MONITORING FOOD MARKETING TO CHILDREN

A joint Nordic monitoring protocol for marketing of foods and beverages high in fat, salt and sugar (HFSS) towards children and young people

Nordic Council of Ministers

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Preface

The protocol describes methods for how to monitor marketing communication of HFSS foods and beverages *directed* to children and young people, and market communication to which children and young people are *exposed* to in their everyday life. A joint Nordic protocol for monitoring will allow for easy comparisons of monitoring data from the different countries.

The project working group who have involved in work with the report are representatives from University of Iceland, The Finnish Consumer's Union, The Danish Veterinary and Food Administration, University of Gothenburg, Directorate of Health – Iceland, Norwegian Directorate of Health, Norwegian Institute of Public Health, Lund University, The Open University (UK), National Institute of Public Health – Slovenia and WHO Regional Office for Europe. The Nordic Council of Ministers funded the work.

In the process of making the protocol, representatives from the two industry regulation schemes in Denmark (Forum for Responsible Food Marketing Communication) and Norway (Food and Drink Industry Professional Practices Committee – MFU) have had the opportunity to comment on the content of the drafts of the protocol. The project group considered all inputs and comments, accounted for some of them, but the majority of their comments reflects having different, principal viewpoints on issues such as the need for monitoring, which marketing communications to include and which groups to target.

Methods of marketing communications are continuously developing, particularly within social media and due to new technical developments. It is also likely that there will be new opportunities and methods for monitoring. Consequently, the methods described in the protocol should always be critically reviewed and possibly adjusted to the particular cultural and social/media context before being applied.

1. Background

Marketing of food and beverages influences children's knowledge, attitudes and food choices. Evidences from systematic reviews show that television advertising influences children's food preferences, purchase requests and consumption patterns.[1] Children and young people today are exposed to marketing of food products in many channels. The marketing has evolved from traditional advertising in print, cinema and TV to new forms of marketing,[2] e.g. internet advertising, mobile phone advertising, product placement and other forms of embedded marketing e.g. native advertising.[3]

The WHO has developed a Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children,[4] and a framework for implementing these recommendations.[5] Resolution WHA63.14 (World Health Assembly) urges Member States to establish a system for monitoring and evaluating the implementation of the set of recommendations. Specifically, recommendations 10 and 11 state that policy frameworks should include systems for monitoring and evaluation.

The public health challenge from marketing of foods and beverages high in fat, salt and sugar (HFSS) to children is likely to be similar in the different Nordic countries. Monitoring of marketing of foods and beverages has been done previously in some of the Nordic countries[6] but not in a consistent manner. If comparative data is available

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[1] Boyland E.J., Nolan S., Kelly B., Tudur-Smith C., Jones A., Halford J.C., et al. (2016) Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults. *Am J Clin Nutr*; http://ajcn.nutrition.org/content/early/2016/01/20/ajcn.115.120022;
WHO (2016). *Report of the Commission on Ending Childhood Obesity*. Geneva: World Health Organization. Cairns G., Angus K., Hastings G. (2009). *The extent nature and effects of food promotion to children: a review of the evidence to December 2008*. Prepared for the World Health Organization. United Kingdom: Institute for Social Marketing, University of Stirling; Cairns G., Angus K., Hastings G., Caraher M. (2013). Systematic reviews of evidence on the nature, extent and effects of food marketing to children. A retrospective study. *Apetite 62* (2013) 209–215.
Folkvord, Anschûtz et al. (2016) Food advertising and eating behavior in children. *Curr Opin Beh Science 2016*, 9:26–31.

[2] The World Health Organization Regional Office for Europe (November 2016). Tackling food marketing to children in a digital world: trans-disciplinary perspectives. Children's rights, evidence of impact, methodological challenges, regulatory options and policy implications for the WHO European Region.

[3] Dalquist, U. & Wadbring, I. (red.), (2017*). Marknadsmässig kurragömmalek? Barn, unga och dold reklam*. Nordicom och Statens Medieråd 2017.

[4] http://www.who.int/dietphysicalactivity/publications/recsmarketing/en/

[5] http://www.who.int/dietphysicalactivity/framework_marketing_food_to_children/en/

[6] See for example: Sandberg H. (2006). Marknadsföring av ohälsosam mat till barn. Lunds Universitet; Sandberg H., Ekström L. (2007): Söt reklam og feta ungar. Nordiska minsterrådet: Köpenhamn. http://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-1318
Sandberg H. (2008). *Prinsessmuffins och cholkladägg. En analys av livsmedelsreklam till barn*. Nordiska ministerrådet, Köpenhamn.
Kelly B., Halford J.S.G., Boyland E.J., Chapman K., Bautista-Castaño I., Berg C., Caroli M., Cook B., Coutinho J.G., Effertz T., Grammatikaki E., Keller K., Leung R., Manios Y., Monteiro R., Pedley C., Prell H., Raine K., Recine E., Serra-Majem L., Singh S., Summerbell C. (2010). Television Food Advertising to Children: A Global Perspective. *American Journal of Public Health: September 2010, Vol. 100, No. 9*, pp. 1730–1736.

for all the Nordic countries, each country will have an indication whether the level of HFSS food and beverage marketing is different or similar than in comparable countries. Experiences gained in this project would be relevant for other countries as well, as long as contextual factors and country specific conditions are accounted for.

The protocol has a public health perspective, as marketing of HFSS products towards children and young people is associated with food consumption and overweight/obesity. The protocol also has a marketing perspective with the aim of monitoring the marketing children and young people are exposed to in itself.

The protocol has been developed as a joint Nordic project between representatives and experts from Iceland, Finland, Sweden, Denmark and Norway.[7] The WHO Regional Office for Europe has also participated in this work together with other international experts. The process of developing the protocol was funded by the Nordic Council of Ministers.

The present protocol has benefitted from several other previous protocols as referred to previously in the text. In addition the protocol has made use of the draft sweep protocol made by the WHO Action Network on reducing marketing pressure on children, as well as Consumers Internationals Manual for monitoring food marketing to children (2011).

Sandberg H. (2011). Tiger talk and candy king: Marketing of unhealthy food and beverages to Swedish children. Communications. Volume 36, Issue 2, Pages 217–244. Bugge A.B., Rysst M (2013): Usunne mat- og drikkereklamer rettet mot barn. En systematisk kartlegging av omfanget i utvalgte medie-kanaler, Statens Institutt for Forbruksforskning. Bugge AB (2015). Food advertising towards children and young people in Norway. *Appetite, 98* (2016), 12–18.

[7] The following insitutions have been involved in the work with the protocol: University of Iceland, Finnish Consumer's Union, The Danish Veterinary and Food Administration, University of Gothenburg, University of Lund, Open University (UK), Directorate of Health – Iceland, National Institute of Public Health – Slovenia, WHO Regional Office for Europe, Norwegian Institute of Public Health and the Norwegian Directorate of Health.

2. Purpose and context

The aim of the protocol is to establish a joint Nordic practice for how to monitor marketing of HFSS foods and beverages to children and young people. The protocol is not for doing "marketing research" but for studying marketing communication in various media and children's everyday life. The protocol describes how to obtain data on marketing of HFSS foods and beverages towards children and young people at a given time as cross-sectional studies, as well as allowing for monitoring of trends. The data provided could also be used for evaluation purposes, for instance providing relevant data for evaluating regulation practices and schemes in the respective countries; to study advertising and marketing practices, contents and forms over time.

In addition to being a tool for monitoring purposes within each country, the protocol will also enable comparisons between the Nordic by establishing a joint understanding on how each marketing channel should be monitored.

The protocol distinguishes between marketing that appear to be *directed* at children (i.e. what is aimed at children) and marketing that children are actually and potentially *exposed* to (i.e. what children actually see). It aims to be independent of differences in marketing regulation of HFSS foods and beverages in the different countries, and of current regulations within each specific country. *Potential exposure* covers all the advertising in a particular media/channel that an individual might pay attention to when using that particular media. *Actual exposure* is equivalent to the ads and commercials or marketing communication which the child or individual pays attention to (look at). The potential exposure is far more (higher) than the actual exposure, but gives a good indication of the commercial saturation of the particular media environment investigated. For online media you can measure actual exposure by eye-tracking technology.[8] It is, however, common to investigate actual exposure by self-reports, but such reports might have flaws and be less reliable. Individuals might be aware sometimes of ad exposure and in other situations unaware of their actual exposure. So actually looking at an ad does not always mean that you recall the ad content and can retrieve the information when asked about it, and ads can have effects even when not consciously recalled.[9] However, when the purpose is to monitor marketing of HFSS in children's everyday life (e.g. stores and sports arenas) and media environment, then potential exposure is a relevant concept to use.

The protocol describes how to monitor marketing that are directed/targeted at children and young people, and marketing that children and young people might be

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[8] Holmberg, N. (2016). *Effects of online advertising on children's visual attention and task performance during free and goal-directed internet use. A media psychology approach to children's website interaction and advert distraction*. Doctoral dissertation, Lund University, Department of Media and Communication.

[9] Nairn, A. & Fine, C. (2008). Who's messing with my mind? The implications of dual-process models for the ethics of advertising to children. *International Journal of Advertising*, *27*(3), pp. 447–470.

exposed to in children's media and media channels with a considerable child audience (based on public national statistics and media measurements), also advertising exposure in their everyday life.

The protocol is not a tool to survey audience actual exposure, audience effects/reactions or reception of ads HFSS, but a tool to map out advertising/marketing as a communication content in traditional and digital media technologies as well as in everyday contexts such as stores etc.

Comparisons must take into account possible contextual differences between the countries, particularly with regard to the different legal regulations of marketing to children and young people. In Denmark and Norway for example, the food industries have different schemes for self-regulation of such marketing.[10] Another important contextual factor to account for is the differences in media use among the target populations in the different countries.

