



July 31, 2022

Re: Online public consultation on draft guidelines on policies to protect children from the harmful impact of food marketing

To the Esteemed Committee:

Thank you for the opportunity to comment on the Draft Guidelines via this online public consultation.

In the pages that follow, we explain how new research from Chile shows that careful all-inclusive marketing controls can reduce children's and adolescents' exposure to marketing of foods and beverages that qualify for warning labels indicating excess sugars, sodium, saturated fats, and energy per 100g or 100ml. This new research, which is not included in the reviews guiding the draft, also shows that the food industry shifted marketing of foods with warning labels to other TV programming outside of children's programs and that the daytime 6am–10pm ban on advertising of these foods was important to significantly reduce children's exposure to this marketing. Further, this new research highlights the importance of schools as a critical environment for eliminating the marketing and sale of foods with warnings and for encouraging healthy diets among children.

Proposing complete bans on all marketing — as Chile has done with its 6am to 10pm ban and as the UK is doing with its 6am to 11pm regulation — would be effective in reducing children's exposure to unhealthy food marketing and in line with protecting children's rights to information and education and their right to be protected from harmful information.

As you will see in the following pages, we provide comments on the importance of children's rights as the key rationale for all recommendations, critique the application of GRADE and suggest a qualification of this approach in all recommendations, describe the new research from Chile, propose clarifications to the marketing definitions and recommendations offered in the Draft Guidelines, and offer thoughts on additional research gaps. References are listed at the end.

Thank you again for the opportunity to provide comments on this draft.



1. General comments and recommendations

1.1 Elevate human rights and equity in draft guidelines

A. Lead with children's rights in recommendations

The Convention on the Rights of the Child lists a number of rights applicable to marketing regulation, including the right to privacy (Article 7), the right to information and protection from harmful information disseminated through media (Article 17), and the right to education (Articles 28 and 29). Relevant to children's right to privacy, the United Nations (United Nations General Assembly Human Rights Council's 46th Session, 2021) has explained in detail children's online privacy rights and protections from online targeting, tracking and saving of their digital information and global regulations protecting these rights.

We advocate for a stronger inclusion of human rights and equity, in particular children's rights, in the recommendations of the Draft Guidelines. Specifically, **the primary rational for all recommendations should be children's rights**. In addition, recommendations should include protection from unhealthy marketing in school environments and mandated protection from the targeting and tracking of children in online environments. Both school environments and online environments need to be explicitly included in recommendations to ensure children's rights to privacy and education are not violated.

B. Address lack of human rights experts in draft guideline development

The WHO Nutrition Guidance Expert Advisory Group Subgroup on Policy Actions (NUGAG Subgroup) was established in 2018 following an open call and a goal of supporting the development of a series of WHO guidelines on policy actions affecting food environments. The WHO's stated intention for selecting NUGAG Subgroup members included "the need for expertise from multiple disciplinary areas" (World Health Organization, 2022a, p. 26, Acknowledgements). The 23 current members of the NUGAG Subgroup listed on the WHO's website (World Health Organization, 2022c), do not appear to include human rights experts. This omission contradicts the WHO Handbook for Guideline Development, which states that the guideline development group is "multidisciplinary" and recognizes the importance of having a human rights expert in the group (World Health Organization, 2014, pp. 25,28).

The list of NUGAG and external members directly involved in the Draft Guideline development have not yet been published (World Health Organization, 2022a, Annex 3,4), which limits the transparency of the guideline development process and the public's ability for comment. The Guideline document does indicate that the NUGAG Subgroup acted as the "guideline development group" (World Health Organization, 2014, pp. 25,28; 2022a, p. 26).

"Equity and Human Rights" are among the five factors to be covered in the Draft Guideline's Review of Contextual Factors (World Health Organization, 2021). Children's rights are foundational to the rationale for protecting children from unhealthy food marketing and are additionally critical considerations in protections from online tracking and marketing, which is noted among contextual issues on p. 46 of the Draft Guidelines but is not a key component of the recommendations (World Health Organization, 2022a). Based on the available information, it seems that only one WHO staff member with



human rights expertise was asked to comment on the human rights section, and no external experts were invited to contribute or comment on this section (World Health Organization, 2021, Acknowledgements). The apparent lack of human rights expertise in the NUGAG Subgroup and external consultants therefore calls into question the development of the Draft Guideline, in addition to other guidelines under development (i.e., nutrition labeling policies, fiscal policies to promote healthy diets, school food and nutrition policies).

