a commercial basis. For the purposes of this study, only federal channels were analysed, as they have larger base audiences.

Channels were selected on the basis of their popularity and coverage of the target audience (children and adolescents). For channel identification, we used the following methods: search for surveys of media popularity, social surveys, and official statistics. We excluded all subscription, cable and regional

channels from the analysis and focused only on those channels that could be watched by children and adolescents regardless of their place of residence and level of family income. Following this procedure, we identified six national television channels to monitor for advertising; these are the channels most often watched by children and adolescents under the age of 16: Balastan, 312 Cinema, KTRC, KTRC Music, KTRC Sport and Tumar (Table 1).

Of the six channels analysed, only one (Balastan) is considered to be exclusively intended for children (mostly broadcasting animated films); the other five channels have wider appeal, attracting an audience that includes adolescents.

The following programme recording methodology was used. For each channel, all TV broadcasts were recorded over two weekdays and two weekend days, between 06:00 and 22:00, from March to May 2018 (Table 2). Following the study protocol, holidays and special days, such as the celebration of Victory Day (9 May), were excluded, so that only data reflecting the normal pattern of TV advertising would be collected. For the same reason, we did not record TV programmes broadcast during the week immediately preceding festivities. In total, 384 hours of TV broadcasts were recorded on DVD over 24 days (12 weekdays and 12 weekend days).

Table 1. Relative popularity of different TV channels in Kyrgyz Republic

| Channel | Primary audience (years) | Viewership as % of that age group |
|------------|--------------------------|-----------------------------------|
| Balastan | 4–15 | 28.0 |
| 312 Cinema | 10–45 | 14.0* |
| KTRC | 10–45 | 31.0* |
| KTRC Music | 10–45 | 29.0* |
| KTRC Sport | 10–45 | 20.0* |
| Tumar | 10–45 | 7.0* |

* No official data about ratings among children and adolescents were available.

Table 2. Recording schedule of selected TV programmes

| Channel | Weekdays | | Weekend days | |
|-------------------|---------------------|---------------------|---------------------|---------------------|
| Balastan | 14 May 2018 (Mon) | 16 May 2018 (Wed) | 13 May 2018 (Sun) | 19 May 2018 (Sat) |
| 312 Cinema | 21 May 2018 (Mon) | 25 May 2018 (Fri) | 19 May 2018 (Sat) | 20 May 2018 (Sun) |
| KTRC | 30 March 2018 (Fri) | 18 May 2018 (Fri) | 25 March 2018 (Sun) | 22 April 2018 (Sun) |
| KTRC Music | 9 April 2018 (Mon) | 10 April 2018 (Tue) | 14 April 2018 (Sat) | 15 April 2018 (Sun) |
| KTRC Sport | 16 May 2018 (Wed) | 17 May 2018 (Thu) | 20 May 2018 (Sun) | 27 May 2018 (Sun) |
| Tumar | 11 April 2018 (Wed) | 12 April 2018 (Thu) | 12 May 2018 (Sat) | 13 May 2018 (Sun) |

2.3 Coding

All the data were coded by two people. Prior to the analysis, each person coded one hour of TV recording. The results were then discussed to reach agreement between the two coders and to eliminate inconsistencies. In addition, any differences in coding were discussed with the coordinators from the National Research Center for Preventive Medicine.

All recorded TV broadcasts were viewed (in fast-forward mode) to detect commercials. Further analysis of advertising content was then carried out.ⁱⁱ All TV advertisements were coded according to the coding method described in the WHO Regional Office for Europe protocol (20). Some additional codes were added to take account of types of TV advertisement peculiar to the Kyrgyz Republic (i.e. types not commonly found elsewhere). In particular, coding for social advertising was added (for more on social advertising, see Section 3.3 below).

Food advertisements were coded in accordance with the indicators suggested in the WHO protocol (20) and entered into Excel spreadsheets. Information on products advertised included the following characteristics: brand name of the product; product

description; nutritional value; product category code (following the WHO NP model); and information on whether the product would be permitted under the WHO NP model.

One problem encountered when coding foods in the Kyrgyz Republic is that mandatory labelling rules for food packaging normally require inclusion only of total fat content, total sugar content (carbohydrates), total protein content (all in grams per 100 g of product), and energy value (in kilocalories per 100 g of product), together with a list of ingredients (without specifying quantities). There is no mandatory requirement that a packaging label gives information on quantities of salt, added sugar or trans fats, so most manufacturers do not provide such information. This information is required in order to code products according to the WHO NP model. Thus, we were obliged to add the code “Unknown” to the column “Marketing authorized under the WHO NP model” for situations where available information was not sufficient to make a decision.

Statistical analysis, including descriptive statistics, was carried out using IBM SPSS Statistics 23 for Windows.

ii This protocol focused solely on spot advertising and did not include programme sponsorship. Items considered to be part of programming and therefore not included as advertising are: opening and closing credits, closed captioning acknowledgements, brief sponsorship announcements, and promotions for content to appear later in the same programme. Sponsorship can vary dramatically, from simply flashing a logo on screen to a short (almost advertisement-like) segment. Capturing all these types within the same study without losing accuracy is therefore difficult. As sponsorship is not included, findings are likely to underestimate the full extent of food promotion on TV.

3. Results

3.1 Exposure variables

In total, 2132 advertisements were analysed by two researchers. Of these, 49.3% were broadcast on weekdays and 50.7% at weekends. The distribution of commercials on weekdays and weekends, by channel, is shown in Fig. 1. As can be seen, on the channels Balastan and Tumar, there was a slight increase in the proportion of advertisements at weekends. On the other four channels (KTRC, 312 Cinema, KTRC Music and KTRC Sport), there was little difference between the number of advertisements broadcast on weekdays and at weekends (Tables A1.1–3).

Analysis of advertising frequency by time slot/interval showed the following. For all channels, fewest advertisements (7.4%) were shown in the early morning hours, between 06:00 and 09:00. Thereafter, from 09:00 to 17:00, the frequency of advertising increased and remained fairly stable. After 17:00, the frequency of advertising increased significantly: indeed, nearly half

(47.6%) of all recorded and analysed advertisements were broadcast in the five hours between 17:00 and 22:00 (Tables A1.1–3).

There were quite significant differences in the frequency of advertisements by time slot/interval on different TV channels (Fig. 2). Thus, on the children’s TV channel Balastan, there were two distinct frequency peaks of advertisements in the day, 07:00–09:00 and 14:00–19:00, during which more than 70% of all advertising on the channel was broadcast. In the daytime (09:00–14:00), when children were at school, only about 20% of commercials were broadcast. On channels with greater appeal to teenage audiences (KTRC Sport, 312 Cinema and Tumar), the frequency of advertisements was more evenly distributed throughout the day. On KTRC and KTRC Music, the highest frequency of advertisements was registered in the evening, from 18:00 to 22:00 (Fig. 2; Tables A1.1–3).

Fig. 1. Proportion of recorded and viewed advertisements on weekdays and at weekends

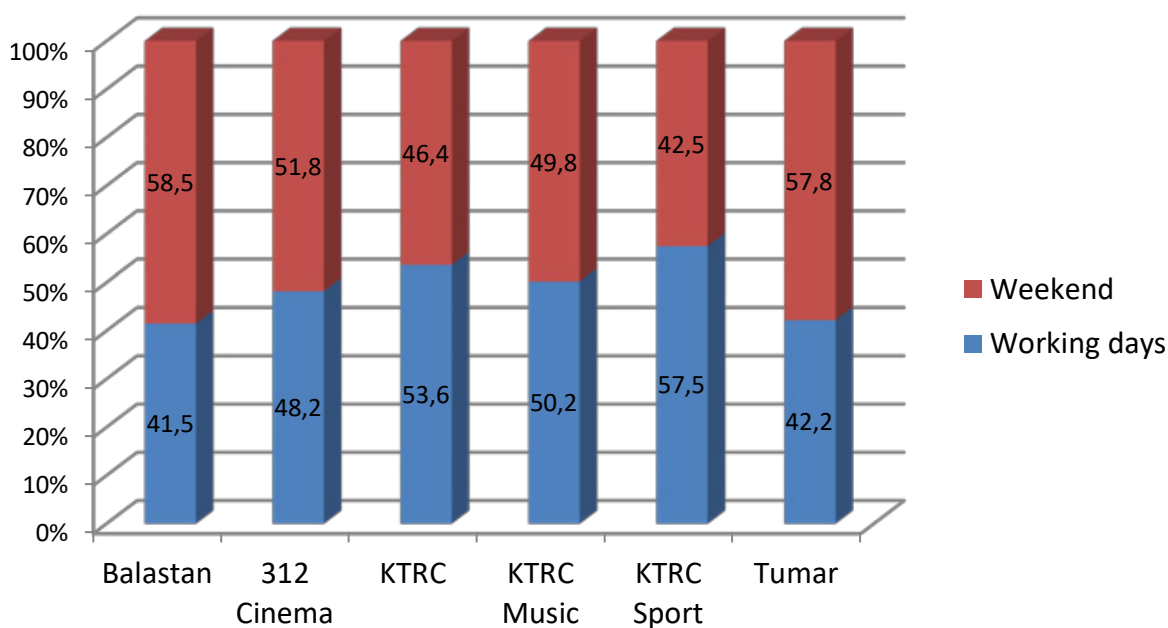
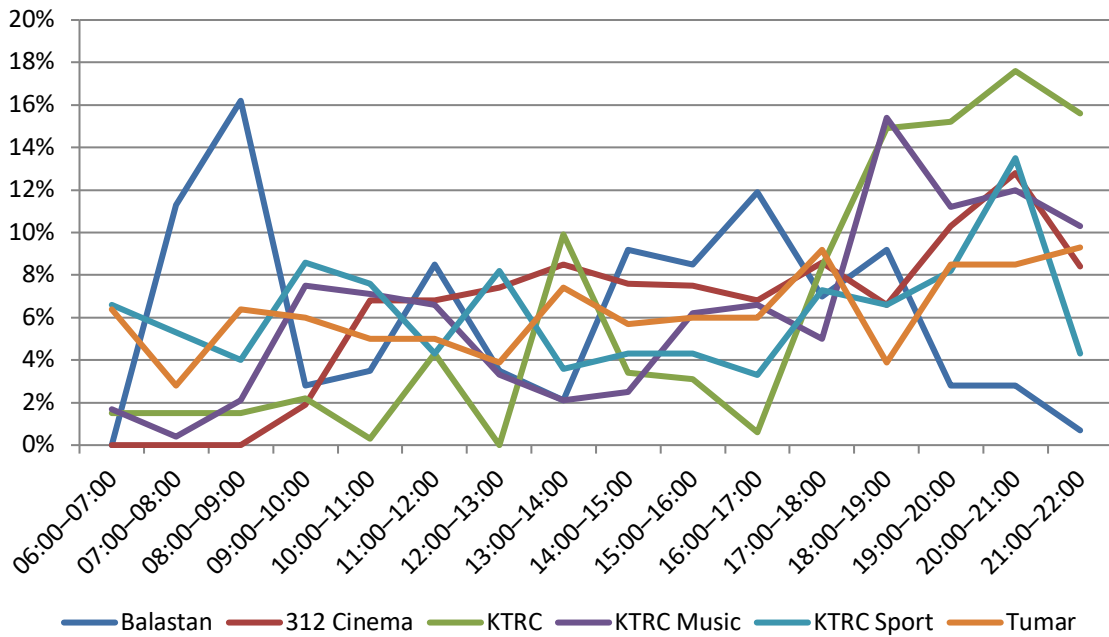