The protocol can be used either in parts or in whole, depending on available resources, time and priorities. The most important purpose of the protocol is to describe how to monitor marketing in each specific marketing channel (for instance in TV). It has been suggested, however, that an "optimal approach" for monitoring is to measure exposure in *all* major media, while only monitoring *one* media channel is described as a "minimal approach".[11] The more media that are being monitored, the better the picture will be.

The protocol is based on previously conducted and well-validated methods of former well-cited studies that have monitored these media.

[10] In Denmark the scheme is called Forum for Responsible Food Marketing Communication (www.kodeksforfoedevarereklamer.dk), and in Norway the scheme is called Food and Drink Industry Professional Practices Committee (MFU) (www.mfu.as).

[11] Kelly, B., King, L., Baur, L., Rayner, M., Lobstein, T., Monteiro, C., Macmullan, J., Mohan, S., Barquera, S., Friel, S., Hawkes, C., Kumanyika, S., L'Abbé, M., Lee, A., Ma, J., Neal, B., Sacks, G., Sanders, D., Snowdon, W., Swinburn, B., Vandevijere, S. & Wlaker, C. (2013). Monitoring food and non-alcoholic beverage promotions to children, *Obesity Reviews* 14 (suppl.1), 59–69.

3. Research questions

The protocol aims to describe how to collect data that will answer the following research questions:

1. To what degree are HFSS foods and beverages marketed as a proportion of marketing overall?
2. To what degree are HFSS foods and beverages marketed as a proportion of overall food and beverage marketing?
3. What proportion of HFSS food and beverage marketing is directed at children and young people?
4. What proportion of HFSS food and beverage marketing are children and young people exposed to?
5. What type of HFSS foods and beverages are marketed to children and young people?
6. What marketing techniques are used to market HFSS foods and beverages to children and young people?

4. Involvement of national governments and stakeholders

The initiative for the protocol aims to establish a joint procedure for how to monitor marketing of HFSS foods and beverages, which will allow for comparisons between the Nordic countries. The ambition is therefore to ensure that the protocol is known by governmental bodies as well as national research institutions in the respective Nordic countries.

In addition, the protocol should be known to other stakeholders, like the food industries and consumer organizations. This is important in order to avoid discussions around *methods* instead of *results* when the protocol is being used. A draft of the protocol has been circulated to a number of stakeholders who were given the opportunity to comment and give inputs on the protocol in order to refine and adjust it.

5. Categories and terms

5.1 Marketing

The American Marketing Association defines *marketing* as

> " ... the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large."[12]

The WHO has particularly emphasized the communication part in their definition of *marketing* as

> " ... any form of commercial communication or message that is designed to, or has the effect of, increasing the recognition, appeal and/or consumption of particular products and services. It comprises anything that acts to advertise or otherwise promote a product or service."[13]

The understanding of marketing in this protocol will be in line with WHO's definition.

In the coding and analysis of results, it is necessary to distinguish analytically between marketing of HFSS that is *directed* at children and young people, and marketing of HFSS foods and beverages that children and young people are *exposed* to. The term *exposure* in this regard, is understood as *potential exposure.*[14]

Marketing *directed at* children and young people uses communication channels, marketing content and techniques, timing and locations that explicitly and intentionally are directed at children and young people. Examples of such marketing would be when it is delivered in conjunction with a TV show meant for children (children's TV).

Marketing of HFSS foods and beverages that children and young people are *exposed to*, is a broader category which includes all HFSS food and beverage marketing that children and young people are exposed to, independently of whether they are predetermined and prioritized as the target group or not. An example of such exposure is marketing delivered during children's peak TV viewing times, when *the greatest*

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[12] American Marketing Association, "About AMA: Definition of Marketing", https://www.ama.org/AboutAMA/Pages/Definition-of-Marketing.aspx (cited 20/10 2015).

[13] WHO, (2010). Set of recommendations on the marketing of foods and non-alcoholic beverages to children, Geneva. http://apps.who.int/iris/bitstream/10665/44416/1/9789241500210_eng.pdf

[14] Helena Sandberg distinguishes potential exposure from actual and self-experienced (perceived) exposure (see Sandberg, H., Gidlöf, K., Holmberg (2011). Children's Exposure to and Perceptions of Online Advertising. *International Journal of Communication* (5), 21–50.
Sandberg, H. (2014). Rörlig måltavla – internetreklam riktad till barn. *Media and Communication Studies Research Reports* 2014:1, University of Lund.).

numbers of children are viewing TV, irrespective of whether they constitute a substantial share of the audience.[15]

Marketing exposure is in this regard broader than directed marketing, and it is necessary to achieve precision in the analysis and reporting. For example, the Norwegian self-regulation scheme is limited to marketing that is *directed* at children, and results should therefore be reported as such. In addition, however, results could also be reported for the broader understanding of marketing *exposure*.

Identifying marketing directed at children may rely on the times at which it is broadcast. It may also rely on the characteristics of the marketing communication.

In the table below, there are nine different factors[16] that are used to measure whether marketing communications are particularly appealing to children and used in child-directed advertising.[17]

Marketing techniques towards children (till 12 years)

- Use of child-directed language and or children's voices
- Use of music likely to appeal to children
- Use of images and colors likely to appeal to children
- Children appearing in the commercial in a way and extent that is likely to be appealing to children
- Use of people, personalities, celebrities, their associates or other persons or individuals who are considered to be a hero/idol for children
- Use of cartoon brand owned characters that appeal to children
- Use of cartoon licensed characters that appeal to children
- Free gifts, toys or collectible items with appeal to children
- Competitions, vouchers or games with appeal to children
- Child-directed/or child appealing design of the food or food packaging

A similar table is presented below, of nine different factors that are used to measure whether marketing communications are directed at young people or not.[18]

[15] Harris, J.L., Sarda, V., Schwartz, M.B., Brownell, K.D. (2013). Redefining "Child-Directed Advertising" to Reduce Unhealthy Television Food Advertising, *Am J Prev Med*, 44(4):358–364.

[16] See for instance: Buijzen, M., Van Reijmersdal, E.A., Owen, L.H. (2010). Introducing the PCMC Model: An Investigative Framework for Young People's Processing of Commercialized Media Content, *Communication Theory ISSN* 1050-3293. Buijzen, M., Valkenberg (2008). Appeals in television advertising: A content analysis of commercials aimed at children and teenagers, Communications. *The European Journal of Communication Research*. Published Online: 11/03/2008 | https://doi.org/10.1515/comm.27.3.349

[17] In a study in Norway, researchers revised the list adding use of humor and surprises with appeal to children and young people and a category "Encouragement to share images, text, hash tags and likes on social media". http://www.hioa.no/extension/hioa/design/hioa/images/sifo/files/file80667_oppdragsrapport_9_2016_sifo.pdf

[18] See footnote above.

Marketing techniques towards youth (till 13 till 17 years)

- Use of youth-directed language and or youth's voices
- Use of music likely to appeal to youth
- Use of images and colors likely to appeal to youth
- Youth appearing in the commercial in a way and extent that is likely to be appealing to youth
- Use of people, personalities, celebrities, their associates or other persons or individuals who are considered to be a hero/idol for youth
- Use of brand owned cartoon characters that appeal to youth
- Use of licensed cartoon characters that appeal to youth
- Free gifts or collectible items with appeal to youth
- Competitions, vouchers or games with appeal to youth
- Youth-directed/or youth appealing design of the food or food packaging

In the data collection, each of these will be coded as separate variables with values "yes"=1 and "no"=0. A summative scale will be made out of the 9 variables (with values from 0–9). In the analysis the scale can potentially be used as a dichotomous measure for whether the marketing techniques are targeted children (with cut-off value=1).

In the coding, it will furthermore be registered whether the marketing contains health and/or nutrition claims and representations of physical activity. The rationale for registrering these factors are to capture whether the marketing tries to "health-wash" HFSS foods and beverages by giving them an healthy association.

Marketing of HFSS foods and beverages do not necessarily follow national borders. However, the focus will be limited to marketing that uses the official language(s) in each country and/or content, timing and/or locations that in the analysis are considered to be particular context specific and/or relevant.

5.1.1 Food and beverages high in fat, salt and sugar (HFSS)

The WHO Regional Office for Europe has established a nutrient profiling model designed for the purpose of categorizing foods and beverages that may or may not be marketed to children and young people (Appendix 1). The model has been developed in collaboration with the European Network on Reducing Marketing Pressure on Children involving 28 WHO Europe Member States.[19] The model is largely based on the nutrient profiling models applied in Denmark and Norway. Despite several challenges and complexities in listing foods that are covered or exempted from marketing restrictions (for instance in terms of categorizations, deciding cut-off values, differences between national models), the WHO European nutrient profile model is the most convenient model to use for comparisons between countries.

In the WHO European nutrient profile model, HFSS foods and beverages are categorized according to the content of total fat, total sugars, added sugar, non-sugar

[19] WHO, (2015). WHO Regional Office for Europe nutrient profile model. World Health Organization, Regional Office for Europe, Copenhagen. http://www.euro.who.int/__data/assets/pdf_file/0005/270716/Nutrient-Profile-Model_Version-for-Web.pdf?ua=1

sweeteners, energy, saturated fat, industrially produced trans-fatty acids and salt. The model has food categories that are permitted, partly permitted (according to defined threshold values), and not permitted for marketing to children and young people. For categories where products are partially permitted, a food or beverage must not exceed any of the nutrient thresholds established for that category. Custom tariff codes are used for categorizations.