1.2 Address bias in GRADE method

The GRADE Public Health Group (Hilton Boon et al., 2021) and others have noted the need to adapt the GRADE method for public health, as the current method has been critiqued for its bias toward RCTs, treatment/exclusion of observational and qualitative research and challenges with non-health outcomes (Rehfuess & Akl, 2013), such that research assessing real-world national level policies via natural or quasi-experiments, surveys, and focus groups will naturally result in low certainty scores (Norris & Bero, 2016).

Further, the GRADE handbook indicates: "A number of criteria should be used when moving from evidence to recommendations... During that process, separate judgments are required for each of these criteria. In particular, separating judgments about the confidence in estimates or quality of evidence from judgments about the strength of recommendations is important as high confidence in effect estimates does not necessarily imply strong recommendations, and strong recommendations can result from low or even very low confidence in effect estimates..." (Schünemann, 2013) The WHO Guidelines for Physical Activity successfully demonstrate this separation of criterion judgments and recommendation strength: "Children and adolescents should limit the amount of time spent being sedentary, particularly the amount of recreational screen time" with the statement "Strong recommendation, low certainty evidence." (World Health Organization, 2020)

Thirdly, the evidence reviewed notes the distinction between mandatory policies and industry self-regulation (Taillie, Busey, Mediano Stoltze, & Dillman Carpentier, 2019), in that industry self-regulation has been largely found to be ineffective and mandatory policies more effective in reducing children's exposure to unhealthy food marketing, as noted on p. 43 of the Draft Guidelines in the review of policy effectiveness (World Health Organization, 2022a). Unlike mandatory governmental policy, industry pledges and self-regulatory measures constitute a qualitatively different intervention marked by variations in defining what products, marketing content, and marketing placement are restricted and what oversight there is for compliance (Hawkes & Harris, 2011). According to the GRADE handbook's recommendations on defining the population and intervention, "a single estimate across the range of patients and interventions will not well serve the decision-making needs of patients and clinicians. These subpopulations should, therefore, be defined separately" (Schünemann, 2013).

It is unclear how certain conditional recommendations were made in the draft, such as: "The recommendation is conditional because the guideline development group was less certain about the desirable effects of implementing the intervention, as these depend on policy design elements and contextual factors. However, no undesirable effects of restricting food marketing were identified." It is also unclear why the resulting judgment of the certainty of evidence on policy effectiveness, such as those presented on p. 43 and



p. 54, combines mandatory policy and industry self-regulation rather than separating these bodies of evidence. We therefore ask for clarification about the inclusion criteria for studies and application of the GRADE method, which we believe has led to bias toward low and very low certainty and artificially weakened recommendations.

1.3 Include missing evidence to strengthen recommendations

We wish to call your attention to new research focused on Chile, which has a comprehensive multi-pronged legislation involving taxation, food warning labels, and marketing restrictions for foods high in sugars, saturated fats, sodium, and energy. As already referenced in Annex 7 of the Draft Guidelines, Chile's legislation was implemented in three phases, each phase with increasingly stringent nutrient thresholds and a graduation from restricting marketing based on child-directed content (e.g., use of cartoon characters in the marketing message on food packages and in an array of mediated and non-mediated channels) and content placement (e.g., ads in children's television programming) to adding a restriction on the advertising of any high-in product on television during times when children might be exposed to this content (i.e., from 6am-10pm) (Corvalán, Reyes, Garmendia, & Uauy, 2019).

Two new publications by (Taillie et al., 2021; Taillie, Reyes, Colchero, Popkin, & Corvalán, 2020) provide important evidence of the effectiveness of Chile's food labeling and advertising law in reducing unhealthy food purchases. Taillie et al.'s (2020) publication in PLOS Medicine compares beverage purchases before and after the first implementation of Chile's regulation and found a significant reduction in purchases of sugar-sweetened beverages with sugar content above the regulated thresholds in sugars per 100ml. Taillie et al.'s (2021) more comprehensive study published in The Lancet Planetary Health shows reductions in purchases of multiple food categories above thresholds in regulated nutrients from before the first implementation to after this implementation. This compelling evidence of food purchase changes suggests a multi-pronged approach that includes a strong marketing regulation component is effective in reducing the presence of sugars, sodium, and fats in household diets. We did not find these citations in the reviews listed in the Draft Guidelines. We urge you to add these two studies to the review, given their focus on purchase behaviors.