Fig. 2. Distribution of recorded and viewed advertisements, by time slot and TV channel

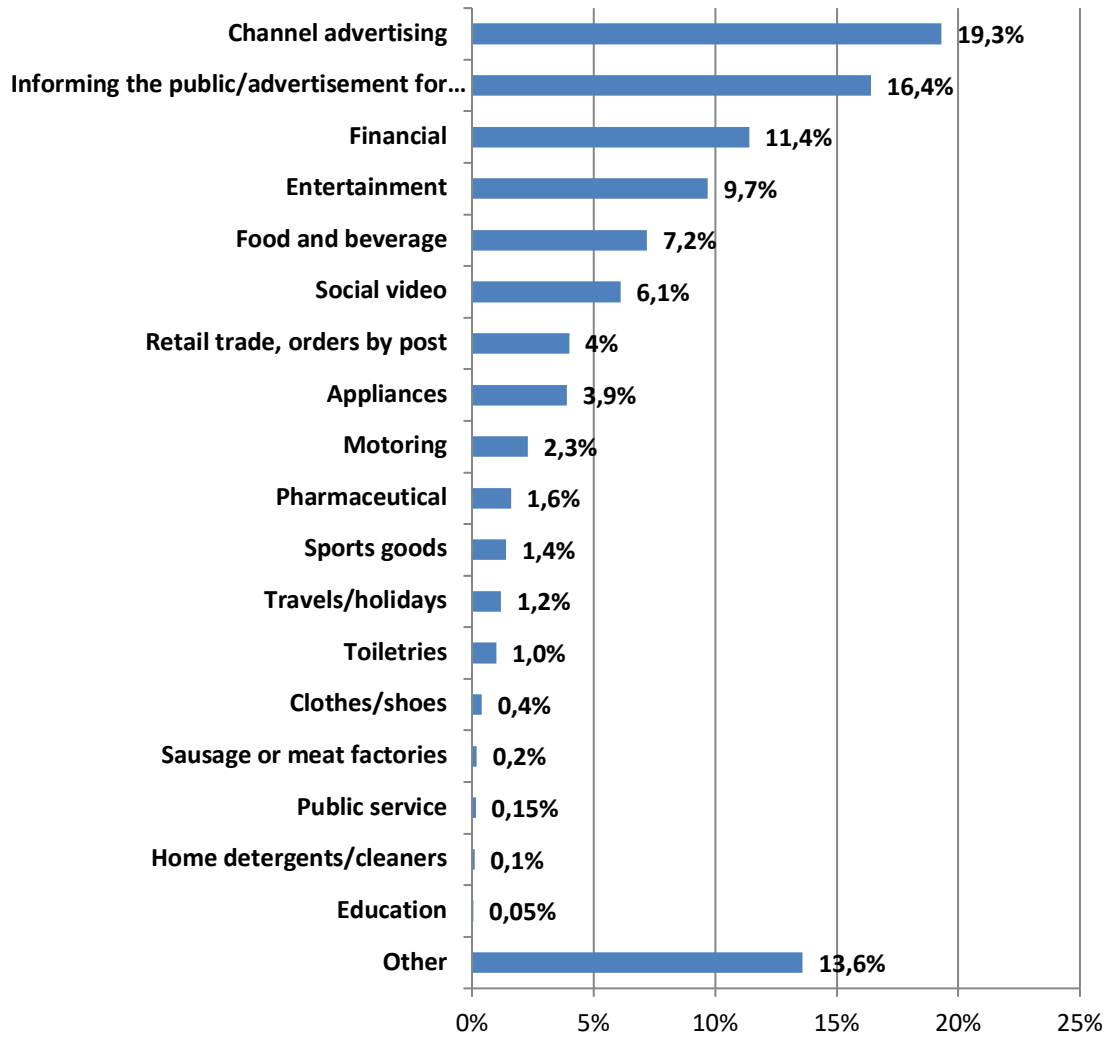


In terms of types of advertising, the most common categories were: channel advertising (19.3%); informing the public/advertisement for domestic services (16.4%); financial advertising (11.4%); entertainment (9.7%); and food and beverages (7.2%) (Fig. 3). On weekdays, the most common types of advertising were channel advertising (23.4%), consumer services (17.1%) and financial advertisements (9.5%); and at weekends, channel advertising (15.4%), consumer services (15.2%), financial advertisements (13.2%), and entertainment (13.0%) (Tables A1.4–6).

We introduced an additional category of advertised products, “Sports goods”, which is not included in the WHO Regional Office for Europe protocol; in our study, this category accounted for 1.4% of advertisements.

Some explanation is also needed to account for the high frequency of advertisements classified as “Other”. Following consultation with the WHO expert, we included in this category commercials dedicated to the 140th anniversary of Bishkek and the 90th anniversary of the birth of the great Kyrgyz writer Chingiz Aitmatov, as these events were widely celebrated in the Kyrgyz Republic in 2018.

Fig. 3. Proportion of advertisements by product type



Advertising of food and beverages was only broadcast on three of the six TV channels analysed: KTRC, KTRC Music and KTRC Sport; 312 Cinema, Tumar and the children’s channel Balastan did not advertise any food and beverage products at all. The most intensive

advertising of food and beverages for the entire period of the study was broadcast on KTRC Music (33.2%), while there was a roughly equal amount of such advertising on KTRC (11.8%) and KTRC Sport (11.6%) (Fig. 4; Tables A1.4–6).

Fig. 4. Proportion of advertisements dedicated to food and beverage products, by channel

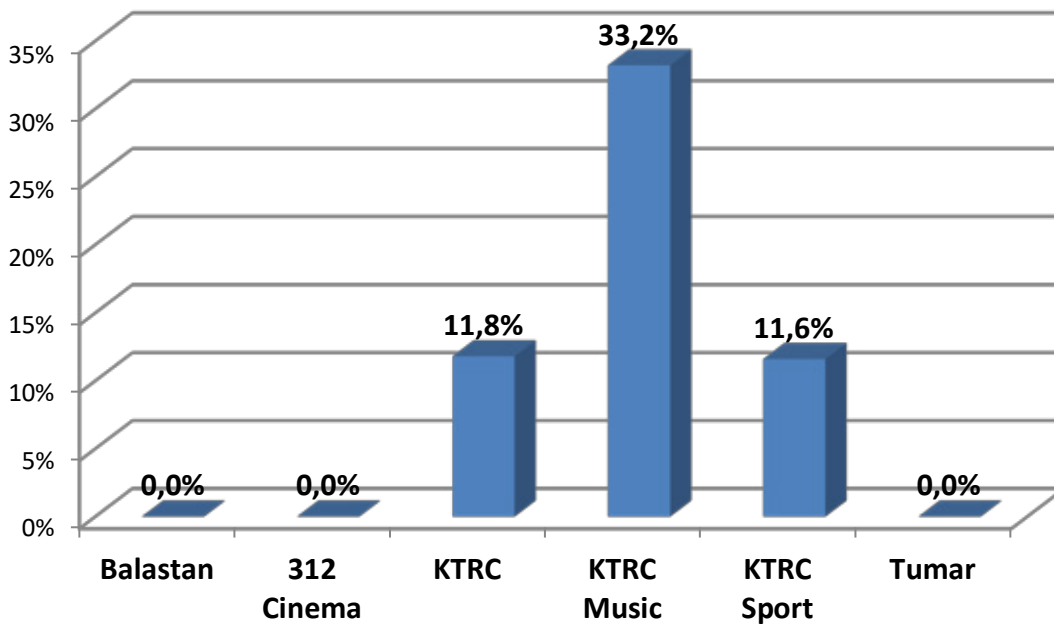


Fig. 5 shows the breakdown of advertising of food products/beverages, following the WHO NP model. According to our data, the following types of products/drinks were most often advertised: soft drinks – including Coca-Cola, Fanta and lemonades (49.7%); juices (18.3%); and savoury snacks, including crisps (chips), nuts, popcorn, Kirieshki (bread croutons), etc. (17.0%). Advertising of chocolate and sugar

confectionery (7.2%) and milk beverages (7.2%) was rather less frequently broadcast. Semi-finished, ready-made and composite dishes (0.6%) were the least commonly advertised food product. It is important to note that there was a marked increase in commercials of sugar-containing drinks and juices on weekends compared to weekdays (Tables A1.7–9).

Fig. 5. Proportion of advertisements dedicated to different types of food and beverage, following the WHO NP model

