

Supplementary file 1: Codebook with general and nested specific codes and definitions

Code	Definitions
FOOD ADVERTISING CODES	
1 Regulations Attitudes	Text related to participants' attitudes towards food advertising regulations.
1,01 Ideas	Text containing participants' ideas for regulating food advertising or food environment.
1,02 Negative Feelings	Text describing participants' negative feelings about food advertising regulations (i.e. when they do not support regulation).
1,03 Positive Feelings	Text describing participants' positive feelings about food advertising regulations (i.e. when they do support regulation).
2a Influences	Text that describes the influences of food adverts on children's food attitudes, knowledge and practices.
2,01 Attitude	Text that describes how participants' attitudes towards food (e.g. preferences) are influenced by seeing food advertisements.
2,02 Behaviour	Text that describes the influence of food adverts on participants' food behaviours, such as requesting, purchasing or consuming particular foods.
2,03 Brand Recognition	Text demonstrating brand recognition (e.g. naming products by a brand name, singing a jingle) or detailing how and why brand recognition occurs.
2,04 Emotions	Text that described the influence of food adverts on participants' emotions, for example invoking positive feelings such as happiness or excitement or negative feelings such as sadness and anger.
2,05 Knowledge	Text that describes how participant's food knowledge (e.g. about nutritional value) have changed as a result of seeing food advertisements.
2b Attitudes	Text that describes participants' attitudes towards food advertisements and companies or individuals that advertise food.
2,06 Negative	Text that describes participants' negative attitudes towards food adverts and/or advertising (e.g. dislike advertising, perceptions of harmful impact).
2,07 Positive	Text that describes participants' positive attitudes towards food adverts and/or advertising (e.g. like advertising, perception advertising is valuable).
2,08 Neither negative nor positive	Text that describes attitudes towards food adverts or advertisers that are neither negative or positive, such as ambivalence, uncertainty or assumed factuality.

Code	Definitions
FOOD ADVERTISING CODES (continued)	
3 Power Techniques	Text that describes the power techniques used in food advertising. Codes modified from WHO (2022)
3,01 Branding	Text describing the use of branding (e.g recognisable logos, jingles and colours) in marketing food to children.
3,02 Child-directed	Text describing the use of child-directed characters or settings such as cartoons, real children or families and/or celebrities, in marketing food to children.
3,03 Claims Health	Text describing the use of health claims to market food to children.
3,04 Claims Taste	Text describing the use of taste claims to market food to children.
3,05 Claims Value	Text describing the use of value claims to market food to children.
3,06 Claims Social	Text describing the use of social claims to market food to children.
3,07 Claims Others	Text describing other claims used to market food to children.
3,08 Offering	Text describing the use of promotional gifts, toys or games to market food to children
3,09 Other	Any other advertising power techniques that do not fit within one of the above categories.
4 Advert Type	Text that describes advert types in terms of the location and/or nature of the advertising media.
4,01 Point-of-sale	Advertisements placed at the place where food is purchased, such as the cash register or refrigerator in a shop, or on the container or stand from which an informal trader sells food.
4,02 Front-of-Store	Advertisements placed on the front of shops that sell foods, including store signs that include (but are not limited to) food pictures or logos, painted walls on storefronts, advertising signs or boards.
4,03 Billboard	Large outdoor board, purpose built for displaying advertising.
4,04 Leaflet	A piece of paper advertising food that is handed out to people, or placed so that people can collect it.
4,05 Screen	Advertisements seen on television, cell phone and other electronic device screens.
4,06 Unspecified	Advertisements for which the type is not specified.
4,07 Other	Adverts that do not fit into the above categories.
5 Exposure	Text that describes the location and other aspects (e.g. frequency) of children's exposure to food advertising.
5,01 Outdoor- JtS	Exposure to outdoor adverts or outlets during the journeys to school.
5,02 Outdoor- other local	Exposure to outdoor adverts or outlets seen outdoors in the participants' local area, but not on the journey to school.
5,03 Outdoor- non-local	Exposure to outdoor adverts or outlets seen in places other than the local area.
5,04 Screen	Adverts seen on screens, including televisions and cell phones.

Code	Definitions
BROADER FOOD ENVIRONMENT CODES	
6 Broad Influences	Text related to broader influences, beyond food advertising, on children's food attitudes, knowledge and behaviours.
6,01 Social	Text describing social influences on children's food knowledge, attitudes and practices.
6,02 Economic	Text describing economic influences on children's food knowledge, attitudes and practices.
6,03 Geographic	Text describing geographic influences on children's food knowledge, attitudes and practices.
6,04 Other	Text describing other influences, beyond food advertising and social, emotional and geographic factors, on children's food knowledge, attitudes and practices.
7 Food Outlet Type	Text that describes food outlets of different types (modified from Moodley, Christofides et al. 2015).
7,01 Informal	A food outlet without a permanent structure or a food outlet with a permanent structure but limited resources, such as no water or electricity, such as a market stall.
7,02 Independent Shop	A food outlet with a permanent structure with access to resources, such as water and electricity.
7,03 Chain Shop	A shop that has a recognisable brand name such as a chain store or franchise (KFC, PickNPay). This does not include independent shops selling branded products such as Coke.
8 Food Type 1	Text that refers to specific types of foods (based on categories in WHO 2023).
8,01 Alcohol	Beverages containing alcohol.
8,02 FruitJuice	100% fruit and vegetable juices (NPM category 4.1)
8,03 SSBevs	Sugar-sweetened beverages. Dairy milk drinks (NPM cat. 4.2) including: Dairy milks (both sweetened and unsweetened); Milkshakes and coffees containing dairy milk (in which the main constituent is dairy milk). Energy drinks (NPM cat. 4.4)- Beverages containing caffeine or other stimulants such as guarana, taurine, lucuronolactone and vitamins. Soft drinks and other drinks (NPM cat. 4.5 excl. bottle water), including Water-based flavoured drinks (carbonated and still); Fruit and vegetable nectars; Sweetened hot beverages including coffee, coffee substitutes, tea, herbal infusions and other hot cereal and grain beverages.
8,04 Healthy Cooked	Composite foods (NPM cat. 10), including ready made meals made with ingredients that have a diverse nutrient profile (i.e. including carbohydrate, protein and vegetable), and do not include processed or deep-fried ingredients; bread