It is not mandatory for the European WHO member states to apply the WHO European nutrient profile model. There may also be smaller differences between countries both in the number of categories used as well as cut-off values.[20] In Appendix 3 there is an overview of the differences between the WHO European nutrient profile model, the Norwegian and Danish models and the EU Pledge.

To allow for comparison, results should be reported according to the WHO nutrient profiling model categories. If a country wishes to categorize food according to national or other nutrient models, it is preferable that this is done in *addition* to the WHO model. Any discrepancies between the WHO nutrient profiling model and national specific model should be highlighted in the reporting.

To allow analysis according to different nutrient profiles, the nutrition values for total fat (g/100g), saturated fat (g/100g), total sugar (g/100g), added sugar (g/100g), non-sugar sweeteners (g/100g), salt (g/100g) and energy (kcal) should be recorded for each product.

5.1.2 Children and young people

Children and young people can be defined by biological age, in legal terms as well as a social and cultural construct. The UN defines a child as person below 18 years, while countries may define the age of criminal responsibility at the age of 15 for instance. The WHO defines young people/adolescents as persons between the ages of 10 and 19.[21] A common understanding is that a person is a child until puberty and a young person/adolescent from puberty until the person is an adult in legal terms. Notably, the 2016 WHO ECHO Commission on Ending Childhood Obesity recommends reduction of food marketing to children and adolescents.[22]

Children and young people are considered to be particularly vulnerable to the effects of marketing. Restrictions defined in food marketing policies aim to protect children and young people who are media illiterate (e.g. do not recognize marketing or cannot critically analyze it), but also to protect children and young people who may recognize marketing but are still vulnerable to the persuasive effects. This is in line with the Nordic Consumer Ombudsmen's view that internet marketing must be particularly

[20] The Danish model has 10 food categories and is available from Forum for Responsible Food Marketing Communication's (www.kodeksforfoedevarereklamer.dk). The Norwegian model has 8 food categories and is available at the Food and Drink Industry Professional Practices Committee's (MFU) webpage (www.mfu.as). The model used by EU Pledge has 9 food categories (EU Pledge Nutrition White Paper – Updated July 2015, http://www.eu-pledge.eu/).

[21] http://www.who.int/topics/adolescent_health/en/

[22] WHO, (2016). Report of the Commission on Ending Childhood Obesity. Geneva: World Health Organization; 2016.

cautious regarding all persons below 18 years old.[23] In their publication on marketing in social media, they further suggest assessing marketing towards children and young people 14 years old and younger more strictly than marketing towards those aged 15 to 17 years.[24]The vulnerability of young people aged 12 and older is also underlined in the research literature.[25]

Monitoring of marketing of HFFS foods and beverages should therefore focus on the most vulnerable group aged 12 years or younger (referred to as "children"), but monitoring of marketing towards the age group 13–17 years old (referred to as "young people") is still important. When selecting media channels to monitor, it is necessary to consider the composition of the audience with regards to gender and socio-demographic factors and ethnicity. Public audience statistics will indicate which audiences (age groups/users) are potentially exposed to the marketing content in each media monitored.

5.2 Media habits

Children and young people's media habits are changing and may vary between countries. The marketing channels to be monitored should be selected based on the most recent data and trends in media use among children and young people. Updated survey and/or media monitoring data on children's and young people's media use is therefore necessary in order to decide the selection of sources within each marketing communication channel. The final monitoring reports should also include descriptions of current trends in media use among children and young people.[26]

Many marketing channels have defined age limits, like social media platforms, cinemas and movies. In other cases, there are no age limits but a specific product or marketing channel (like a TV-show) may have been developed with a certain age group in mind. Despite having defined age limits, however, data have shown that users do not respect these. In the case of social media platforms like Facebook, Instagram or Snapchat, many users are younger than the set age limit of 13 years. In such cases, the marketers are not responsible for children's exposure to their marketing, but from a

[23] Paragraph 7.1, page 13, "De nordiska konsumentombudsmännens ståndpunkt om handel och marknadsföring på Internet", 2010 (Available online: http://publikationer.konsumentverket.se/sv/publikationer/malgrupper/foretagare/vagledningar/de-nordiska-konsumentombudsmannens-standpunkt-om-handel-och-mark.html)

[24] See footnote 19, page 11 in "De nordiska konsumentombudsmännens ståndpunkt om marknadsföring via sociala medier", 2012, (Available online: https://www.konsumentverket.se/globalassets/publikationer/produkter-och-tjanster/reklam-och-marknadsforing/vagledning-standpunkt-marknadsforing-sociala-medier-121205-konsumentverket.pdf

[25] Harris JL, Heard A, Schwartz (2014). *Older still vulnerable: All children need protection from unhealthy food marketing*. Yale Rudd Center for Food Policy & Obesity;
Carter O.B.J., Patterson L.J., Donovana R.J., Ewing M.T., Robert C.M. (2011). Children's understanding of the selling versus persuasive intent of junk food advertising: Implications for regulation. *Social Science & Medicine*, (72) Issue 6, 962–968.

[26] Depending on available time and resources there is also an option to involve young people themselves by inviting a representative group of children/young people to write down media diaries which could describe their actual media usage.

public health perspective it is still necessary to monitor the marketing that children are potentially exposed to.

Along the line of the understanding of potential exposure of marketing as described above, marketing channels to monitor should therefore be selected on the basis of children and young people's *actual media use* rather than relying on defined age limits. Actual media use among children and young people (in whole or in subgroups) should be decisive in the sampling procedure.

6. Methods

6.1 General

The following paragraphs describe how to monitor marketing of HFSS foods and beverages in different marketing channels. Each marketing communication medium needs to be monitored in specific ways. For some of the marketing communication media the methods are well established, while others are more exploratory. This is particularly the case with the new media. The protocol aims to describe how to monitor in the different media. At the same time, each country that makes use of the protocol may need to prioritize which of the marketing channels they consider to be particularly important to monitor. A more detailed template for coding schemes for each marketing channel will have to be elaborated and established when applying the protocol. At the same time, limitation of resources might have to adjust the amount of data collected.

6.2 Marketed product, brand or service

Each registration of monitoring should specify name of the *brand*, as well as the name of the *responsible company*. The product will be categorized according to the list of foods and beverages (Appendix 1).

6.3 TV

Traditional marketing in TV consists of commercials between programs, within a program (as commercial breaks), sponsor spots TV-shows,[27] programs or movies.

Children and young people have access to a wide range of TV-channels. TV-channels to be selected should include both TV-channels that are the most popular among children and TV-channels specifically targeting children and young people. Only TV channels using national languages (spoken or subtitles) in the respective countries should be monitored.

Based on audience or rating data, a selection of TV-channels should be monitored during the 6 hours peak TV-viewing times on weekdays and at weekends among the following four groups: i) girls 12 years or younger, ii) boys 12 years and younger, iii) girls 13 to 17 years and iv) boys 13 to 17 years.

The necessary variables to include when monitoring marketing in TV are: i) name of broadcaster and channel, ii) time start/end, iii) day/month/year, iv) TV-show/program

[27] Marketing may also be product placements, but such marketing is not covered by the protocol.

before commercial (name and program category) v) TV-show/program after commercial (name and program category), vi) marketing techniques (see paragraph 6.1).

Preferably, the 10 most viewed TV-channels should be monitored on two weekdays, Friday and Saturday for at least two weeks on the day parts (breakfast, daytime, primetime and nighttime that are most popular with the demographics described above. Preferably the monitoring should avoid national holidays and periods where seasonal/traditional foods and beverages are more likely to be marketed than the rest of the year (Christmas, Easter etc.):[28]

- *Documentation required*: video recordings of commercials
- *Relevant research questions*: 1, 2, 3, 4, 5, 6

6.4 Streaming TV

In addition to traditional TV, children and young people are watching streaming TV, including embedded TV-channels and YouTube channels. Marketing in these channels consists of commercials/sponsor spots before, during and possibly after the content.

Selection of streaming TV should be the 3 most watched streaming TV-shows (using national languages and if such figures are available) by the following four groups: i) girls 12 years or younger, ii) boys 12 years and younger, iii) girls 13 to 17 years and iv) boys 13 to 17 years.

The necessary variables to include when monitoring marketing in TV are: i) name of broadcaster/website, ii) day/month/year, iii) title of program after commercial (name and program category), iv) number of ad breaks in the program, v) marketing techniques (see paragraph 6.1):

- *Documentation required*: screen shots of commercial
- *Relevant research questions*: 5, 6

6.5 Social media

Marketing in social media promotes products and brands through adverts and content that is shared, liked, reviewed and targeted to the characteristic of the user profile. There is much development in marketing in the various social media platforms as well as social media platforms in general. Monitoring of marketing of HFSS towards children and young people in social media should therefore remain under continuous review as new methods for monitoring are developed or become publicly available. At present,

[28] This is according to the recommendation in: Kelly B., King L., Baur L., Rayner M., Lobstein T., Monteiro C., et al. (2013). Monitoring food and non-alcoholic beverage promotions to children, *Obesity Reviews 14 (suppl.1)*, 59–69, October 2013. https://doi.org/10.1111/obr.12076

age- and location-specific analytics are typically only available to brands and platforms themselves. However, in case these analytics may be purchased this should be investigated as a first option, depending on budgets available and the age groups for which such data are available.