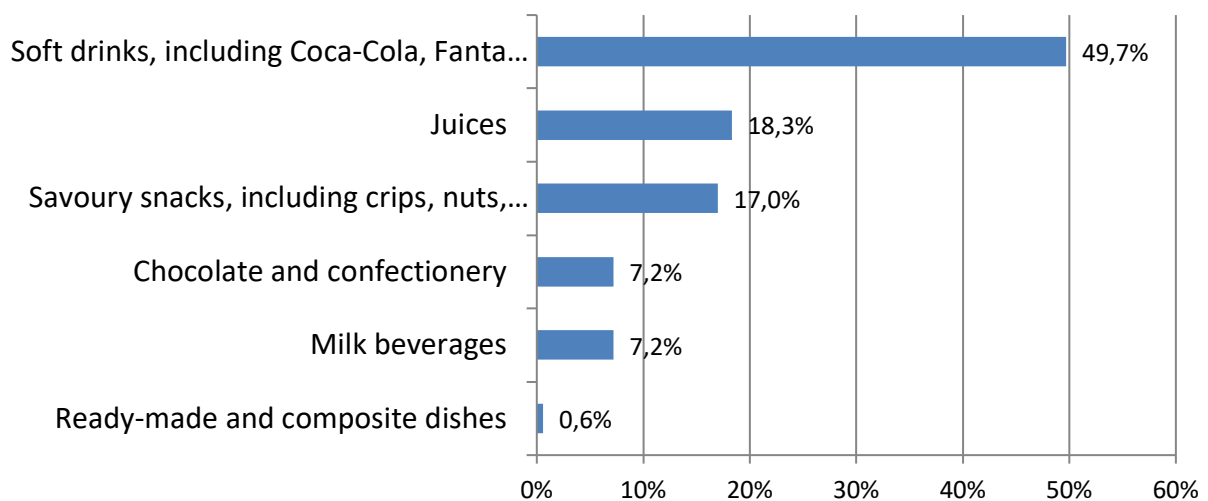
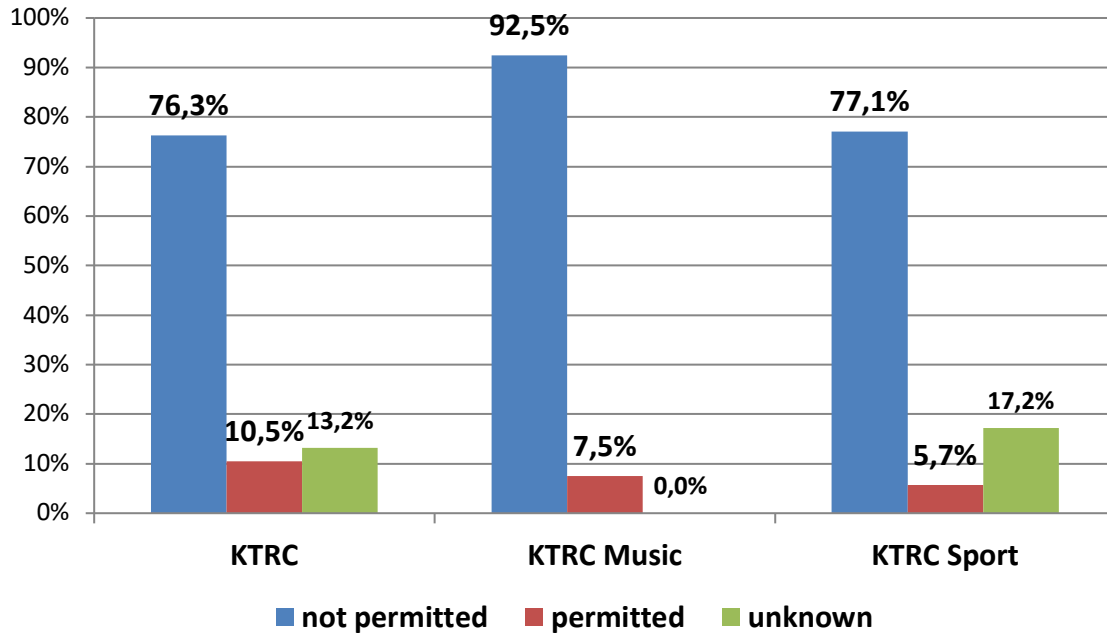


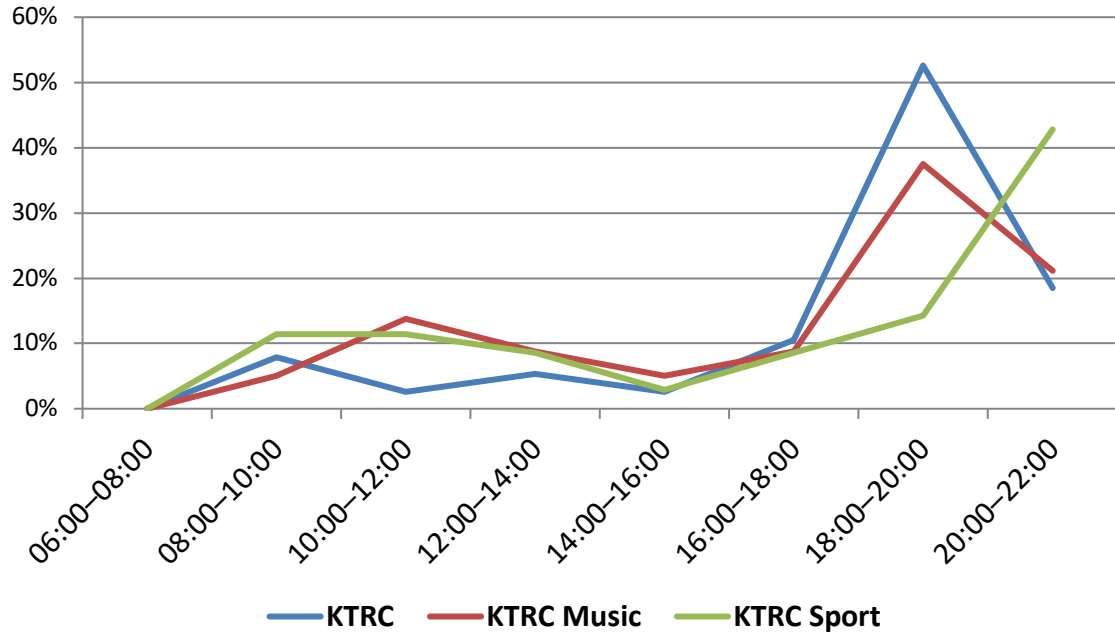
Fig. 6. Proportion of food and beverage advertisements permissible or impermissible for marketing to children according to the WHO NP model, by channel



Next, we evaluated the proportion of advertised products that would be permitted or not permitted for marketing to children according to the WHO NP model. It turned out that only 7.8% of advertised products would be permitted for marketing to children, while 85% would not be permitted. Lack of information on ingredients (in particular, content of added sugars and sweeteners) prevented us from classifying 7.2% of commercials, which were placed under the “Unknown” category. Impermissible products were most frequently advertised on KTRC Music, with no significant difference between weekdays and weekends (Fig. 6; Tables A1.10–12).

Food and beverage advertising across all channels was very unevenly distributed throughout the day. Food advertisements were not broadcast on any channel before 08:00. From 08:00 to 18:00 the amount of food advertising within each two-hour interval/slot represented 5–10% of all such advertisements per channel. By far the largest shares of food and beverage advertising fell in the periods 18:00–20:00 (35.9%) and 20:00–22:00 (25.5%); this trend was typical for both weekdays and weekends (Fig. 7; Tables A1.13–15).

Fig. 7. Distribution of food and beverage advertisements, recorded and viewed, by time slot and channel



A similar situation was observed with respect to advertising of food and beverage products not permitted for marketing to children. Fewest such commercials were broadcast in the early morning hours and between

14:00 and 18:00. Most such advertisements were broadcast, on all channels, from 18:00 to 22:00. This trend was similar both for weekdays and for weekends (Fig. 8; Tables A1.16–18).

Fig. 8. Distribution of advertisements, recorded and viewed, of foods not permissible for marketing to children, by time slot and channel

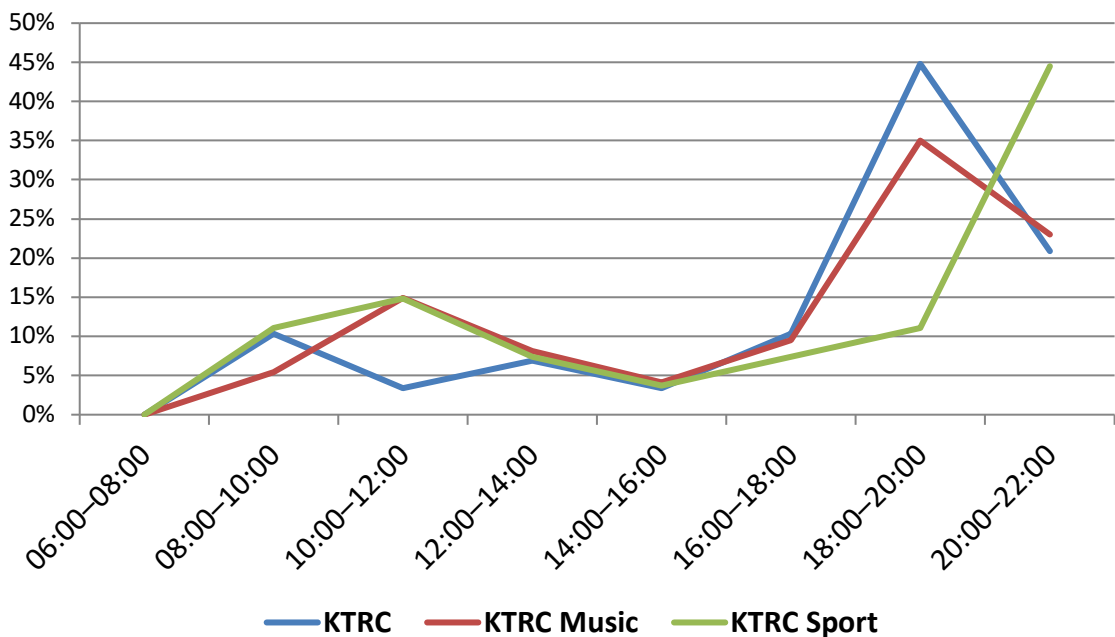


Fig. 9. Average number of food advertisements per hour, overall and of products not permitted for marketing to children, by channel