Two publications by (Jensen et al., 2021a; Jensen et al., 2021b) support a broad recommendation for reducing the prevalence of unhealthy food marketing across time periods and locations relevant to children across multiple age ranges. Jensen et al. (2021a) publication in Pediatric Obesity notes dual drops in both television advertising exposure and consumption of foods above regulated thresholds in sugars, sodium, saturated fats, and/or energy (hereafter "high-in foods") among preschool children from before to after the first implementation of the Chilean law. Recall that Chile's regulation included a restriction on child-directed marketing content on food packages in addition to warning labels as part of the first implementation. Jensen et al. (2021b) notes a drop in adolescents' high-in ad exposure and a drop in high-in food consumption for adolescents with lower high-in ad exposure at baseline, highlighting the importance of long-term reductions in unhealthy food marketing for older children and teens who have spent their lifetimes inundated with high levels of unhealthy food marketing and who are increasingly exposed to food promotions online, as noted in the Draft Guidelines.



Evidence from the evaluation of Chile's multi-phased law is still incoming, with evidence that adds strength to the recommendation for comprehensive marketing restrictions. For example, new research presented at the November 2021 annual meeting of the Latin American Society of Nutrition (SLAN) (Dillman Carpentier, 2021) shows additional significant drops in both high-in advertising prevalence on television and children's exposure to high-in advertising based on television audience ratings data from the initial implementation of content-based restrictions to the implementation of the daytime ban of high-in advertising. This research highlights the exposure children continue to have when a restriction is limited to children's programming and notes the strengths of a regulation that dually contains measures designed to eliminate the possibility of children's exposure in a widespread manner and measures to reduce the marketing power of messages (restricting child appeals in the ad content) that a smaller proportion of children continue to see (e.g., at night).

In sum, we believe the growing body of evidence from the Chilean evaluation warrants a strengthening of the recommendations presented in the Draft Guidelines.

1.4 Provide more comprehensive definitions of marketing

A. Improve the definition of marketing

Proposed definition: "Marketing: Any form of commercial communication or message that acts to advertise or otherwise promote a product, its related brand or service, and is designed to increase, or has the effect of increasing, the recognition, appeal and/or consumption of particular products and services." (p. 6 of Draft Guidelines)

Suggested revision: "Marketing: Any form of direct and indirect marketing activity that is designed to, or has the effect of, increasing the recognition, appeal and/ or consumption of particular products, services, and brands. It comprises anything that acts to advertise or otherwise promote a product, service or brand, including paid, owned, and earned content, as well as, digital data collection to inform marketing practices."

The WHO (2012, p. 9) had previously defined 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." This definition encompasses a wide range of content, channels and locales and includes advertising, packaging, product placements, sponsorships, and partnerships promoting foods or beverages inside and outside of analog or digital media. However, this definition could be further specified to acknowledge new and different forms of marketing as follows.

First, brand marketing increases recognition, appeal and/ or consumption of particular products and services. "Branding involves the process of endowing products and services with the advantages that accrue to building a strong brand (e.g., enhanced loyalty, price premiums, etc.)." (Keller, 2003) Marketing that promotes a brand name, brand logo, or brand family therefore indirectly promotes products and services via the common name or logo, even if there is no explicit reference to a particular product or service. Brand-promoting strategies are at the center of marketing practices and impact food



preferences and eating behaviors (E. J. Boyland & Halford, 2013). Additionally, evidence shows that food marketing has spillover effects, in that exposure to an advertisement for one branded product within a brand family can increase the preference for and consumption of other products within the brand family (Pina, Riley, & Lomax, 2013). For instance, advertising sugar-sweetened soda has been shown to increase consumers' demand for sugar-free sodas from the same brand and vice versa (Lopez, Liu, & Zhu, 2015). Therefore, in order to reduce the recognition, appeal and/ or consumption of particular products considered unhealthy, brand marketing should also be included in the marketing definition.