Where specific analytics cannot be accessed, monitoring methods depend on the nature of each platform and the marketing on it, and monitoring in social media needs an exploratory approach.[29] Creating avatar user profiles and simulating engagement in online activities on smartphones typical of a child of relevant age and monitor exposure is one suggested method with mixed experiences. The method needs to be explored with regards to the extent the method provide substantial and relevant information, as well as exploring eventual challenges with existing Terms and Conditions of social media platforms, as these are owned by private corporations who are free to limit access to researchers and change these terms over time. Exploratory monitoring activities should be done with these terms and conditions and legal advice should be obtained when necessary. Another exploratory method that have been tried out is to recruit children and young people who screenshots adverts that they receive through their social media account.[30]

An alternative option is to monitor the content of specific brand or product social media pages made by the food industry purposely selected according to the following categories in the WHO nutrient profiling model (see Appendix 1). Three specific product's social media accounts from each of the following food categories should be selected based on popularity of the brand account with the target group (or closest age group) within Facebook if available: (i) chocolate and sugar confectionary, energy bars, and sweet toppings and desserts, (ii) cakes, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such, (iii) breakfast cereals, (iv) beverages and (v) savoury snacks as well as (vi) ice cream and (vii) fast food.

The variables to include when monitoring social media brand pages are: a) social media platform, b) time and date visited, c) description of marketing (review/advertisement/like/sharing/sponsored content), d) marketing technique (see chapter 6.1):[31]

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[29] See for instance a recent study of usergenerated advertising and food portrayals in Instagram: Holmberg C., Chaplin J.E., Hillman T., Berg C. (2016). Adolescents' presentation of food in social media: An explorative.
Study. *Appetite (99)*. 121–129.

[30] Experience from Norway suggests that an analysis of online and social media advertising is far more complicated methodically than TV since atvertising online is increasingly personalised via websites, tablets and smartphones. In order to map the amount of unhealthy food and beverage marketing that target children and young people online, 5 girls and 5 boys aged 12–17 years old, from different areas in Norway, were recruited as informants in a study conducted in 2016. The informants were asked to take screenshots of all advertisements they received and noticed on the websites and social media they used the most. The informants chose themselves when during a day they took the screenshots and how many different websites and social media they delivered screenshots from. Each child sent in between 60 and 100 screenshots. In this way, the researchers gained insight into how children and young people are addressed on the internet. The informants could choose if they wanted to take screenshots from mobile, ipad or computer. All participants received a gift card. They submitted consent form, and anonymity was assured. Only the researchers were given access to the data collected. http://www.hioa.no/extension/hioa/design/hioa/images/sifo/files/file80667_oppdragsrapport_9_2016_sifo.pdf

[31] In the Irish Heart Foundation's report written by Mimi Tatlow-Golden "Who's Feeding the Kids Online? Digital Food Marketing and Children in Ireland" (2016), marketing techniques used on Facebook pages were clustered in to three themes: identifying (advertised food/drink shown, brand logo shown, product packing shown), linking (engagement:

- *Documentation required*: screenshots of brand pages.[32]
- *Relevant research question* (s): 5, 6

6.6 Web-sites and video-blogs/blogs

Marketing in webpages and blogs include sites that are visited and used by children and young people specifically, as well as sites that children and young people visit and use. Webpages made by the food industry for specific food/beverage products should only be monitored if they are visited by children and/or young people.

Selection of webpages and blogs should preferably be the 10 most visited web-sites (excluding search engines) and 10 most popular (video-) blogs[33, 34] by the following four groups i) girls 12 years or younger, ii) boys 12 years or younger, iii) girls 13 to 17 years, iv) boys 13 to 17 years.

The necessary variables to include when monitoring marketing on webpages and video-/ blogs which are most frequently visited by children and young people: a) name of webpage and video-/blog, b) time/day/month/year visited, c) description of main activities of the webpages and video-/ blog, d) marketing techniques (see chapter 5.1), e) sponsored blog content (declared and non-declared), f) adverts. However these data should be treated with considerable caution until a method of identifying ads delivered to children (rather than public health researchers) becomes available, as adverts exposed on a video-/blog reflects user profiles' tracked online activities across sites and devices and the exposed adverts must therefore be understood in the context of personalized web-marketing.

Monitoring webpages made by the food industry for specific food/beverage products should be optional unless they are on the list of most popular webpages among children and young people. There should be a distinction between national web-pages, which is under the jurisdiction of each country and the international web-pages which are not. However, if the most used web-pages are international, this should be discussed. Cross-border-marketing points to the need for a global focus on the issue.

An alternative option is to monitor product specific food product or brand web-pages purposely selected according to the food categories in the WHO nutrient profiling model (see Appendix 1). Three product specific webpages from each of the

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Facebook #, comment, tag and poist promts; cross-digital links (website, app, YouTube, Instagram) and persuading (humour (jokes, punes, witty comments); having fun; bold graphics, animation, cartoons; special days: popular culture, #days, national days, political events; entertainment (TV, movie, games); competition; sports, being physically active; family (activities, events, value and fun); teen/young adult shown; celebrity, entertainment/sports star; novel item – new menu, product and flavour; children shown; friendship; brand or liscensed characters).

[32] It is problematic to save screenshots of children's social media platforms both from an ethical point of view and considering the copyright of photos. It is therefore important to avoid screenshots where other users name and picture appear.

[33] The choice of web-pages is a question of what data is available. Examples of resources could be Nordicom or other national data on children's media use like panel or tracking. General search pages and generic pages, where a platform has many channels, e.g., YouTube should not be included.

[34] See also the experiences from Norway.
http://www.hioa.no/extension/hioa/design/hioa/images/sifo/files/file80667_oppdragsrapport_9_2016_sifo.pdf

following food categories should be selected on the basis of popularity of general sale statistics (if available): (i) chocolate and sugar confectionary, energy bars, and sweet toppings and desserts, (ii) cakes, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such, (iii) breakfast cereals, (iv) beverages and (v) savoury snacks as well as (vi) ice cream and (vii) fast food.

The necessary variables to include when monitoring food industry's web pages for specific food/beverage products: a) name of webpage, b) time/day/month/year visited, c) description of main activities of the webpages, d) marketing techniques (see chapter 6.1). The description of main activities of the webpage should be a qualitative description of the content, design features, tabs, links, and estimate of age group aimed at. This task should be conducted by two reviewers independently, to look at and descriptions compared, to ensure that people are looking at and interpreting the same things (see chapter 8.2):

- *Documentation required*: screen shots of webpages/blogs (landing page)
- *Relevant research questions*: 5, 6

6.7 Magazines

Marketing in magazines are printed advertisements for products and webpages, competitions, product placements and sponsorships.

Selection of magazines should be one copy of the 10 most popular magazines for in the following four groups: i) girls 12 years or younger, ii) boys 12 years or younger, iii) girls 13 to 17 years, iv) boys 13 to 17 years.

The necessary variables to include when monitoring marketing in magazines are: a) name of magazine, b) issue number/year published, c) description of the magazine, d) number of ads, e) number of food and beverage ads, f) number of HFSS ads, g) marketing techniques (see chapter 6.1):

- *Documentation required*: copies of magazines
- *Relevant research questions*: 1, 2, 3, 4, 5, 6

6.8 In-store

Marketing of HFSS foods and beverages in grocery stores will mainly be through packaging, shelf placement, price promotions, point of sale and/or point of purchase displays[35] in the stores.

[35] Equivalent to the Norwegian term "sjokkselger".

Selection of grocery stores should be 5 urban (more than 20,000 inhabitants) grocery stores, and 5 rural (less than 20.000 inhabitants) grocery stores.[36] At the urban and rural sites at least one store should be larger than 500 m^2 (i.e. mega-market, hypermarket, supermarket). The selected stores should represent different chains. Some description of socio-economic status of the area should be included.

The monitoring should focus on the following food categories: (i) chocolate and sugar confectionary, energy bars, and sweet toppings and desserts, (ii) cakes, sweet biscuits and pastries or other sweet bakery wares, and dry mixes for making such, (iii) breakfast cereals, (iv) beverages (v) savory snacks, (vi) ice cream, (vii) fast food.

The necessary variables to include when monitoring shelf placement are: a) name of grocery store, b) rural/urban site, c) size of store (<500 m^2 / >500m^2), d) time (date/clock), e) points of sale and/or point of purchase displays (yes/no), f) shelf placement for HFSS foods and beverage products directed at children/young people (shelf row number from the floor/estimated height in cm)

The necessary variables to include when monitoring packing are: a) name of grocery store, b) rural/urban site, c) size of store (<500 m^2 / >500m^2), d) points of sale/point of purchase displays (yes/no), e) shelve placement (shelve row number from the floor/estimated height in cm), f) description of child/youth appealing element of packing (competitions/cartoons (both licensed and spokes characters)/ collections/premium offers):

- *Documentation required*: photos of shelves/products/point of purchase/point of sale
- *Relevant research question* (s): 5, 6

6.9 Cinemas

Marketing in cinemas are either commercials prior to the movie or in cinema shops/entrance areas.[37]

The most convenient way to monitor commercials prior to the movies is to request copies of commercials from the marketing distribution companies. These companies distribute packages of commercials based on age limits for the movies.[38] The monitoring should include movies with no age limits (where children are the target group for the movie, except movies obviously not directed at children) and movies with age limits 15 years and/or below. Product placement in the movie itself is not covered by this protocol.

[36] If there is evidence of demographic variation in food store offerings and promotions, it would be worth ensuring demographic variation in the store sampling.

[37] Marketing in cinemas can also be interconnected marketing where movie characters or themes are used as a marketing technique to attract children's attention in for instance fast food restaurants.

[38] If it is not possible to get access to copies of the commercials from the distribution companies, an alternative will be to visit the cinemas and watch the relevant movies.

The variables to include when monitoring marketing in cinema commercials are: a) age limit, b) name of movie, c) movie category, d) description of commercial, e) marketing techniques (see chapter 5.1):

- *Documentation required*: copies of cinema commercial packages
- *Relevant research question (s)*: 1, 2, 3, 4, 5, 6

6.10 Cinema shops

Monitoring of marketing of HFSS foods and beverages at the cinema shop should estimate the total meters of shelves of product as well as register special offers or other promotional materials (e.g. posters) that may encourage larger volumes of HFSS foods and beverages.