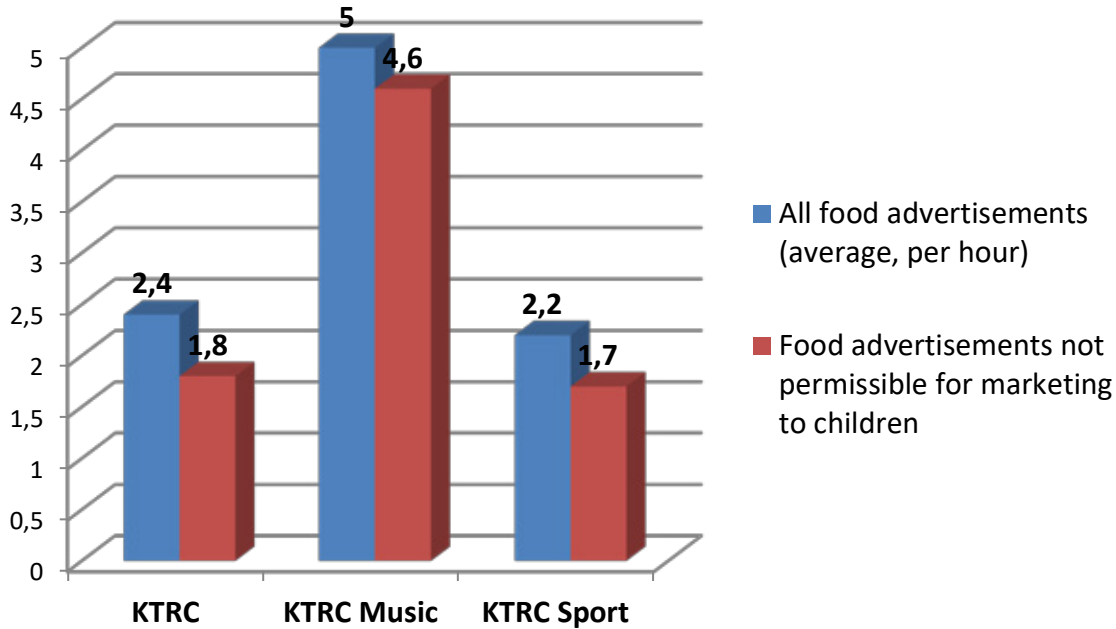


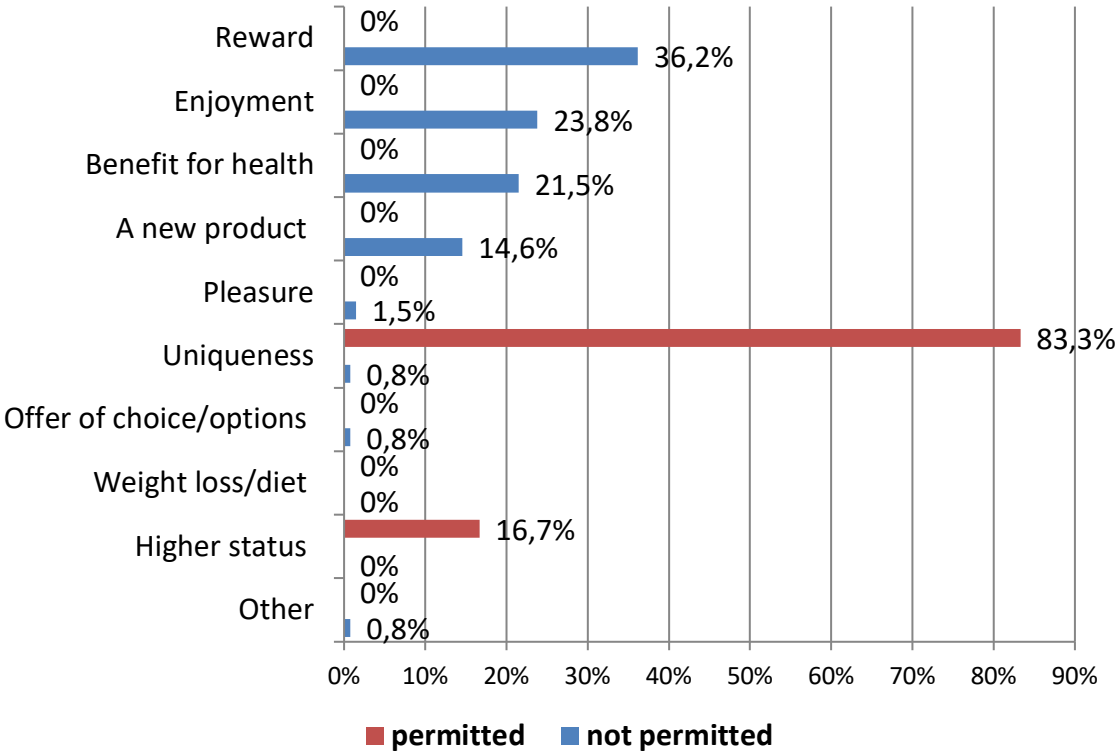
Fig. 9 shows the average number of food advertisements per hour broadcast by each channel overall, compared to the number of food advertisements for products that are not permitted for marketing to children. Of the three channels watched by and targeted at teenagers that broadcast food advertisements, KTRC Music broadcast such advertisements at the highest frequency (5 per hour); of these, 4.6 were advertisements for food products that are not permissible for marketing to children. In broad terms, KTRC and KTRC Sport broadcast a similar number of food advertisements per hour, on average (2.4 and 2.2, respectively); of these, 1.8 and 1.7, respectively, were for products not permissible for marketing to children.

3.2 Power variables

Next, we evaluated the key persuasive appeals and marketing techniques used in promoting food products

(Fig. 10; Tables A1.19–20). Many of the techniques previously described in the literature were present in food and beverage advertising analysed in the Kyrgyz Republic. The key persuasive appeals identified in advertisements for food products not permissible for marketing to children were: reward (36.2%), enjoyment (23.8%), and health claims ascribed to the advertised product (21.5%). Less frequently, advertisements used a new product launch (14.6%) or pleasure (1.5%) as appeals. Different motivational appeals were observed in advertisements for foods permissible for marketing according to the WHO NP model. In these cases, the principal motivations were uniqueness (83.3%) and enhanced status (16.7%).

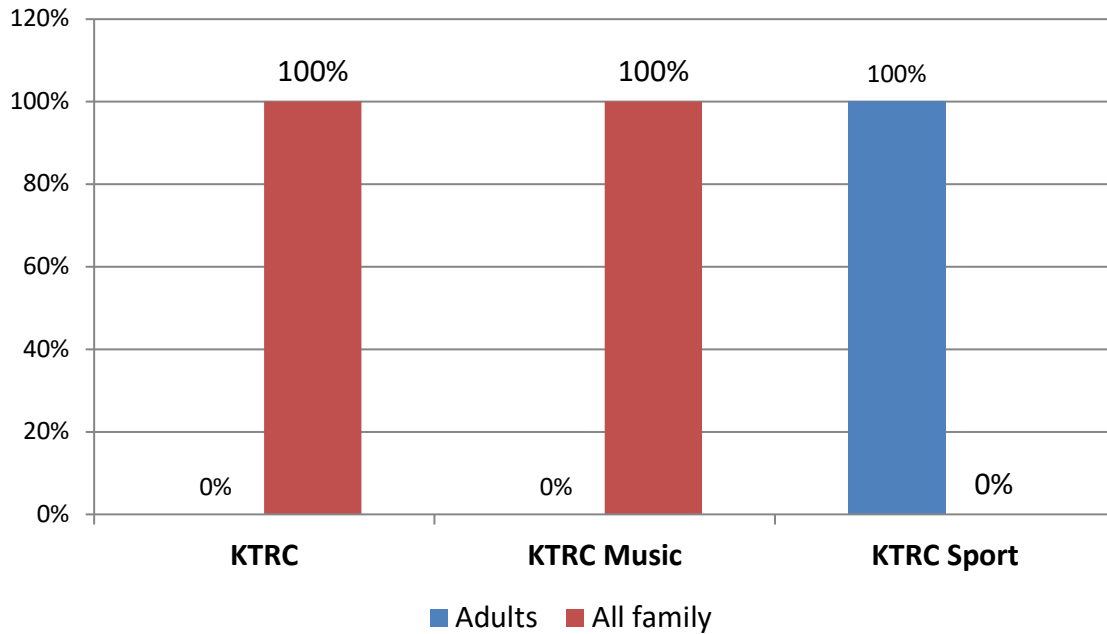
Fig. 10. Persuasive appeals used in advertising of food products permissible and impermissible for marketing to children, in accordance with the WHO NP model



When analysing the content of food advertisements, we did not identify advertisements aimed exclusively at children. We did, however, identify advertisements of appeal to children and adolescents as well as to

the whole family. Foods permissible for marketing to children were primarily targeted at the whole family or adults (Fig. 11; Table A1.21).

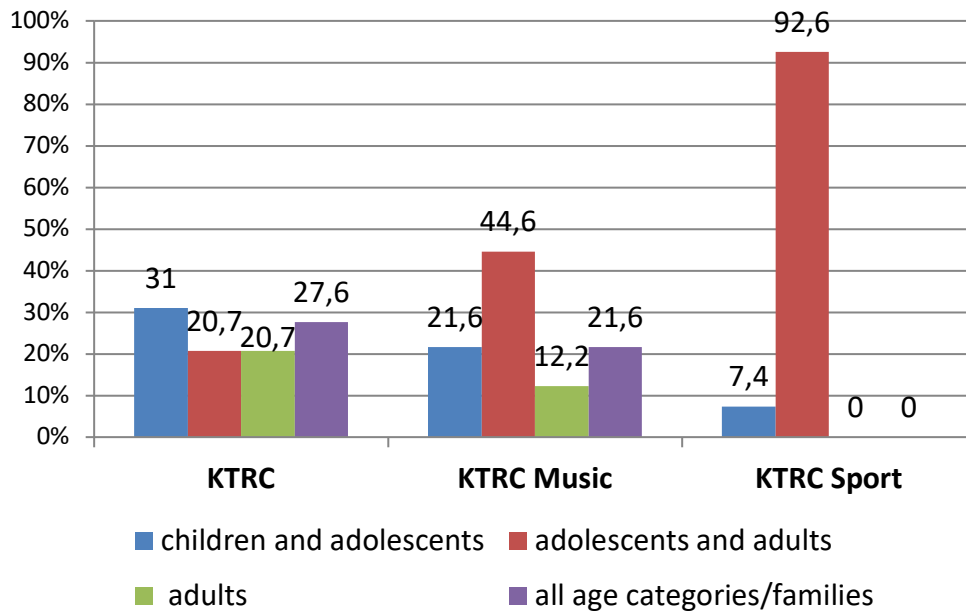
Fig. 11. Main target audience for advertisements of products permissible for marketing to children according to the WHO NP model



The target audience for foods impermissible for marketing to children was primarily adolescents and

adults (49.2%) or children and adolescents (20.8%) (Fig. 12; Table A1.22).

Fig. 12. Main target audience for advertisements of products impermissible for marketing to children according to the WHO NP model



3.3 Social advertising

Social advertising comprises non-commercial advertising aimed at behaviour change, addressing health and safety issues, important social problems, etc. Under Kyrgyz legislation, such advertising should occupy at least 5% of the total monthly advertising space (Article 20-3 of the Law KR on advertising of 26 April 2013, No. 62). Over the period of the survey

(24 days, 06:00–22:00), social advertising accounted for 6.1% of all advertisements, which corresponds closely to the above-mentioned article of the Kyrgyz law. The largest shares of social advertising were broadcast on KTRC (20.5%) and KTRC Sport (13.6%). The researchers found no social advertising on 312 Cinema or Tumar (Tables A1.4–6).

4. Discussion

Food marketing is recognized as an important factor influencing purchasing and consumption preferences for food and beverages (11). A significant number of studies demonstrate a direct link between exposure to advertising of HFSS food products (i.e. the amount of such advertising viewed) and the development of childhood obesity (16, 17, 24, 25). Lobstein & Dobb (16) in their earlier systematic review used data from the USA, Australia and eight European countries to demonstrate a significant association between the number of food advertisements per hour on children's TV and the frequency of childhood obesity. Carter (26) emphasized the limited ability of children, particularly pre-school and early schoolchildren, to perceive the commercial nature of advertisements.

Our study was the first of its kind to deal with TV marketing of foods and beverages to children and adolescents in the Kyrgyz Republic. It was made possible by the support and cooperation of WHO experts working under the coordination of specialists from the Ministry of Health of the Russian Federation. The study protocol was developed on the basis of a methodology previously used in several countries (21–23); it has much in common with the protocol used in a similar study recently conducted in the Russian Federation (27).