Code	Definitions
BROADER FOOD ENVIRONMENT CODES (Continued)	
8 Food Type 1 (Continued)	Text that refers to specific types of foods (based on categories in WHO 2023).
8,05 Healthy Raw	Bottled water and other drinks (NPM cat. 4.5, excluding sugary beverages) including bottled water and unsweetened hot beverages such as tea and coffee. Minimally processed breakfast cereals (NPM cat. 6) such as steel-cut, rolled or instant oats for preparing oatmeal and muesli; includes porridge mix and hot instant cereals. Unsweetened yoghurt, sour milk and similar products (NPM cat. 7). Cheeses (NPM cat. 8) including hard, soft and processed cheeses. Sandwiches and wraps with healthy fillings such as cheese and vegetables and limited or no added fat and salt. Unprocessed fresh meat. Minimally processed carbohydrates such as wheat flour, maize meal, rice. prepackaged salads; Fresh fruits and vegetables.
8,06 Salty Snacks	Savoury snacks (NPM cat. 4) including: Crackers/savoury biscuits; Nuts, seeds and kernels (including popcorn, nuts, peanuts and seeds (plain or seasoned with salt or flavoured); Potato, vegetable and grain chips (packaged); Extruded snacks; Savoury pretzels.
8,07 Sugary Snacks	NPM Cat 1 Chocolate and sugar confectionery, energy bars, sweet toppings and desserts- Chocolate confectionery Sugar confectionery (including jellies and boiled sweets; chewing-gum and bubble gum; caramels; liquorice sweets, marzipan sweets), Granola and cereal-type bars, Spreadable chocolate and other sweet sandwich toppings, Nut butters. (e.g., peanut butter), Honey NPM Cat 2- Cakes, sweet biscuits and pastries; other sweet bakery wares; and dry mixes for making such, including: Cookies/sweet biscuits; Cakes and sponges; Sweet pies and pastries; Baked and cooked desserts; Pancakes, waffles and French toast; Scones and soda bread; Dry mixes for making such; Tofu- and other plant-based desserts.
8,08 Unhealthy Cooked	Composite foods (NPM cat 10) that are energy dense, including deep fried foods and ultra-processed cooked foods. Examples include savoury pies, burgers, hot chips, fried chicken, pizza. Processed meats such as polony, burger patties, wors and other processed sausages.
8,09 Unhealthy Raw	Edible ices (NPM cat. 5) including Dairy and plant-based ice creams; Water-based ices (including sorbets); and Frozen yogurts. Highly processed breakfast cereals (NPM cat. 6) including shredded, flaked, puffed and extruded cereals and granola. Sugar sweetened yoghurt and similar products (NPM cat. 7).
8,10 Others	Foods that do not fit into any of the above classifications.
8,11 Unspecified	Where type of food is not specified in enough detail to classify.

Code	Definitions
BROADER FOOD ENVIRONMENT CODES (continued)	
Text that describes foods in terms of their branding (or lack thereof).	
9 Food Type 2	
9,01 Branded	Foods that are discussed in relation to a recognisable brand name such as Shoprite, Coke, KFC or Pedros. Includes new, less established brands. Does not include names of independent food retailers such as Michelle's Tuckshop.
9,02 Unbranded	Foods that do not have brand names such as <i>amagwinya</i> and <i>amakota</i> , burgers and hotdogs sold by informal traders, or for which branded varieties are either uncommon or unavailable.
9,03 Mixed	Adverts that include a combination of branded and unbranded foods.
9,04 Unspecified	Foods that may be branded or unbranded but the participant has not specified, such as cold drink, burgers or fried chicken.
Categories that indicate the overall healthfulness of foods (based on categories in WHO 2023)	
10 Food Type 3	
10,01 Healthy	Foods categorised in 8 to 8.4 or 8.5.
10,02 Unhealthy	Foods classified in 8 to 8,01; 8,02; 8,06; 8,07; 8,08; 8,09; 8,10; 8,11; 8,13.
10,03 Mixed	Foods classified in 8 to 8,03 or 8,13.
10,04 Unspecified	Not enough detail to determine if food is unhealthy or healthy.

WHO, World Health Organization (2023). WHO Regional Office for Europe nutrient profile model. [WHO Regional Office for Europe nutrient profile model](#).