The variables to include when monitoring the cinema shop are: a) location, b) time and date visited, c) number of theatres, d) number of shops, e) point of sale, f) special offers (size/products):

- *Documentation required*: photos of cinema shop.
- *Relevant research question (s)*: 5, 6.

6.11 In-game adverts

An important and developing area is in-game marketing and advertising, in online and console gaming[39] (see also).[40] This may involve use of logos within games or games developed on the basis of a particular product or brand. Marketing in on-line games will involve personalized marketing based on previous computer activities, monitoring of marketing in online games should therefore be done on computers that are "clean".

The games to be selected for monitoring should be based on statistics of the most popular games among boys and girls, based on available information on children and young people's actual use rather than any recommended age limits on the games. Selection of games should be the 5 most popular online games and 5 most popular console games by the following four groups[41] i) girls 12 years or younger, ii) boys 12 years or younger, iii) girls 13 to 17 years, iv) boys 13 to 17 years.

The variables to include when monitoring games are: a) name of game, b) recommended age, c) online game (yes/no), d) available platforms

[39] I 2014, almost 40% of the Norwegian children and young people (9 to 16 years, boys and girls) said that they played some game several times each day. (Medietilsynet, 2014; Barn og medier 2014).

[40] Martinez, C. (2017). Targeting Children Online: Young internet users and producers in the commercial media environment Lund.

[41] In some cases, free, online games (for instance advert games) may become popular even if the popularity.

(smartphone/tablet/computer), e) console game (yes/no), f) marketing technique (see chapter 6.1):

- *Documentation required*: screenshots
- *Relevant research question (s)*: 5, 6

6.12 Marketing in the local community (schools, sports arenas)

Marketing in the local community includes marketing in schools and sports arenas such as sponsor boards, vending machines, material that are distributed and sold at the schools/arenas, competitions/activities, canteens etc.

Schools and sports arenas should be selected from 3 urban (more than 20,000 inhabitants) sites, and 3 rural (less than 20,000 inhabitants) sites. At each site at least one primary school and one secondary school should be selected, as well as at least two sports indoor and two outdoor arenas at each site.

The variables to include when monitoring schools/sports arenas are: a) name of school/arena, b) rural/urban site, c) schools: size of school (number of students) d) sports arena: type of arena, e) number marketing spots, f) marketing technique (see chapter 6.1):

- *Documentation required*: photos
- *Relevant research question (s)*: 5, 6

7. Reporting

7.1 General

The analysis and reporting should include descriptions of current regulations in the country, updated information on media use and habits among children and young people as well as other relevant contextual information that may situate the findings. This is particularly important when results involve comparisons between two or more countries. Explicit information of about channels monitored and reported on should be provided.

7.2 Reliability and trustworthiness

One of the critical parts in monitoring marketing towards children and young people is the interpretation and understanding of what and when marketing techniques have been used purposely to attract the interest of children and young people. In paragraph 7.1 the different techniques are described, but the coding and categorization will still rely on the researchers' interpretation. The coding of marketing techniques should therefore be carried out by at least two independent individuals in order to assess the level of inter-rater reliability. The inter-rater agreement should be reported as % agreement along with the test used in order to measure the agreement, e.g. Cohens Kappa or the Krippendorfs Alpha. If there are disagreements between the two, they will first exchange viewpoints and aim to come to an agreement. If not, a third independent person will be involved to finally decide. All cases where there have been disagreements will be registered in the data file.

The procedure for how interpretation discrepancies were solved should be described in the report. In the reports there should also be a detailed list with visual examples of the marketing efforts that have been categorized as using techniques targeting children and young people (chapter 5.1) to ensure transparency.

7.3 Generalizability and transferability

The generalizability of results generated by the protocol (external validity) is dependent on the sampling procedure. With representative samples of adequate sizes generalizability is possible for media like TV, magazines and cinema commercials. For the other marketing channels like in-store marketing, cinema shops, schools, sports arenas, web-sites, blogs, social media, and in-game adverts, the result will provide an illustration of the nature of HFSS food and beverage marketing children and young

people are exposed to and the marketing techniques employed at a particular point in time and in a particular setting/ context, but cannot assess the total extent or volume/proportion. For the latter examples of marketing channels (online marketing), the result will illustrate the *nature* of HFSS food and beverage marketing children and young people are exposed to and the marketing techniques employed, but cannot assess the total extent or volume/proportion.

8. Further collaboration

The protocol will need regular adjustments and updates. Particularly regarding new media, methods described may not work as intended and may need reconsideration. Future developments in marketing as well as in children and young people's media habits will also require updates. It is therefore important that the Nordic countries aim to establish a schedule and routines for regular updates and revision, preferably in collaboration with WHO Regional Office for Europe. The food industry and other stakeholders should be given the opportunity to contribute their comments and suggestions.

The protocol is a product of a joint Nordic collaboration. Ownerships of data and reports from monitoring of marketing of HFSS foods and beverages will be defined in each case, but there is a mutual understanding between the countries to keep each other updated on monitoring plans, activities and reports.

Any initiative to develop joint research proposals and collaborations using the protocol is highly encouraged.

9. Acknowledgements

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Sammendrag

Protokollen beskriver metoder for å monitorere markedsføring av mat- og drikkevarer med høyt innhold av fett, salt og sukker som er rettet mot barn og unge eller som barn og unge blir eksponert for i hverdagen. En felles nordisk protokoll for monitorering legger til rette for å sammenligne data på slik markedsføring mellom forskjellige land. Protokollen inneholder metoder for monitorering innenfor blant annet områder som TV, sosiale medier, internett, butikker, magasiner og kinoer med forslag til dokumentasjon og relevante forskningsspørsmål.

Rapporten er skrevet av en arbeidsgruppe som har bestått av representanter fra Islands universitet, Konsumentforbundet i Finland, Fødevarestyrelsen i Danmark, Göteborgs universitet, Helsedirektoratet - Island, Helsedirektoratet - Norge, Folkehelseinstituttet i Norge, Lunds universitet, The Open University (Storbritannia), National Institute of Public Health - Slovenia og WHO Regional Office for Europe. Nordisk ministerråd har finansiert arbeidet.

I arbeidet med å lage protokollen har representanter fra de to bransjestyrte ordningene for regulering av markedsføring rettet mot barn og unge i Danmark (Forum for Fødevarereklamer) og i Norge (Matbransjens Faglige Utvalg, MFU) hatt anledning til å kommentere på innholdet i utkastene til protokollen. Alle innspill og kommentarer er blitt vurdert av prosjektgruppen. Noen av innspillene er tatt hensyn til, men de fleste av kommentarene gjenspeiler forskjellige prinsipielle synspunkter på temaer som behovet for monitorering, hvilken markedsføringskommunikasjon som skal inkluderes og hva som skal være målgruppene.

Metoder for markedsføringskommunikasjon utvikles kontinuerlig, særlig innen sosiale medier og på grunn av ny teknologisk utvikling. Derfor vil det komme nye muligheter og metoder for monitorering. Følgelig bør metodene beskrevet i protokollen gjennomgås og tilpasses kulturell og sosial mediekontekst før de anvendes.

Appendix 1: Categories for marketed food and beverages

Table 1: Categories for marketed food and beverages

Foods /beverages	Aggregated food-groups	Food and beverage categories based on HFSS value (WHO nutrient profiling model)
1. Foods	1.1 Chocolate and sugar confectionary, energy bars, and sweet toppings and desserts	1.1.1 Chocolate and sugar confectionary, energy bars, and sweet toppings and desserts
	1.2 Cake, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such	1.2.1 Cake, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such
	1.3 Savory snacks	1.3.1 Savory snacks (*no* added sugar and if salt content per 100 g *does not* exceed 0.1 g) or/and saturated fat
		1.3.2 Savory snacks (*with* added sugar and/or if salt content per 100 g *exceed* 0.1 g) or/and saturated fat
	1.4 Breakfast cereals	1.4.1 Breakfast cereals (if content per 100 g *does not* exceed 10 g total fat, or/and 15 g total sugars, or/and 1.6 g salt)
		1.4.2 Breakfast cereals (if content per 100 g *exceed* 10 g total fat, or/and 15 g total sugars, or/and 1.6 g salt)
	1.5 Dairy products	1.5.1 Yoghurts, sour milk, cream and other similar foods (if the content per 100 g *does not* exceed 2.5 g total fat, and/or 2 g saturated fat, and/or 10g total sugars, and/or 0.2 g salt)
		1.5.2 Yoghurts, sour milk, cream and other similar foods (if the content per 100 g *exceed* 2.5g total fat, and/or 2 g saturated fat, and/or 10 g total sugars, and/or 0.2 g salt)
		1.5.3 Cheese (if the content per 100g *does not* exceed 20 g total fat, and/or 1.3 g salt)
		1.5.4 Cheese (if the content per 100g *exceed* 20 g total fat, and/or 1.3 g salt)
		1.5.5. Ice cream
	1.6 Ready-made and convenience foods and composite dishes	1.6.1 Ready-made and convenience foods and composite dishes (if the content per 100 g *does not exceed* 10 g total fat, and/or 4 g saturated fat, and/or 10 g total sugars, and/or 1 g salt and/or 225 energy (kcal) or less)
		1.6.2 Ready-made and convenience foods and composite dishes (if the content per 100 g *exceed* 10g total fat, and/or 4 g saturated fat, and/or 10 g total sugars, and/or 1 g salt and/or 225 energy (kcal) or less)
	1.7 Butter and other fats and oils	1.7.1 Butter and other fats and oils (if the content per 100 g *does not exceed* 20 g saturated fat, and/or 1.3 g salt)
		1.7.2 Butter and other fats and oils (if the content per 100 g *exceed* 20 g saturated fat, and/or 1.3 g salt)