More generally, marketing can be discussed in terms of paid, owned, and earned content (Katz, 2016). Briefly, paid content consists of messages, like advertising, sponsorships, or product placement, for which a company pays for exposure. Owned content consists of content a company directly owns and controls, for example its packaging or website. Earned content refers to messages others create and disseminate about the company or its product, as in word-of-mouth user-generated content on social media or unpaid promotions by social media influencers (Brooks et al., 2022). The WHO (2012) definition does not reflect the rise in earned content in digital media and blur between paid, owned and earned content online.

Specific to digital marketing strategies, we would also refer to our comments regarding children's rights to privacy and indicate that any marketing definition should include protections from tools and techniques used to engage in targeted marketing.

In sum, we believe revisions to the definition of marketing are needed that includes the full array of paid, owned, and earned content presently known and leaves room for the inclusion of new forms of marketing that will arise in the future:

- Expand marketing activity beyond "commercial." This expansion would include earned content.
- Expand "communication or message" to include any form of direct and indirect marketing activity. This inclusion would encompass corporate social responsibility and cause-related marketing events and programs, sponsorships and partnerships, merchandising, brand ambassadors and social media influencer activity, and any promotional activity by celebrities, influencers, athletes, licensed characters, etc. This inclusion would also encompass marketing activity that might exist in any locale or time where/ when children might be present, including but not limited to schools, play spaces, sports and entertainment venues, point of sale, digital and social media, and product and brand placements and tie-ins.
- Expand "particular products and services" to include brand marketing that
 has the effect of increasing recognition, appeal, or consumption of its
 products or services.
- Include digital data collection as a part of digital marketing (see our comments on children's rights and specifically their right to privacy).



B. Improve the definition of marketing power

Proposed definition: "Power: The power of marketing is influenced by the content of the message, especially the creative strategies used. These strategies include graphics and visual design, such as cartoons and brand equity characters; humour, fun and fantasy; movie and sports celebrities; and competitions and entertainment events." (p. 6 of Draft Guidelines)

Suggested revision: "Power: The power of marketing is influenced by the content **and performance of the marketing action, including** the creative and placement strategies used. These strategies encompass content and placement in settings and contexts likely to be relevant or appealing to young audiences. Examples include **but are not limited to:** graphics and visual design, such as cartoons and brand equity characters; **appeals attractive to both child and** general audiences such as health, humour, fun, social success, and fantasy; use of childhood or school contexts; celebrity and influencer promotions; competitions, entertainment events, and other mediated and non-mediated events and venues where children are in the audience; and any form of digital interaction or targeting from digital data collection."

With regard to marketing content, the WHO Narrative Review on food marketing research indicates the power of food marketing encompasses the use of "a wide range of creative strategies likely to appeal to, and resonate with, young audiences. These included the use of celebrity/sports endorsements; promotional characters; promotions, gifts/incentives and tie-ins; competitions; games; colour, visual imagery and novel designs; animation, dynamic elements and special effects; branding; persuasive appeals; health/nutrition claims and disclaimers; and various other engagement techniques" (World Health Organization, 2022b).

Research supports the wide array of creative strategies that attract and appeal to children. For example, although generally considered non-child-directed, health claims used in food advertising have been shown to generate children's positive responses toward the advertised products (Arrúa et al., 2017). Health claims are among the most prevalent creative content techniques used in food marketing directed to children, and emotional appeals are perhaps an even more prevalent content technique used in childand adolescent targeted marketing (Elliott & Truman, 2019).