We obtained data on the extent and nature of food advertising in the Kyrgyz Republic. This information allowed us to examine the proportion of such advertisements that would or would not be permissible for marketing to children according to the WHO NP model.

We studied the TV output of six federal channels popular with children and teenagers, analysing a total of 2132 advertisements broadcast between 06:00 and 22:00 on 24 separate days. One of the six channels (Balastan) was considered to be a children's channel, mostly broadcasting animated films; the other five were directed at adolescents.

Food and beverage advertising was identified on three of the six TV channels analysed; it was, on average, the fifth most frequent of all types of advertised products (7.2%). Overall, therefore, the exposure of the Kyrgyz population, including children and adolescents, to food advertising is relatively low and significantly below similar indicators in countries such as the Russian Federation (19.2%) (27), Germany (18.5%) (28), the United Kingdom (12.8%) (29) and China (25%) (30). Three channels, including the children's channel Balastan, did not advertise food and drinks at all. This is positive, but it does mean that the proportion of food and beverage advertising on the other channels was comparatively much higher and closer to the values observed elsewhere.

On the channels directed at adolescents, the most commonly advertised products were soft drinks with added sugar and sweeteners (49.7%) and natural juices (18.3%). In this regard, our data coincide with the findings of research into websites popular among children in the USA, which showed that 60–84% of advertised products were HFSS or met the criteria set by the National Academy of Medicine for “products that should be avoided” (31). Somewhat less frequent is advertising of savoury snacks (crisps/chips, crackers, etc.), although their share is still quite significant (17.0%). Studies from the Kyrgyz Republic indicate that the sodium content of commonly available savoury snacks is extremely high – one portion can contain nearly an entire day's maximum recommended intake of sodium (32). At the same time, marketing of dairy products (including yoghurts) and chocolate and confectionery products appeared to be relatively low (both 7.2%) when compared to the Russian Federation, where advertising of dairy products was in first place in the overall ranking of commercials for food products (27).

It should be noted that the national channels do not advertise certain food types, such as fruit and vegetables, that have a beneficial effect on children's health and are approved for marketing. The absence

of such advertising on TV is also reported by Russian researchers (27).

In assessing whether the foods and beverages advertised were permissible for marketing to children and adolescents according to the WHO NP model, it was found that the great majority of foods (85%) were not allowed. We were unable to classify 7.2% of food advertisements because the products concerned failed to give sufficient information on their composition, so we can assume that the amount of unauthorized advertising is in fact even higher. Similar data on frequency of unauthorized advertising to children and adolescents were found in the Russian Federation (61.9%) (27), USA (84.4%) (18), Canada (78.5%) (17), and Germany (73%) (28); unauthorized food products were advertised less frequently in China (48%) (30).

On the channels popular with adolescents, the average frequency of food and beverage advertising was 2.2–5.0 advertisements per hour, while in the case of products not permissible for marketing the figure was 1.7–4.6. A similar frequency of advertising of food products, including those not permitted for marketing, was observed in China (30), while similar indicators in the Russian Federation, Europe and North America were slightly higher (17, 18, 27, 28).

On all three channels that were found to advertise foods and beverages, a peak in advertising occurred in the evening, with the largest number of advertisements broadcast between 18:00 and 20:00 (35.9%) and between 20:00 and 22:00 (25.5%). Such peaks are found in studies from other countries, and – worryingly – they typically coincide with peak viewing times of children and adolescents (33). Given that the power of food marketing is principally determined by overall exposure, the fact that the majority of such advertisements are broadcast during children and adolescent viewing times means that these age groups are likely to see a significant amount of advertising for foods, including HFSS products, even if they are not the main “target audience”.

Typically, food advertisers use various motivational techniques when marketing their products. A systematic review published in 2014 analysed 38 publications and found that the most common methods of persuasion used in food and beverage advertising were use of premium offers, advertising characters, information on health utility, and appeal to taste and emotional attractiveness (19). Similar data were obtained in our study. We observed that reward (36.2%) and pleasure (23.8%) were the most frequent motivational appeals used in advertising food and drink products impermissible for marketing according to the WHO NP model. Of particular concern was the fact that, in 21.5% of cases, the word “health” was used as the primary incentive in promoting a given product. It is clear that such advertising is unfair and seeks to mislead consumers; it should be scrutinized by the relevant legal authorities. Misleading types of advertising were also recorded on Russian TV, but rather less often (9%) (27).

We found that only 20.8% of commercials for impermissible products were designed specifically for children and adolescents. However, it should be noted that food advertisements intended only for adults made up just 11.5% of the total. Given the peak in food and beverage advertising between 18.00 and 20.00, even if younger children are not the primary audience of the advertisements broadcast, it is likely that they are exposed to a significant amount of marketing and will be influenced by it.

Under Kyrgyz legislation, the total amount of social advertising (non-commercial advertising aimed at behaviour change, addressing health and safety issues, important social problems, etc.) should take up at least 5% of the total monthly advertising space used in the previous month (Article 20-3 of the Law KR on advertising of 26 April 2013, No. 62). Over the period of the survey (24 days, 06:00–22:00), social advertising accounted for 6.1% of all advertisements – closely compliant with the relevant Kyrgyz legislation and clearly a statistic to be welcomed.

5. Conclusion

Marketing of unhealthy foods and beverages is an important public health issue and a key contributory factor in the growth of childhood obesity worldwide. Our study is the first of its kind to analyse TV marketing of foods and beverages to children and adolescents in the Kyrgyz Republic.

We identified the following positive aspects in food and beverage advertising in the Kyrgyz Republic: the absence of such advertising on a number of children's channels and (to a lesser extent) on youth channels; a relatively small proportion of food advertisements in the overall advertising structure; and a relatively high proportion of social and educational advertising on

Kyrgyz TV. At the same time, it should be acknowledged that marketing of unhealthy food products accounts for more than 85% of food product advertising to children and adolescents and that there is a lack of legislative restrictions on marketing food products to children. One in every five advertisements for foods not permissible for marketing to children uses the word "health" as an incentive/persuasive appeal, which is clearly misleading for consumers. We suggest that the relevant enforcement authorities take this and other, broader findings of the study into account when considering changes in the existing legislation.

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Annex 1

Table A1.1. Number and percentage of advertisements shown each hour (06:00–22:00), by channel (all days)

| Time slot/interval (one-hour increment) | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| 06:00–07:00 | 0 | 0.00 | 0 | 0.00 | 5 | 1.50 | 4 | 1.70 | 20 | 6.60 | 18 | 6.40 | 47 | 2.20 |
| 07:00–08:00 | 16 | 11.30 | 0 | 0.00 | 5 | 1.50 | 1 | 0.40 | 16 | 5.30 | 8 | 2.80 | 46 | 2.20 |
| 08:00–09:00 | 23 | 16.20 | 0 | 0.00 | 5 | 1.50 | 5 | 2.10 | 12 | 4.00 | 18 | 6.40 | 63 | 3.00 |
| 09:00–10:00 | 4 | 2.80 | 16 | 1.90 | 7 | 2.20 | 18 | 7.50 | 26 | 8.60 | 17 | 6.00 | 88 | 4.10 |
| 10:00–11:00 | 5 | 3.50 | 57 | 6.80 | 1 | 0.30 | 17 | 7.10 | 23 | 7.60 | 14 | 5.00 | 117 | 5.50 |
| 11:00–12:00 | 12 | 8.50 | 57 | 6.80 | 14 | 4.30 | 16 | 6.60 | 13 | 4.30 | 14 | 5.00 | 126 | 5.90 |
| 12:00–13:00 | 5 | 3.50 | 62 | 7.40 | 0 | 0.00 | 8 | 3.30 | 25 | 8.20 | 11 | 3.90 | 111 | 5.20 |
| 13:00–14:00 | 3 | 2.10 | 72 | 8.50 | 32 | 9.90 | 5 | 2.10 | 11 | 3.60 | 21 | 7.40 | 144 | 6.80 |
| 14:00–15:00 | 13 | 9.20 | 64 | 7.60 | 11 | 3.40 | 6 | 2.50 | 13 | 4.30 | 16 | 5.70 | 123 | 5.80 |
| 15:00–16:00 | 12 | 8.50 | 63 | 7.50 | 10 | 3.10 | 15 | 6.20 | 12 | 4.30 | 17 | 6.00 | 129 | 6.10 |
| 16:00–17:00 | 17 | 11.90 | 57 | 6.80 | 2 | 0.60 | 16 | 6.60 | 10 | 3.30 | 17 | 6.00 | 119 | 5.60 |
| 17:00–18:00 | 10 | 7.00 | 73 | 8.60 | 27 | 8.40 | 12 | 5.00 | 22 | 7.30 | 26 | 9.20 | 170 | 8.00 |
| 18:00–19:00 | 13 | 9.20 | 56 | 6.60 | 48 | 14.90 | 37 | 15.40 | 20 | 6.60 | 11 | 3.90 | 185 | 8.60 |
| 19:00–20:00 | 4 | 2.80 | 87 | 10.30 | 49 | 15.20 | 27 | 11.20 | 25 | 8.20 | 24 | 8.50 | 216 | 10.10 |
| 20:00–21:00 | 4 | 2.80 | 108 | 12.80 | 57 | 17.60 | 29 | 12.00 | 41 | 13.50 | 24 | 8.50 | 263 | 12.30 |
| 21:00–22:00 | 1 | 0.70 | 71 | 8.40 | 50 | 15.60 | 25 | 10.30 | 12 | 4.30 | 26 | 9.30 | 185 | 8.60 |
| Total | 142 | 100.00 | 843 | 100.00 | 323 | 100.00 | 241 | 100.00 | 301 | 100.00 | 282 | 100.00 | 2132 | 100.00 |