Foods /beverages	Aggregated food-groups	Food and beverage categories based on HFSS value (WHO nutrient profiling model)
	1.8 Bread	1.8.1 Bread, bread products and crisp bread (if the content per 100 g *does not exceed* 10 g total fat, and /or 10 g total sugars, and/or 1.2 g salt)
		1.8.2 Bread, bread products and crisp bread (if the content per 100 g does *exceed* 10 g total fat, and /or 10 g total sugars, and/or 1.2 g salt)
	1.9 Pasta, rice and grains	1.9.1 Fresh or dried pasta, rice and grains (if the content per 100 g *does not exceed* 10 g total fat, and /or 10 g total sugars, and/or 1.2 g salt)
		1.9.2 Fresh or dried pasta, rice and grains (if the content per *exceed* 10 g total fat, and /or 10 g total sugars, and/or 1.2 g salt)
	1.10 Processed fruit, vegetables and legumes	1.10.1 Processed fruit, vegetables and legumes (if the content per 100 g *does not exceed* 5 g total fat, and/or 10 g total sugars, and/or 0g added sugars, and/or 1 g salt)
		1.10.2 Processed fruit, vegetables and legumes (if the content per 100 g *exceed* 5 g total fat, and/or 10 g total sugars, and/or 0g added sugars, and/or 1 g salt)
	1.11 Processed meat, poultry, fish and similar	1.11.1 Processed meat (if the content per 100 g *does not exceed* 20 g total fat and/or 1.7 g salt)
		1.11.2 Processed meat (if the content per 100 g *exceed* 20 g total fat and/or 1.7 g salt)
		1.11.3 Processed poultry (if the content per 100 g *does not exceed* 20 g total fat and/or 1.7 g salt)
		1.11.4 Processed poultry (if the content per 100 g *exceed* 20 g total fat and/or 1.7 g salt)
		1.11.5 Processed fish (if the content per 100 g *does not exceed* 20 g total fat and/or 1.7 g salt)
		1.11.6 Processed fish (if the content per 100 g *exceed* 20 g total fat and/or 1.7 g salt)
	1.12 Sauces, dips and dressings	1.12.1 Sauces, dips and dressings (if the content per 100 g *does not* exceed 10 g total fat, and/or 0g added sugars, and/or 1 g salt)
		1.12.2 Sauces, dips and dressings (if the content per 100 g *exceed* 10 g total fat, and/or 0g added sugars, and/or 1 g salt)
	1.13 Fresh and frozen meat, poultry, fish and similar	1.13.1 Fresh and frozen meat, poultry, fish and similar
	1.14 Fresh and frozen fruit, vegetables and legumes	1.14.1 Fresh and frozen fruit, vegetables and legumes
2. Beverages	2.1 Beverages	2.1.1 Juices
		2.1.2 Energy drinks
		2.1.3 Milk drinks if content per 100g *does not* exceed 2.5 g total fat, and/or 0g added sugar, and/or 0g non-sugar sweetener
		2.1.4 Milk drinks if content per 100g *exceed* 2.5 g total fat, and/or 0g added sugar, and/or 0g non-sugar sweetener
		2.1.5 Other beverages if content per 100 g *does not* exceed 0g added sugar, and/or 0g non-sugar sweetener
		2.1.6 Other beverages if content per 100 g *exceed* 0g added sugar, and/or 0g non-sugar sweetener

Foods /beverages	Aggregated food-groups	Food and beverage categories based on HFSS value (WHO nutrient profiling model)
3. Other	3.1 Other	3.1.1 Clothes/shoes 3.1.2 Education 3.1.3 Entertainment 3.1.4 Financial 3.1.5 Household cleaners/detergents 3.1.6 Household equipment 3.1.7 Motoring 3.1.8 Pet products 3.1.9 Pharmaceutical 3.1.10 Public information 3.1.11 Publishing 3.1.12 Retailing and mail order 3.1.13 Toiletries 3.1.14 Toys 3.1.15 Travel/transport/holidays 3.1.16 Utilities 3.1.17 Channel promotions 3.1.18 Other

Appendix 2 Coding scheme - example

Table 2: Coding scheme[42]

	Variable number	Variable name	Variable values
Coder id	varoo1	Id.number for coder	(given id.number for the person repsonsible for coding)
Product (all)	varoo2	Unique id.number	(given id.number for the specific)
	varoo3	Brand	(brand)
	varoo4	Responsible company	(name)
Product category (all)	varoo5	Overall category	Foods = 1 Beverages = 2 Other = 3
	varoo6	Food category	Chocolate and sugar confectionary, energy bars, and sweet toppings and desserts = 1 Cake, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such = 2 Savory snacks = 3 Breakfast cereals = 4 Dairy products = 5 Edible ices = 6 Ready-made and convenience foods and composite dishes = 7 Butter and other fats and oil = 8 Bread = 9 Pasta, rice and grains = 10 Processed fruit, vegetables and legumes = 11 Processed meat, poultry, fish and similar = 12 Sauce, dips and dressings = 13 Fresh and frozen meat, poultry, fish and similar = 14 Fresh and frozen fruit, vegetables and legumes = 15 Other foods = 16 Not applicable = 9999
	varoo7	Beverage category	Juices = 1 Energy drinks = 2 Milk drinks = 3 Other beverages = 4 Not applicable = 9999
	varoo8	Other category	Clothes/ shoes = 1 Education = 2 Entertainment = 3 Finanical = 4 Household cleaners/ detergents = 5 Household equipments = 6 Motoring = 7 Pet products = 8 Pharmaceutical = 9 Public information = 10 Publishing = 11 Retailing and mail order = 12 Toiletries = 13 Toys = 14 Travel/ transport/ holiday = 15 Utilities = 16 Channel promotions = 17 Other = 18

[42] This example is only included to illustrate how a code sheet can be designed and can not be used without further processing.

Not applicable = 9999

	Variable number	Variable name	Variable values
Nutrional content (if product category = food or beverage)	var010	Total fat	(g/100g)
	var011	Saturated fat	(g/100g)
	var012	Total sugar	(g/100g)
	var013	Added sugar	(g/100g)
	var014	Non-sugar sweeteners	(g/100g)
	var015	Salt	(g/100g)
	var016	Energy	(kcal)
	var017	*RECODED*: HFSS food/beverage according to WHO nutrition profile model	IF (*food category* = 4 IF total fat = <10g/100g AND/OR total sugars = <15g/100g AND/OR salt = <1.6g/100g) OR (*food category* = 5 IF total fat = <2.5g/100g AND/OR saturated fat = <2g/100g AND/OR total sugar = <10g/100g AND/OR salt 0.2g/100g) OR (*food category* = 7 IF total fat = <10g/100g AND/OR saturated fat = <4g/100g AND/OR total sugar = <10g/100g AND/OR salt = <1g/100g AND/OR kcal = <225) OR (*food category* = 8 IF saturated fat = <20g/100g AND/OR salt = <1.3g/100g) OR (*food category* = 9 IF total fat = < 10g/100g AND/OR total sugar = <10g/100g AND/OR salt = <1.2g/100g) OR (*food category* = 10 IF total fat = <10g/100g AND/OR total sugar = <10g/100g AND/OR salt = <1.2g/100g) OR (*food category* = 11 IF total fat = <5g/100g AND/OR total sugar = <10g/100g AND/OR added sugars = <0g/100g AND/OR salt = <1g) OR (*food category* = 12 IF total fat = <20g/100g AND/OR salt = <1.7g/100g) OR (*food category* = 13 IF total fat = <10g/100g AND/OR total added sugar = <0g/100g AND/OR salt = <1g/100g) OR (*food category* = 14) OR (*food category* = 15) OR (*beverage category* = 3 IF total fat = <2.5g/100g AND/OR added sugars = <0g AND/OR non-sugar sweeteners = <0g) OR (*beverage category* = 4 IF added sugars = <0g AND/OR non-sugar sweeteners = <0g: *No = 0* IF (food category = 1) OR (food category = 2) OR (food category = 3) OR (food category = 4 IF total fat>10g/100g AND/OR total sugars>15g/100g AND/OR salt>1.6g/100g) OR (food category = 5 IF total fat>2.5g/100g AND/OR saturated fat>2g/100g AND/OR total sugar>10g/100g AND/OR salt>0.2g/100g) OR (food category = 6) OR (food category = 7 IF total fat>10g/100g AND/OR saturated fat>4g/100g AND/OR total sugar>10g/100g AND/OR salt>1g/100g AND/OR kcal>225) OR (food category = 8 IF saturated fat>20g/100g AND/OR salt>1.3g/100g) OR (food category = 9 IF total fat>10g/100g AND/OR total sugar>10g/100g AND/OR salt>1.2g/100g) OR (food category = 10 IF total fat>10g/100g AND/OR total sugar>10g/100g AND/OR salt>1.2g/100g) OR (food category = 11 IF total fat>5g/100g AND/OR total sugar>10g/100g AND/OR added sugars>0g/100g AND/OR salt>1g) OR (food category = 12 IF total fat>20g/100g AND/OR salt>1.7g/100g) OR (food category = 13 IF total fat > 10g/100g AND/OR total added sugar>0g/100g AND/OR salt>1g/100g) OR (beverage category = 1) OR (beverage category = 2 OR (beverage category = 3 IF total fat >2.5g/100g AND/OR added sugars>0g AND/OR non-sugar sweeteners>0g) OR (beverage category = 4 IF added sugars>0g AND/OR non-sugar sweeteners>0g) : *Yes = 1*
	var018	RECODED: HFSS food/beverage according to Norwegian nutrition profile model	(to be added) (to be added)
	var019		(to be added)