Recent data presented at the International Society of Behavioral Nutrition and Physical Activity (ISBNPA) and International Communication Association annual conferences in 2022 show that Chilean children 11-12 yo feel similarly attracted to child- and non-childdirected advertising based on the definition of child-directed content in the Chilean regulation (F. Mediano-Stoltze, Dillman Carpentier, F., Harris, J., Comello, M.L., Lazard, A., Reyes, M., & Taillie, L. S 2022; F. Mediano-Stoltze, Dillman Carpentier, F., Harris, J., Lazard, A., Comello, M.L., Taillie, L. S. & Reyes, M, 2022). The research presented at ISBNPA, in particular, shows that emotional persuasive strategies that are universally appealing, such as friendship and fun, were the main drivers of soda advertising impacts on children's attitudes and beverage choices, regardless of the presence of other child cues (use of child actors and cartoon imagery) in the ad content. The universal appeal of friendship seen in this recently presented research noted above aligns with appeals



of popularity and seen in other research on marketing appeals aimed at adolescents and teens (Buijzen & Valkenburg, 2002; Potvin Kent, Martin, & Kent, 2014). We consider friendship and popularity to be examples of social success.

Despite the evidence for the wide range of creative strategies appealing to children, restrictions to power of marketing in the current food marketing regulations are mostly focused on what has been considered "child-directed creative content," banning only the most obvious child-appealing techniques most relevant to younger children (Mulligan, Kent, Christoforou, & L'Abbé, 2020) and excluding persuasive strategies that might capture children's attention and be liked by children despite the message being more directed toward a general audience (Elliott & Truman, 2019; Mulligan, Potvin Kent, Vergeer, Christoforou, & L'Abbé, 2021). Therefore, we suggest the recommendation incorporate a wider array of examples of content "likely to be relevant or appealing to young audiences" including "appeals attractive to both child and general audiences" that specifically mention health and social success among the examples of power. We further suggest using the phrase "Examples include but are not limited to" to emphasize the wide range of strategies that can appeal to children of different ages.

Marketing policies have also focused on the placement of marketing content, focusing on channels attracting a particular threshold (e.g., a 20% audience share) of children (Taillie et al., 2019). Recent qualitative research from Chile not included in the Draft Guideline review (Correa et al., 2022) indicates the importance of schools as an important venue to consider in any intervention. This research describes findings from focus groups with mothers of children 2–14-year-olds, which highlights the importance of a comprehensive legislation that includes multiple measures, including food labeling, in addition to the critical role of schools in reinforcing the legislation. To further emphasize the broader definition of marketing and marketing exposure, and to specifically note the role of schools as a relevant cue for children, we suggest additionally including "performance of the marketing action" in addition to the focus on content, "placement in settings and contexts likely to be relevant or appealing to young audiences" to further emphasize the diversity of marketing activities and exposure potential, "other mediated and non-mediated events and venues where children are in the audience" to again emphasize marketing activity beyond content strategies, and "use of childhood or school contexts" to specifically call attention to marketing in areas where children gather, such as schools, and marketing content strategies using references to these areas as cues for relevance or appeal.

Finally, given the increasing prevalence of food marketing in digital and social media (World Health Organization, 2022b) and the high use of these media by children and adolescents (Tatlow-Golden & Garde, 2020), it is pertinent to include digital marketing strategies in any policy aimed at reducing children's exposure to unhealthy food marketing. Digital marketing encompasses engagement techniques that provide opportunities to interact with companies or brand messages and can also provide an immersive media experience to attract and persuade consumers (Brooks et al., 2022; Montgomery, Grier, Chester, & Dorfman, 2011). Additionally, digital marketing strategies are developed based on users' digital behavior collected through digital technology. Users' behavioral and demographic information is used to identify social and psychographic profiles and test, refine, and tailor digital strategies to reach maximum effects (Montgomery et al., 2011). Altogether, the digital marketing landscape amplifies the impact of marketing beyond that of just passive exposure (Leslie, Levine, Loughlin, & Pechmann, 2009; Montgomery et al., 2011; Pechmann, Levine, Loughlin, & Leslie, 2005; Tatlow-Golden & Garde, 2020; World Health Organization, 2022b). We have already commented on children's rights to privacy with



respect to being tracked and targeted by marketers. Therefore we encourage including "any form of digital interaction or targeting from digital data collection" as a form of power. We have also commented elsewhere on the power of social media influencers to impact young audiences' purchase decisions and further suggest the addition of "influencer promotions" as an example of power.

C. Improve the definition of marketing exposure

Proposed marketing exposure definition: "Exposure to marketing is influenced by the communication channels, times and settings in which children see marketing. Exposure includes the reach and frequency of a particular message. Reach is the percentage of people in a target market who are exposed to the campaign over a specified period. Frequency is a measure of how many times the average person is exposed to a message (1)."