Table A1.2. Number and percentage of advertisements shown each hour (06:00–22:00), by channel (weekdays)

| Time slot/interval (one-hour increment) | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| 06:00–07:00 | 0 | 0.00 | 0 | 0.00 | 3 | 1.70 | 2 | 1.70 | 12 | 6.90 | 6 | 5.00 | 23 | 2.20 |
| 07:00–08:00 | 6 | 10.20 | 0 | 0.00 | 4 | 2.30 | 1 | 0.80 | 7 | 4.00 | 2 | 1.70 | 20 | 1.90 |
| 08:00–09:00 | 12 | 20.30 | 0 | 0.00 | 4 | 2.30 | 2 | 1.70 | 11 | 6.40 | 5 | 4.20 | 34 | 3.20 |
| 09:00–10:00 | 2 | 3.40 | 8 | 2.00 | 5 | 2.90 | 11 | 9.10 | 14 | 8.10 | 6 | 5.00 | 46 | 4.40 |
| 10:00–11:00 | 3 | 5.10 | 24 | 5.90 | 1 | 0.60 | 11 | 9.10 | 8 | 4.60 | 8 | 6.70 | 55 | 5.20 |
| 11:00–12:00 | 5 | 8.50 | 32 | 7.90 | 14 | 8.00 | 12 | 9.90 | 4 | 2.30 | 2 | 1.70 | 69 | 6.60 |
| 12:00–13:00 | 0 | 0.00 | 30 | 7.40 | 0 | 0.00 | 2 | 1.70 | 8 | 4.60 | 3 | 2.50 | 43 | 4.10 |
| 13:00–14:00 | 0 | 0.00 | 31 | 7.60 | 11 | 6.20 | 2 | 1.70 | 9 | 5.20 | 10 | 8.40 | 63 | 6.00 |
| 14:00–15:00 | 6 | 10.20 | 31 | 7.60 | 3 | 1.70 | 0 | 0.00 | 6 | 3.50 | 9 | 7.60 | 55 | 5.20 |
| 15:00–16:00 | 6 | 10.20 | 38 | 9.40 | 10 | 5.80 | 10 | 8.30 | 7 | 4.00 | 7 | 5.90 | 78 | 7.40 |
| 16:00–17:00 | 8 | 13.50 | 24 | 5.90 | 1 | 0.60 | 11 | 9.10 | 10 | 5.80 | 7 | 5.90 | 61 | 5.80 |
| 17:00–18:00 | 4 | 6.80 | 31 | 7.60 | 9 | 5.20 | 4 | 3.30 | 11 | 6.40 | 13 | 10.90 | 72 | 6.90 |
| 18:00–19:00 | 7 | 11.80 | 31 | 7.60 | 33 | 19.00 | 16 | 13.20 | 19 | 11.00 | 0 | 0.00 | 106 | 10.10 |
| 19:00–20:00 | 0 | 0.00 | 42 | 10.30 | 22 | 12.50 | 14 | 11.60 | 12 | 6.90 | 12 | 10.10 | 102 | 9.70 |
| 20:00–21:00 | 0 | 0.00 | 55 | 13.50 | 18 | 10.20 | 9 | 7.40 | 26 | 15.00 | 13 | 10.90 | 121 | 11.50 |
| 21:00–22:00 | 0 | 0.00 | 29 | 7.30 | 35 | 21.00 | 14 | 11.40 | 9 | 5.30 | 16 | 13.50 | 103 | 9.80 |
| Total | 59 | 100.00 | 406 | 100.00 | 173 | 100.00 | 121 | 100.00 | 173 | 100.00 | 119 | 100.00 | 1051 | 100.00 |

Table A1.3. Number and percentage of advertisements shown each hour (06:00–22:00), by channel (weekends)

| Time slot/interval (one-hour increment) | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| 06:00–07:00 | 0 | 0.00 | 0 | 0.00 | 2 | 1.30 | 2 | 1.70 | 8 | 6.30 | 12 | 7.40 | 24 | 2.20 |
| 07:00–08:00 | 10 | 12.00 | 0 | 0.00 | 1 | 0.70 | 0 | 0.00 | 9 | 7.00 | 6 | 3.70 | 26 | 2.40 |
| 08:00–09:00 | 11 | 13.40 | 0 | 0.00 | 1 | 0.70 | 3 | 2.50 | 1 | 0.80 | 13 | 8.00 | 29 | 2.70 |
| 09:00–10:00 | 2 | 2.40 | 8 | 1.80 | 2 | 1.30 | 7 | 5.80 | 12 | 9.40 | 11 | 6.70 | 42 | 3.90 |
| 10:00–11:00 | 2 | 2.40 | 33 | 7.60 | 0 | 0.00 | 6 | 5.00 | 15 | 11.70 | 6 | 3.70 | 62 | 5.70 |
| 11:00–12:00 | 7 | 8.50 | 25 | 5.70 | 0 | 0.00 | 4 | 3.30 | 9 | 7.00 | 12 | 7.40 | 57 | 5.30 |
| 12:00–13:00 | 5 | 6.00 | 32 | 7.30 | 0 | 0.00 | 6 | 5.00 | 17 | 13.30 | 8 | 4.90 | 68 | 6.30 |
| 13:00–14:00 | 3 | 3.60 | 41 | 9.40 | 21 | 14.00 | 3 | 2.50 | 2 | 1.60 | 11 | 6.70 | 81 | 7.50 |
| 14:00–15:00 | 7 | 8.50 | 33 | 7.60 | 8 | 5.30 | 6 | 5.00 | 7 | 5.50 | 7 | 4.40 | 68 | 6.30 |
| 15:00–16:00 | 6 | 7.20 | 25 | 5.70 | 0 | 0.00 | 5 | 4.20 | 5 | 3.90 | 10 | 6.10 | 51 | 4.70 |
| 16:00–17:00 | 9 | 10.80 | 33 | 7.60 | 1 | 0.70 | 5 | 4.20 | 0 | 0.00 | 10 | 6.10 | 58 | 5.40 |
| 17:00–18:00 | 6 | 7.20 | 42 | 9.60 | 18 | 12.00 | 8 | 6.70 | 11 | 8.60 | 13 | 8.00 | 98 | 9.10 |
| 18:00–19:00 | 6 | 7.20 | 25 | 5.70 | 15 | 10.00 | 21 | 17.50 | 1 | 0.80 | 11 | 6.70 | 79 | 7.30 |
| 19:00–20:00 | 4 | 4.80 | 45 | 10.30 | 27 | 18.00 | 13 | 10.80 | 13 | 10.10 | 12 | 7.40 | 114 | 10.50 |
| 20:00–21:00 | 4 | 4.80 | 53 | 12.10 | 39 | 26.00 | 20 | 16.70 | 15 | 11.70 | 11 | 6.70 | 142 | 13.10 |
| 21:00–22:00 | 1 | 1.20 | 42 | 9.60 | 15 | 10.00 | 11 | 9.10 | 3 | 2.30 | 10 | 6.10 | 82 | 7.60 |
| Total | 83 | 100.00 | 437 | 100.00 | 150 | 100.00 | 120 | 100.00 | 128 | 100.00 | 163 | 100.00 | 1081 | 100.00 |

Table A1.4. Number and percentage of advertisements, by product type and channel (all days)

| Type of product advertised | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| Food and beverages | 0 | 0.00 | 0 | 0.00 | 38 | 11.80 | 80 | 33.20 | 35 | 11.60 | 0 | 0.00 | 153 | 7.20 |
| Clothes/shoes | 0 | 0.00 | 0 | 0.00 | 2 | 0.60 | 2 | 0.80 | 0 | 0.00 | 4 | 1.40 | 8 | 0.40 |
| Education | 0 | 0.00 | 0 | 0.00 | 1 | 0.30 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.05 |
| Entertainment | 0 | 0.00 | 0 | 0.00 | 28 | 8.70 | 30 | 12.40 | 1 | 0.30 | 147 | 52.10 | 206 | 9.70 |
| Financial | 0 | 0.00 | 200 | 23.70 | 25 | 7.70 | 14 | 5.80 | 4 | 1.30 | 0 | 0.00 | 243 | 11.40 |
| Home detergents/cleaners | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2 | 0.80 | 0 | 0.00 | 0 | 0.00 | 2 | 0.10 |
| Appliances | 0 | 0.00 | 44 | 5.20 | 9 | 2.80 | 0 | 0.00 | 26 | 8.60 | 4 | 1.40 | 83 | 3.90 |
| Motoring | 0 | 0.00 | 48 | 5.70 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 48 | 2.30 |
| Pet supplies | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Pharmaceutical products | 0 | 0.00 | 0 | 0.00 | 32 | 9.90 | 3 | 1.20 | 0 | 0.00 | 0 | 0.00 | 35 | 1.60 |
| Informing the public/ advertisement for domestic services | 0 | 0.00 | 348 | 41.40 | 2 | 0.60 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 350 | 16.40 |
| Publishing activity | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Retail trade and orders by post | 0 | 0.00 | 83 | 9.80 | 2 | 0.60 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 85 | 4.00 |
| Toiletries | 17 | 12.00 | 0 | 0.00 | 0 | 0.00 | 4 | 1.70 | 0 | 0.00 | 0 | 0.00 | 21 | 1.00 |
| Toys | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Travel/transport/holidays | 0 | 0.00 | 0 | 0.00 | 4 | 1.20 | 21 | 8.70 | 0 | 0.00 | 0 | 0.00 | 25 | 1.20 |
| Public services | 0 | 0.00 | 0 | 0.00 | 3 | 0.90 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 3 | 0.15 |
| Advertisement of the TV channel | 111 | 78.20 | 0 | 0.00 | 69 | 21.40 | 29 | 12.00 | 96 | 31.90 | 107 | 38.00 | 412 | 19.30 |
| Other | 6 | 4.20 | 118 | 14.00 | 40 | 12.40 | 41 | 17.20 | 65 | 21.80 | 20 | 7.10 | 290 | 13.60 |
| Baby food before one year | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Sausage or meat factories | 0 | 0.00 | 2 | 0.20 | 2 | 0.60 | 0 | 0.00 | 1 | 0.30 | 0 | 0.00 | 5 | 0.20 |
| Social advertising | 8 | 5.60 | 0 | 0.00 | 66 | 20.50 | 15 | 6.20 | 41 | 13.60 | 0 | 0.00 | 130 | 6.10 |
| Sports goods | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 32 | 10.60 | 0 | 0.00 | 32 | 1.40 |
| Total | 142 | 100.00 | 843 | 100.00 | 323 | 100.00 | 241 | 100.00 | 301 | 100.00 | 282 | 100.00 | 2132 | 100.00 |