		RECODED: HFSS food/beverage according to Danish nutrition profile model	(to be added)

	Variable number	Variable name	Variable values
	var020	RECODED: HFSS food/beverage according to Swedish nutrition profile model	(to be added) (to be added)
	var021	RECODED: HFSS food/beverage according to Finnish nutrition profile model	(to be added) (to be added)
	var022	RECODED: HFSS food/beverage according to Islandic nutrition profile model	(to be added) (to be added)
Media (all)	var030	Marketing media channel	TV = 1 Streaming-TV = 2 Blog = 3 Website = 4 Magazine = 5 In-store = 6 Cinema = 7 Cinema shop = 8 Social media = 9 In-game adverts = 10 Community = 11 Other = 12
Marketing techniques (all)	var031	Use of child-like language and/or children's voices (intended for children, spoken by children etc.)	No = 0 Yes = 1
	var032	Use of bright colors likely to appeal particular to children	No = 0 Yes = 1
	var033	Use of music likely to appeal particular to children	No = 0 Yes = 1
	var034	Use of child-appealing images	No = 0 Yes = 1
	var035	Use of children appearing in the commercial	No = 0 Yes = 1
	var036	Use of personalities, celebretites, associates and/or persons familiar and appealing to children	No = 0 Yes = 1
	var037	Use of cartoon characters that appeal to children (licensed and/or brand owned)	No = 0 Yes = 1
	var038	Use of free gifts, toys and/or collectable items appealing to children	No = 0 Yes = 1
	var039	Use of competitions, vouchers and/or games with appeal to children	No = 0 Yes = 1
	var040	Use of products with a child-appealing design and/or packaging	No = 0 Yes = 1
	var041	RECODED: (Sumscore marketing techniques targeting children)	(SUM var031-var040, (0-10))

	var042	RECODED: Marketing specifically targeted children	IF var041 SUMSCORE = 0: No = 0 IF var041 SUMSCORE> = 1: Yes = 1
	Variable number	**Variable name**	**Variable values**
	var043	Did the two persons repsonsible for independent coding agree on coding of marketing techniques?	Yes = 1 No, but agreed after meeting = 2 No, but made a decision after consulting a third person = 3
	var044	Does the marketing include any beneficial health claims?	No = 0 Yes = 1
	var045	Does the marketing include any beneficial nutrition claims?	No = 0 Yes = 1
	var046	Does the marketing include any representation of physical activity?	No = 0 Yes = 1
TV (if media = 1)	var050	TV-channel	(name)
	var051	Date	dd/mm/yy
	var052	Name of program, before commercial	(name)
	var053	Program category, before commercial	Cartoon = 1 Kids/ children = 2 Sitcom = 3 Soap = 4 Sports = 5 Travel = 6 Drama = 7 News = 8 Cookery = 9 Reality = 10 Talk show = 11 Game show = 12 Music = 13 Animal/wildlife = 14 Documentary = 15 Other = 16
	var054	Audience composition, 2-12 years old (if available)*	(%)
	var055	Audience composition, 13-17 years old (if available)*	(%)
	var056	Gender profile	No particular gender profile = 0 Likely to be most appealing to girls = 1 Likely to be most appealing to boys = 2
	var057	Commercial start	hrs/min
	var058	Commercial length	(seconds)
Streaming-TV (if media = 2)	var060	Broadcaster	(name)
	var061	Date visited	dd/mm/yy
	var062	Time visited	hrs/min
	var063	Name of program, after commercial	(name)
	var064	Program category, after commercial	Cartoon = 1 Kids/ children = 2 Sitcom = 3 Soap = 4 Sports = 5 Travel = 6 Drama = 7 News = 8 Cookery = 9 Reality = 10

			Talk show = 11 Game show = 12
	Variable number	**Variable name**	**Variable values**
			Music = 13 Animal/wildlife = 14 Documentary = 15 Other = 16
	var065	Length of commercial	(seconds)
	var066	Audience composition, 2-12 years old (if available)*	(%)
	var067	Audience composition, 13-17 years old (if available)*	(%)
	var068	Gender profile	No particular gender profile = 0 Likely to be most appealing to girls = 1 Likely to be most appealing to boys = 2
Blog (if media = 3)	var070	URL	(url)
	var071	Date visited	dd/mm/yy
	var072	Time visited	hrs/min
	var073	Type of blog	Personal = 1 Group blog = 2 Microblog = 3 Corporate blog = 4 Organisational blog = 5 Other = 6
	var074	Blog genre	Fashion = 1 Beauty = 2 Music = 3 Games = 4 Travel = 5 Health = 6 Political = 7 Other = 8
	var075	Type of ad.	Small-format ads = 1 Listing (sponsored hyperlink) = 2 Paid placement (content sponsorship, advergame) = 3 Banner ads (flash, floating, expandable) = 4 Large format ads pop-ups and pop-unders = 5 Large format ads interstitials broadcas adv interupts content = 6 Other = 7
	var076	Labelled as ad (is the ad marked with a sign/label saying it is an ad?	No = 0 Yes = 1
	var077	Discernability of sender (is the sender of the ad discernible in the ad?)	No = 0 Yes = 1
	var078	Audience composition, 2–12 years old (if available)*	(%)
	var079	Audience composition, 13–17 years old (if available)*	(%)
	var080	Gender profile	No particular gender profile = 0 Likely to be most appealing to girls = 1 Likely to be most appealing to boys = 2
Web-sites (if media = 4)	var090	URL	(url)
	var091	Date visited	dd/mm/yy
	var092	Time visited	hrs/min
	var093	Type of website	Product specific = 1 Gaming = 2 Celebrity/fansite = 3 Humor = 4

			News = 6 Other = 7
	Variable number	**Variable name**	**Variable values**
	var094	Type of ad.	Small-format ads = 1 Listing (sponsored hyperlink) = 2 Paid placement (content sponsorship, advergame) = 3 Banner ads (flash, floating, expandable) = 4 Large format ads pop-ups and pop-unders = 5 Large format ads interstitials broadcas adv interupts content = 6 Other = 7
	var095	Labelled as ad (is the ad marked with a sign/label saying it is an ad?	No = 0 Yes = 1
	var096	Discernability of sender (is the sender of the ad discernible in the ad?)	No = 0 Yes = 1
	var097	Audience composition, 2-12 years old (if available)*	(%)
	var098	Audience composition, 13-17 years old (if available)*	(%)
	var099	Gender profile	No particular gender profile = 0 Likely to be most appealing to girls = 1 Likely to be most appealing to boys = 2
Magazine (if media = 5)	var110	Name of magazine	(name)
	var111	Issue number	(number)
	var112	Year published	(year)
	var113	Type of magazine	Cartoon = 1 Sports = 2 Gaming = 3 Fashion = 4 Other = 5
	var114	Size of ad.	Less than a full page = 1 1 page = 2 More than one page = 3
	var115	Gender profile	No particular gender profile = 0 Likely to be most appealing to girls = 1 Likely to be most appealing to boys = 2
In-store (if media = 6)	var120	Name of store	(name)
	var121	Urban/rural location	Urban (more than 20.000 inhabitants) = 1 Rural (less than 20.000 inhabitants) = 2
	var122	Size of store	Larger than 500m2 = 1 Less than 500m2 = 2
	var123	Dated visited	dd/mm/yy
	var124	Time visited	hrs/min
	var125	Estimated sociodemographic status of area	Low = 1 Medium/average = 2 High = 3 Not known = 4
	var126	Points of sale/point of purchase display	No = 0 Yes = 1
	var127	Placement, shelve row number from floor	(row number)
	var128	Child appealing element of packing	None = 0 Competitions = 1 Cartoons = 2 Collectibles = 3 Premium offer = 4 Other = 5

	Variable number	Variable name	Variable values
Cinema (if media = 7)	var140	Data source	Copies of commercials from cinema marketing companies = 1 Cinema visit = 2
	var141	Name of movie (if visiting the cinema)	(name) Not applicable = 9999
	var142	Dated visited (if visiting the cinema)	dd/mm/yy Not applicable = 9999
	var143	Time visited (if visiting the cinema)	hrs/min Not applicable = 9999
	var144	Movie category/age limit	No age limit (family movie) = 1 Age limit 6/7 years = 2 Age limit 11/12 years = 3 Age limit 15/16 years = 4 Age limit 18 years = 5
Cinema shop (if media = 8)	var160	Name of cinema	(name)
	var161	Number of theatres in the cinema	(number)
	var162	Dated visited	dd/mm/yy
	var163	Time visited	hrs/min
	var164	Special offer; reduce price for soft drink and snacks combined	No = 0 Yes = 1
	var165	Special offer; reduce price for soft drink, snacks and sweets combined	No = 0 Yes = 1
	var166	Special offer; reduce price for soft drink and sweets combined	No = 0 Yes = 1
	var167	Quantity offer: (ex. 3 for the price of two) soft drink	No = 0 Yes = 1
	var168	Quantity offer: (ex. 3 for the price of two) snack	No = 0 Yes = 1
	var169	Quantity offer: (ex. 3 for the price of two) sweets	No = 0 Yes = 1
	var170	Points of sale/point of purchase display with reference to a specfic movie with particular appeal to children	No = 0 Yes = 1
Social media (if media = 9)	var180	Social media platform	Facebook = 1 Instagram = 2 Snapchat = 3 YouTube = 4 Skype = 5 Other = 6
	var181	Name of page, account	(name)
	var182	Time visited	hrs/min
	var183	Date	dd/mm/yy
	var184	User profile	Authentic female user, 13 years = 1 Authentic male user, 13 years = 2 Avatar female user, 13 years = 3 Avatar male user, 13 years = 4 No user account = 5
	var185	Type of ad.	Small-format ads = 1 Listing (sponsored hyperlink) = 2 Paid placement (content sponsorship, advergame) = 3 Banner ads (flash, floating, expandable) = 4 Large format ads pop-ups and pop-unders = 5 Other = 6