Table A1.5. Number and percentage of advertisements, by product type and channel (weekdays)

| Type of product advertised | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| Food and beverages | 0 | 0.00 | 0 | 0.00 | 16 | 9.20 | 34 | 28.10 | 15 | 8.70 | 0 | 0.00 | 65 | 6.20 |
| Clothes/shoes | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2 | 1.70 | 0 | 0.00 | 4 | 3.40 | 6 | 0.60 |
| Education | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Entertainment | 0 | 0.00 | 0 | 0.00 | 9 | 5.20 | 20 | 16.50 | 0 | 0.00 | 37 | 31.10 | 66 | 6.30 |
| Financial | 0 | 0.00 | 83 | 20.40 | 13 | 7.50 | 4 | 3.30 | 0 | 0.00 | 0 | 0.00 | 100 | 9.50 |
| Home detergents/cleaners | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.80 | 0 | 0.00 | 0 | 0.00 | 1 | 0.10 |
| Appliances | 0 | 0.00 | 15 | 3.70 | 5 | 2.90 | 0 | 0.00 | 16 | 9.20 | 2 | 1.70 | 38 | 3.60 |
| Motoring | 0 | 0.00 | 24 | 5.90 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 24 | 2.30 |
| Pet supplies | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Pharmaceutical products | 0 | 0.00 | 0 | 0.00 | 15 | 8.70 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 15 | 1.40 |
| Informing the public/ advertisement for domestic services | 0 | 0.00 | 180 | 44.30 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 180 | 17.0 |
| Publishing activity | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Retail trade and orders by post | 0 | 0.00 | 41 | 10.10 | 1 | 0.60 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 42 | 4.00 |
| Toiletries | 4 | 6.80 | 0 | 0.00 | 0 | 0.00 | 2 | 1.70 | 0 | 0.00 | 0 | 0.00 | 6 | 0.60 |
| Toys | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Travel/transport/holidays | 0 | 0.00 | 0 | 0.00 | 2 | 1.20 | 11 | 9.10 | 0 | 0.00 | 0 | 0.00 | 13 | 1.20 |
| Public services | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Advertisement of the TV channel | 49 | 83.00 | 0 | 0.00 | 47 | 27.20 | 17 | 14.00 | 63 | 36.40 | 70 | 58.80 | 246 | 23.40 |
| Other | 4 | 6.80 | 63 | 15.60 | 20 | 11.60 | 23 | 19.00 | 37 | 21.40 | 6 | 5.00 | 153 | 14.60 |
| Baby food before one year | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Sausage or meat factories | 0 | 0.00 | 0 | 0.00 | 1 | 0.60 | 0 | 0.00 | 1 | 0.60 | 0 | 0.00 | 2 | 0.20 |
| Social advertising | 2 | 3.40 | 0 | 0.00 | 44 | 25.30 | 7 | 5.80 | 21 | 12.10 | 0 | 0.00 | 74 | 7.00 |
| Sports goods | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 20 | 11.60 | 0 | 0.00 | 20 | 1.90 |
| Total | 59 | 100.00 | 406 | 100.00 | 173 | 100.00 | 121 | 100.00 | 173 | 100.00 | 119 | 100.00 | 1051 | 100.00 |

Table A1.6. Number and percentage of advertisements, by product type and channel (weekends)

| Type of product advertised | Balastan | | 312 Cinema | | KTRC | | KTRC Music | | KTRC Sport | | Tumar | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|-------------|---------------|
| | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| Food and beverages | 0 | 0.00 | 0 | 0.00 | 22 | 14.70 | 46 | 38.30 | 20 | 15.60 | 0 | 0.00 | 88 | 8.40 |
| Clothes/shoes | 0 | 0.00 | 0 | 0.00 | 2 | 1.30 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2 | 0.20 |
| Education | 0 | 0.00 | 0 | 0.00 | 1 | 0.70 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.10 |
| Entertainment | 0 | 0.00 | 0 | 0.00 | 19 | 12.70 | 10 | 8.30 | 1 | 0.80 | 110 | 67.50 | 140 | 13.00 |
| Financial | 0 | 0.00 | 117 | 26.80 | 12 | 8.00 | 10 | 8.30 | 4 | 3.10 | 0 | 0.00 | 143 | 13.20 |
| Home detergents/cleaners | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 0.80 | 0 | 0.00 | 0 | 0.00 | 1 | 0.10 |
| Appliances | 0 | 0.00 | 29 | 6.60 | 4 | 2.70 | 0 | 0.00 | 10 | 7.80 | 2 | 1.20 | 45 | 4.20 |
| Motoring | 0 | 0.00 | 24 | 5.50 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 24 | 2.20 |
| Pet supplies | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Pharmaceutical products | 0 | 0.00 | 0 | 0.00 | 17 | 11.30 | 3 | 2.50 | 0 | 0.00 | 0 | 0.00 | 20 | 1.90 |
| Informing the public/ advertisement for domestic services | 0 | 0.00 | 168 | 38.40 | 2 | 1.30 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 170 | 15.20 |
| Publishing activity | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Retail trade and orders by post | 0 | 0.00 | 42 | 9.60 | 1 | 0.70 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 43 | 4.00 |
| Toiletries | 13 | 15.70 | 0 | 0.00 | 0 | 0.00 | 2 | 1.70 | 0 | 0.00 | 0 | 0.00 | 15 | 1.40 |
| Toys | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Travel/transport/holidays | 0 | 0.00 | 0 | 0.00 | 2 | 1.30 | 10 | 8.30 | 0 | 0.00 | 0 | 0.00 | 12 | 1.10 |
| Public services | 0 | 0.00 | 0 | 0.00 | 3 | 2.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 3 | 0.30 |
| Advertisement of the TV channel | 62 | 74.70 | 0 | 0.00 | 22 | 14.70 | 12 | 10.00 | 33 | 25.80 | 37 | 22.70 | 166 | 15.40 |
| Other | 2 | 2.40 | 55 | 12.60 | 20 | 13.20 | 18 | 15.00 | 28 | 21.90 | 14 | 8.60 | 137 | 12.70 |
| Baby food before one year | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Sausage or meat factories | 0 | 0.00 | 2 | 0.50 | 1 | 0.70 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 3 | 0.30 |
| Social advertising | 6 | 7.20 | 0 | 0.00 | 22 | 14.70 | 8 | 6.80 | 20 | 15.60 | 0 | 0.00 | 56 | 5.20 |
| Sports goods | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 12 | 9.40 | 0 | 0.00 | 12 | 1.10 |
| Total | 83 | 100.00 | 437 | 100.00 | 150 | 100.00 | 120 | 100.00 | 128 | 100.00 | 163 | 100.00 | 1081 | 100.00 |

Table A1.7. Number and percentage of advertisements dedicated to different food and beverage types, by WHO NP code and channel (all days)*

| WHO NP model food category code | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|---|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| Chocolate and confectionery made of sugar | 3 | 7.90 | 6 | 7.50 | 2 | 5.70 | 11 | 7.20 |
| Savoury snacks | 10 | 26.30 | 16 | 20.00 | 0 | 0.00 | 26 | 17.00 |
| Beverages – juices | 9 | 23.70 | 19 | 23.70 | 0 | 0.00 | 28 | 18.30 |
| Beverages – milk drinks | 5 | 13.20 | 6 | 7.50 | 0 | 0.00 | 11 | 7.20 |
| Beverages – soft drinks, incl. Coca-Cola, Fanta, etc. | 11 | 28.90 | 33 | 41.30 | 32 | 91.40 | 76 | 49.70 |
| Finished (ready-made) and semi-finished products for fast cooking; food mixes | 0 | 0.00 | 0 | 0.00 | 1 | 2.90 | 1 | 0.60 |
| Total | 38 | 100.00 | 80 | 100.00 | 35 | 100.00 | 153 | 100.00 |

* Only the frequency characteristics of food and beverage advertisement categories that were present on TV during the analysed period are given here.

Table A1.8. Number and percentage of advertisements dedicated to different food and beverage types, by WHO NP code and channel (weekdays)*

| WHO NP model food category code | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|---|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| Chocolate and confectionery made of sugar | 2 | 12.50 | 4 | 11.80 | 1 | 6.70 | 7 | 10.80 |
| Savoury snacks | 6 | 37.50 | 9 | 26.50 | 0 | 0.00 | 15 | 23.10 |
| Beverages – juices | 1 | 6.30 | 9 | 26.50 | 0 | 0.00 | 10 | 15.40 |
| Beverages – milk drinks | 2 | 12.50 | 3 | 8.70 | 0 | 0.00 | 5 | 7.70 |
| Beverages – soft drinks, incl. Coca-Cola, Fanta, etc. | 5 | 31.20 | 9 | 26.50 | 13 | 86.60 | 27 | 41.50 |
| Finished (ready-made) and semi-finished products for fast cooking; food mixes | 0 | 0.00 | 0 | 0.00 | 1 | 6.70 | 1 | 1.50 |
| Total | 16 | 100.00 | 34 | 100.00 | 15 | 100.00 | 65 | 100.00 |

* Only the frequency characteristics of food and beverage advertisement categories that were present on TV during the analysed period are given here.

Table A1.9. Number and percentage of advertisements dedicated to different food and beverage types, by WHO NP code and channel (weekends)*

| WHO NP model food category code | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|---|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| Chocolate and confectionery made of sugar | 1 | 4.50 | 2 | 4.30 | 1 | 5.00 | 4 | 4.50 |
| Savoury snacks | 4 | 18.20 | 7 | 15.20 | 0 | 0.00 | 11 | 12.50 |
| Beverages – juices | 8 | 36.40 | 10 | 21.70 | 0 | 0.00 | 18 | 20.50 |
| Beverages – milk drinks | 3 | 13.60 | 3 | 6.50 | 0 | 0.00 | 6 | 6.80 |
| Beverages – soft drinks, incl. Coca-Cola, Fanta, etc. | 6 | 27.30 | 24 | 52.30 | 19 | 95.00 | 49 | 55.70 |
| Finished (ready-made) and semi-finished products for fast cooking; food mixes | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Total | 22 | 100.00 | 46 | 100.00 | 20 | 100.00 | 88 | 100.00 |

* Only the frequency characteristics of food and beverage advertisement categories that were present on TV during the analysed period are given here.

Table A1.10. Number and percentage of food advertisements permissible for marketing to children according to the WHO NP model, by channel (all days)

| Marketing status according to WHO NP model | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| Marketing to children permitted | 4 | 10.50 | 6 | 7.50 | 2 | 5.70 | 12 | 7.80 |
| Marketing to children not permitted | 29 | 76.30 | 74 | 92.50 | 27 | 77.10 | 130 | 85.00 |
| Unknown | 5 | 13.20 | 0 | 0.00 | 6 | 17.20 | 11 | 7.20 |
| Total | 38 | 100.00 | 80 | 100.00 | 35 | 100.00 | 153 | 100.00 |

Table A1.11. Number and percentage of food advertisements permissible for marketing to children according to the WHO NP model, by channel (weekdays)

| Marketing status according to WHO NP model | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| Marketing to children permitted | 2 | 12.50 | 3 | 8.80 | 1 | 6.70 | 6 | 9.20 |
| Marketing to children not permitted | 12 | 75.00 | 31 | 91.20 | 14 | 93.30 | 57 | 87.70 |
| Unknown | 2 | 12.50 | 0 | 0.00 | 0 | 0.00 | 2 | 3.10 |
| Total | 16 | 100.00 | 34 | 100.00 | 15 | 100.00 | 65 | 100.00 |

Table A1.1.2. Number and percentage of food advertisements permissible for marketing to children according to the WHO NP model, by channel (weekends)

| Marketing status according to WHO NP model | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|--|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| Marketing to children permitted | 2 | 9.10 | 3 | 6.50 | 1 | 5.00 | 6 | 6.80 |
| Marketing to children not permitted | 17 | 77.30 | 43 | 93.50 | 13 | 65.00 | 73 | 83.00 |
| Unknown | 3 | 13.60 | 0 | 0.00 | 6 | 30.00 | 9 | 10.20 |
| Total | 22 | 100.00 | 46 | 100.00 | 20 | 100.00 | 88 | 100.00 |

Table A1.1.3. Number and percentage of food advertisements per two-hour slot, by channel (all days)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 3 | 7.90 | 4 | 5.00 | 4 | 11.40 | 11 | 7.20 |
| 10:00-12:00 | 1 | 2.60 | 11 | 13.80 | 4 | 11.40 | 16 | 10.50 |
| 12:00-14:00 | 2 | 5.30 | 7 | 8.80 | 3 | 8.60 | 12 | 7.80 |
| 14:00-16:00 | 1 | 2.60 | 4 | 5.00 | 1 | 2.90 | 6 | 3.90 |
| 16:00-18:00 | 4 | 10.50 | 7 | 8.80 | 3 | 8.60 | 14 | 9.20 |
| 18:00-20:00 | 20 | 52.60 | 30 | 37.50 | 5 | 14.30 | 55 | 35.90 |
| 20:00-22:00 | 7 | 18.50 | 17 | 21.10 | 15 | 42.80 | 39 | 25.50 |
| Total | 38 | 100.00 | 80 | 100.00 | 35 | 100.00 | 153 | 100.00 |

Table A1.1.14. Number and percentage of food advertisements per two-hour slot, by channel (weekdays)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 3 | 18.80 | 3 | 8.80 | 1 | 6.70 | 7 | 10.80 |
| 10:00-12:00 | 1 | 6.30 | 5 | 14.70 | 2 | 13.30 | 8 | 12.30 |
| 12:00-14:00 | 0 | 0.00 | 2 | 5.90 | 0 | 0.00 | 2 | 3.10 |
| 14:00-16:00 | 1 | 6.30 | 2 | 5.90 | 1 | 6.70 | 4 | 6.20 |
| 16:00-18:00 | 0 | 0.00 | 2 | 5.90 | 3 | 20.00 | 5 | 7.70 |
| 18:00-20:00 | 9 | 56.20 | 13 | 38.20 | 1 | 6.70 | 23 | 35.40 |
| 20:00-22:00 | 2 | 12.40 | 7 | 20.60 | 7 | 46.60 | 16 | 24.50 |
| Total | 16 | 100.00 | 34 | 100.00 | 15 | 100.00 | 65 | 100.00 |

Table A1.1.15. Number and percentage of food advertisements per two-hour slot, by channel (weekends)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 0 | 0.00 | 1 | 2.20 | 3 | 15.00 | 4 | 4.50 |
| 10:00-12:00 | 0 | 0.00 | 6 | 13.00 | 2 | 10.00 | 8 | 9.10 |
| 12:00-14:00 | 2 | 9.10 | 5 | 10.90 | 3 | 15.00 | 10 | 11.40 |
| 14:00-16:00 | 0 | 0.00 | 2 | 4.30 | 0 | 0.00 | 2 | 2.30 |
| 16:00-18:00 | 4 | 18.20 | 5 | 10.90 | 0 | 0.00 | 9 | 10.20 |
| 18:00-20:00 | 11 | 50.00 | 17 | 37.00 | 4 | 20.00 | 32 | 36.40 |
| 20:00-22:00 | 5 | 22.70 | 10 | 21.70 | 8 | 40.00 | 23 | 26.10 |
| Total | 22 | 100.00 | 46 | 100.00 | 20 | 100.00 | 88 | 100.00 |

Table A1.16. Number and percentage of advertisements for foods not permissible for marketing to children according to the WHO NP model per two-hour slot, by channel (all days)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 3 | 10.30 | 4 | 5.00 | 3 | 11.10 | 10 | 7.70 |
| 10:00-12:00 | 1 | 3.40 | 11 | 13.80 | 4 | 14.80 | 16 | 12.30 |
| 12:00-14:00 | 2 | 6.90 | 6 | 8.80 | 2 | 7.40 | 10 | 7.70 |
| 14:00-16:00 | 1 | 3.40 | 3 | 5.00 | 1 | 3.70 | 5 | 3.80 |
| 16:00-18:00 | 3 | 10.30 | 7 | 8.80 | 2 | 7.40 | 12 | 9.20 |
| 18:00-20:00 | 13 | 44.80 | 26 | 37.50 | 3 | 11.10 | 42 | 32.30 |
| 20:00-22:00 | 6 | 20.90 | 17 | 21.10 | 12 | 44.50 | 35 | 27.00 |
| Total | 29 | 100.00 | 74 | 100.00 | 27 | 100.00 | 130 | 100.00 |

Table A1.17. Number and percentage of advertisements for foods not permissible for marketing to children according to the WHO NP model per two-hour slot, by channel (weekdays)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 3 | 25.00 | 3 | 9.70 | 1 | 7.10 | 7 | 12.30 |
| 10:00-12:00 | 1 | 8.30 | 5 | 16.10 | 2 | 14.30 | 8 | 14.00 |
| 12:00-14:00 | 0 | 0.00 | 1 | 3.20 | 0 | 0.00 | 1 | 1.80 |
| 14:00-16:00 | 1 | 8.30 | 2 | 6.50 | 1 | 7.10 | 4 | 7.00 |
| 16:00-18:00 | 0 | 0.00 | 2 | 6.50 | 2 | 14.30 | 4 | 7.00 |
| 18:00-20:00 | 6 | 50.00 | 11 | 35.50 | 1 | 7.20 | 18 | 31.60 |
| 20:00-22:00 | 1 | 8.40 | 7 | 22.50 | 7 | 50.00 | 15 | 26.30 |
| Total | 12 | 100.00 | 31 | 100.00 | 14 | 100.00 | 57 | 100.00 |

Table A1.18. Number and percentage of advertisements for foods not permissible for marketing to children according to the WHO NP model per two-hour slot, by channel (weekends)

| Two-hour interval/slot | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|------------------------|-----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| 06:00-08:00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 08:00-10:00 | 0 | 0.00 | 1 | 2.30 | 2 | 15.40 | 3 | 4.10 |
| 10:00-12:00 | 0 | 0.00 | 6 | 14.00 | 2 | 15.40 | 8 | 11.00 |
| 12:00-14:00 | 2 | 11.80 | 5 | 11.60 | 2 | 15.40 | 9 | 12.30 |
| 14:00-16:00 | 0 | 0.00 | 1 | 2.30 | 0 | 0.00 | 1 | 1.40 |
| 16:00-18:00 | 3 | 17.60 | 5 | 11.60 | 0 | 0.00 | 8 | 11.00 |
| 18:00-20:00 | 7 | 41.20 | 15 | 34.90 | 2 | 15.40 | 24 | 32.90 |
| 20:00-22:00 | 5 | 29.40 | 10 | 23.30 | 5 | 38.40 | 20 | 27.30 |
| Total | 17 | 100.00 | 43 | 100.00 | 13 | 100.00 | 73 | 100.00 |

Table A1.19. Number and percentage of advertisements for foods impermissible for marketing to children, by channel and primary persuasive appeal

| Primary persuasive appeal | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|-----------------------------|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| Health/nutrition | 9 | 31.10 | 19 | 25.70 | 0 | 0.00 | 28 | 21.50 |
| Uniqueness | 1 | 3.40 | 0 | 0.00 | 0 | 0.00 | 1 | 0.80 |
| Pleasure | 0 | 0.00 | 0 | 0.00 | 2 | 7.40 | 2 | 1.50 |
| Status attribute/sex appeal | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Reward/competition | 9 | 31.10 | 14 | 18.90 | 24 | 88.90 | 47 | 36.20 |
| Weight loss/diet | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Offer of choice/options | 1 | 3.40 | 0 | 0.00 | 0 | 0.00 | 1 | 0.80 |
| Delectation/satisfaction | 6 | 20.70 | 25 | 33.80 | 0 | 0.00 | 31 | 23.80 |
| Launch of new product | 3 | 10.30 | 16 | 21.60 | 0 | 0.00 | 19 | 14.60 |
| Other | 0 | 0.00 | 0 | 0.00 | 1 | 3.70 | 1 | 0.80 |
| Total | 29 | 100.00 | 74 | 100.00 | 27 | 100.00 | 130 | 100.00 |

Table A1.20. Number and percentage of advertisements for foods permissible for marketing to children, by channel and primary persuasive appeal

| Primary persuasive appeal | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|-----------------------------|----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| Health/nutrition | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Uniqueness | 4 | 100.00 | 6 | 100.00 | 0 | 0.00 | 10 | 83.30 |
| Pleasure | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Status attribute/sex appeal | 0 | 0.00 | 0 | 0.00 | 2 | 100.00 | 2 | 16.70 |
| Reward/competition | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Weight loss/diet | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Offer of choice/options | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Delectation/satisfaction | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Launch of new product | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Other | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Total | 4 | 100.00 | 6 | 100.00 | 2 | 100.00 | 12 | 100.00 |

Table A1.21. Primary target audience for advertisements of products permissible for marketing to children, by channel

| Primary audience | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|---------------------------------|----------|---------------|------------|---------------|------------|---------------|-----------|---------------|
| | n | % | n | % | n | % | n | % |
| 1 = children | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 2 = children and adolescents | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 3 = adolescents | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 4 = adolescents and adults | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 5 = adults | 0 | 0.00 | 0 | 0.00 | 2 | 100.00 | 2 | 16.70 |
| 6 = elderly | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 7 = all age categories/families | 4 | 100.00 | 6 | 100.00 | 0 | 0.00 | 10 | 83.30 |
| Total | 4 | 100.00 | 6 | 100.00 | 2 | 100.00 | 12 | 100.00 |

Table A1.22. Primary target audience for advertisements of products impermissible for marketing to children, by channel

| Primary audience | KTRC | | KTRC Music | | KTRC Sport | | Total | |
|---------------------------------|-----------|---------------|------------|---------------|------------|---------------|------------|---------------|
| | n | % | n | % | n | % | n | % |
| 1 = children | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 2 = children and adolescents | 9 | 31.00 | 16 | 21.60 | 2 | 7.40 | 27 | 20.80 |
| 3 = adolescents | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 4 = adolescents and adults | 6 | 20.70 | 33 | 44.60 | 25 | 92.60 | 64 | 49.20 |
| 5 = adults | 6 | 20.70 | 9 | 12.20 | 0 | 0.00 | 15 | 11.50 |
| 6 = elderly | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| 7 = all age categories/families | 8 | 27.60 | 16 | 21.60 | 0 | 0.00 | 24 | 18.50 |
| Total | 29 | 100.00 | 74 | 100.00 | 27 | 100.00 | 130 | 100.00 |

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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