	Variable number	Variable name	Variable values
	var186	Number of likes	(number)
	var187	Number of sharings	(number)
	var188	Number of comments	(number)
In-game advert (if media = 10)	var200	Name of game	(name)
	var201	Gaming platform	Online gaming = 1 Console = 2 Smart phone/tablet = 3
	var202	Recommended age	None = 0 3 years = 1 7 years = 2 12 years = 3 16 years = 4 18 years = 5
	var203	Type of game	Action = 1 Adventure = 2 Role playing = 3 Simulation = 4 Strategy = 5 Sport = 6 Arcade = 7 Advertgame = 8 Other = 9
	var204	Type of ad.	Small-format ads = 1 Listing (sponsored hyperlink) = 2 Paid placement (content sponsorship, advergame) = 3 Banner ads (flash, floating, expandable) = 4 Large format ads pop-ups and pop-unders= 5 Large format ads interstitials broadcas adv interupts content = 6 Other = 7
	var205	Labelled as ad (is the ad marked with a sign/label saying it is an ad?	No = 0 Yes = 1
	var206	Discernability of sender (is the sender of the ad discernible in the ad?)	No = 0 Yes = 1
Community (if media = 11)	var220	Place	(name)
	var221	Urban/rural location	Urban (more than 20,000 inhabitants) = 1 Rural (less than 20,000 inhabitants) = 2
	var222	Dated visited	dd/mm/yy
	var223	Time visited	hrs/min
	var224	Estimated sociodemographic status of area	Low = 1 Medium/average = 2 High = 3 Not known = 4
	var225	Community location	School/around school (within 500 m range) = 1 Sports arena/sports club = 2 Other club/in door social meeting place for children/youth = 3 Park, ourdoor recreation area = 4 Other = 5
	var226	Type of marketing	General event = 1 Sports event = 2 Vending machine = 3 Outdoor boards/banners = 4 Other = 5

Appendix 3: Nutrient profile models

Table 3: Nutrient profile models[43],[44]

	Total fat	Sat.fat	Sugar	Added sugar	Non-sugar sweeteners	Salt	Energy	ref
Chocolate and sugar confectionary, energy bars, and sweet toppings and desserts								
WHO			*Not permitted*					Cat.1
Denmark	5 g/100 g		5 g/100 g			*		Cat.9
Norway			*Not permitted*					
EU Pledge			*Not permitted*					
Cake, sweet biscuits and pastries other sweet bakery wares, and dry mixes for making such								
WHO			*Not permitted*					Cat.2
Denmark	10 g/100 g		10 g/100 g			*		Cat.4
Norway			*Not permitted*					
EU Pledge		10 g/100 g	35 g/100 g			450 mg sodium/100 g	200 kcal/ portion	Subcat. 6.A
Savory snacks								
WHO				0 g/100 g		0.1g/100g		Cat.3
Denmark	5 g/100g		5 g/100 g			*		Cat.9
Norway			*Not permitted*					
EU Pledge		10% kcal from SAFA	10 g/100 g			670/900 mg sodium/100 g	170 kcal/ portion	Subcat. 2C/2D/6B
Edible ices								
WHO			*Not permitted*					Cat.5
Denmark	5 g/100 g		5 g/100 g			*		Cat.9
Norway			*Not permitted*					
EU Pledge		5 g/100 g	20 g/100 g			120 mg sodium/100 g	110 kcal/ portion	Cat.9
Breakfast cereals								
WHO	10 g/100 g		15 g/100 g			1.6 g/100 g		Cat. 6
Denmark	10 g/100 g		15 g/100 g			*		Cat. 5
Norway			20 g/100 g					
EU Pledge		5 g/100 g	30 g/100 g			450 mg sodium/100 g	210 kcal/ portion	Subcat. 6.C
Yoghurt, sour milk, cream and other similar foods								
WHO	2.5 g/100 g	2 g/100 g	10 g/100 g			0.2 g/100 g		Cat.7
Denmark	2.5 g/100 g		10 g/100 g			*		Cat.1
Norway	3.3/100 g		11 g/100 g					

[43] The Danish model has 10 food categories and is available from Forum for Responsible Food Marketing Communication's (www.kodeksforfoedevarereklamer.dk). The Norwegian model has 8 food categories and is available at the Food and Drink Industry Professional Practices Committee's (MFU) webpage (www.mfu.as). The model used by EU Pledge has 9 food categories (EU Pledge Nutrition White Paper – Updated July 2015, http://www.eu-pledge.eu/).

[44] The table is made for comparison to give an overview of differences and similarities between nutrient profile models. The food categories in the table are based on the WHO nutrient profile model and may differ for the other models included. For specific details on food categories and nutrient criteria of each model, see footnote 43.

For beverages, see each nutrient profile model in footnote 43.

	Total fat	Sat.fat	Sugar	Added sugar	Non-sugar sweeteners	Salt	Energy	ref
EU Pledge		2.6 g/100 g	13.5 g/100 g			300 mg sodium/100 g	170 kcal/ portion	Subcat. 5A
Cheese								
WHO	20 g/100 g					1.3 g/ 100 g		Cat 8
Denmark	20 g/100 g							Cat 2
Norway			*No restrictions/permitted*					
EU Pledge			See details in link, footnote 43					
Ready-made and convenience foods and composite dishes								
WHO	10 g/100 g	4 g/100 g	10 g/100 g			1 g/100 g	225 kcal	Cat.9
Denmark	10 g/100 g		10 g/100 g			*		Cat.10
Norway (Served and take-away meals)		4 g/100 g				1 g/100 g	225 kcal	
EU Pledge I (Soups)		1.5 g/100 g	7.5 g/100 g			350 mg sodium/ 100 g	170 kcal/ portion	Subcat. 7A
EU Pledge II (Composite dishes, main dishes, filled sandwiches)		5 g/100g	7.5 g/100 g			400 mg sodium/ 100 g	425 kcal/ portion	Subcat. 7B
EU Pledge III (Meals, example children's meal)		10% kcal from SAFA	20 g/meal see details in model			660 mg sodium/ meal	340/510 kcal/meal	Cat.8
Butter and other fats and oil								
WHO		20 g/100 g				1.3 g/100 g		Cat.10
Denmark (other fats and oils)			*No restrictions/permitted*					
Norway			*No restrictions/permitted*					
EU Pledge (oil and other fats)		33% total fat is SAFA	(5 g/100 g)			500 mg sodium/ 100 g	85 kcal/ portion	Subcat. 1A
Bread								
WHO	10 g/100 g		10 g/100 g			1.2 g/100 g		Cat.11
Denmark	10 g/100 g		10 g/100 g			*		Cat.4
Norway			*No restrictions/permitted*					
EU Pledge		5 g/100 g	5 g/100 g			500 mg sodium/100 g	340 kcal/ portion	Subcat. 6D
Dried pasta, rice and grains								
WHO	10 g/100 g		10 g/100 g			1.2 g/100 g		Cat.12
Denmark			*No restrictions/permitted*					
Norway			*No restrictions/permitted*					
EU Pledge			See details in link, footnote 43					
Fresh and frozen meat, poultry, fish and similar								
WHO			*Permitted*					Cat.13
Denmark	20 g/100 g							Cat.3
Norway			*No restrictions/permitted*					
EU Pledge			*No restrictions/permitted*					

	Total fat	Sat.fat	Sugar	Added sugar	Non-sugar sweete-ners	Salt	Energy	ref
Processed meat, poultry, fish and similar								
WHO	20 g/100 g					1.7 g/100 g		Cat.14
Denmark	20 g/100 g							Cat.3
Norway			*No restrictions/permitted*					
EU Pledge		6 g/100 g (meat) 33% of total fat is SAFA (fish)	(5g/100g)			800 mg sodium/100 g (meat) 450 mg sodium/100 g (fish)	170 kcal/ portion	Cat. 3 (meat)/Cat. 4 (fish)
Fresh and frozen fruit, vegetables and legumes								
WHO			*No restrictions/permitted*					Cat.15
Denmark	5 g/100 g		10 g/100 g			*		Cat.6
Norway			*No restrictions/permitted*					
EU Pledge			*No restrictions/permitted*					Subcat. 2A
Processed fruit, vegetables and legumes								
WHO	5 g/100 g		10 g/100 g	0 g/100 g		1 g/100 g		Cat.16
Denmark	5 g/100 g		10 g/100 g			*		Cat.6
Norway			*No restrictions/permitted*					
EU Pledge		1.5 g/100 g	15 g/100 g			300 mg sodium/ 100 g	170 kcal/ portion	Subcat. 2A
Sauces, dips and dressings								
WHO	10 g/100 g			0 g/100 g		1 g/100 g		Cat 17
Denmark	10 g/100 g							Cat.7
Norway			*No restrictions/permitted*					
EU Pledge			See details in link, footnote 43					

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MONITORING FOOD MARKETING TO CHILDREN

The protocol describes methods for how to monitor marketing of foods and beverages high in fat, salt and sugar towards children and young people at a given time as cross-sectional studies, as well as allowing for monitoring of trends. The data provided could also be used for evaluation purposes, for instance providing relevant data for evaluating regulation practices and schemes in the respective countries; to study advertising and marketing practices, contents and forms over time. In addition to being a tool for monitoring purposes within each country, the protocol will also enable comparisons between the Nordic countries by establishing a joint understanding on how each marketing channel should be monitored. The protocol has been developed as a Nordic project between representatives and experts from Iceland, Finland, Sweden, Denmark and Norway together with international experts.

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