Suggested revision: "Exposure to marketing is influenced by the communication channels, venues, tools, times and settings in which children see **or experience** marketing. Exposure includes the reach and frequency of a particular message **or marketing action**. Reach is the percentage of people in a target market who are exposed to the campaign over a specified period. Frequency is a measure of how many times the average person is exposed to a message.

If policies are to effectively reduce children's and adolescents' total exposure to all forms of food marketing (World-Health-Organization, 2012), we suggest expanding the "exposure" definition to account for the complexities of the food marketing landscape which as noted above, includes a wide variety of marketing messages and activities from content on packages to social media posts (Hallez, Qutteina, Raedschelders, Boen, & Smits, 2020; Tatlow-Golden & Garde, 2020). This complexity is reflected in the Implementation Considerations Section of the Draft Guidelines (p. 53), which states: "Policies should also be as broad as possible in terms of the marketing channels covered (e.g. television, digital, packaging, outdoors, sponsorship) — including taking into account the evolving marketing landscape (e.g. increasing digital marketing) — to protect children from exposure and prevent the migration of food marketing to other marketing channels to which children are exposed" (World Health Organization, 2022a). Therefore we suggest the definition to incorporate the word "venues" to clearly cover marketing actions in physical locations where children might gather (Signal et al., 2017), inclusive of outdoor advertising and promotion in schools and public places. We also suggest adding the word "tools" to account for marketing on packages (Hallez et al., 2020), or any other kind of merchandising. The inclusion of "tools" would also include marketing activities that exist in digital spaces, for example digital tracking and the use of algorithms to target individual users.

Also in consideration of digital marketing, given the interactive nature of current marketing practices online (Tatlow-Golden & Garde, 2020; World Health Organization, 2016), we suggest adding the words "experience" and "marketing action" to describe marketing exposure to the tools and strategies around content and placement of paid, owned, and earned promotions. For instance, digital marketing allows consumers to interact and co-create marketing actions through liking, commenting, sharing, and creating posts. We believe the proposed additions to the definition will ensure any interaction is also considered within the concept of exposure.



2. Recommendations

2.1 Recommendation 1

Proposed recommendation: "WHO suggests implementation of policies to restrict food marketing to which children are exposed.

Conditional recommendation, very low certainty evidence"

(p. 49 of Draft Guidelines)

Suggested revision: "WHO suggests implementation of **mandatory** policies to

comprehensively restrict food marketing to which children and adolescents (0–19 years old) are exposed, irrespective of creative content, timing, venue, or intended audience. Strong recommendation aligning with the UN Convention on the Rights of the Child (UNCRC), very low certainty evidence based on GRADE (not adapted for public health)

We suggest "mandatory policies" instead of "policies" aligning with Recommendation 2's first suggestion that the policies "be mandatory" (p. 49) and the evidence provided in Remark 1: "Regarding policy design elements, evidence indicates that voluntary measures are more likely to show undesirable effects than desirable effects for exposure to, and power of, marketing." Compared to no food marketing policies or measures, mandatory policies are associated with a greater proportion of desirable than undesirable effects on reducing child food marketing exposure (Carpentier, Correa, Reyes, & Taillie, 2020; Ofcom, 2008, 2010) and power (Mediano Stoltze et al., 2019; Ofcom, 2008), whereas voluntary measures are associated with a greater proportion of undesirable than desirable effects (E. Boyland, McGale, Maden, Hounsome, Boland, & Jones, 2022). Moreover, when comparing mandatory policies versus voluntary measures directly, mandatory policies are more likely than voluntary measures to generate desirable effects (E. Boyland, McGale, Maden, Hounsome, Boland, & Jones, 2022). Evidence further suggests that non-mandatory food marketing restrictions, which are generally industry led, may generate clear or potential public health harm (E. Boyland, McGale, Maden, Hounsome, Boland, & Jones, 2022). Therefore, it is important to ensure this recommendation does not invite stakeholders to implement measures that might have undesirable effects, such as increasing marketing of unhealthy food products targeting children (Effertz & Wilcke, 2012; Kent & Pauzé, 2018; Potvin Kent, Dubois, & Wanless, 2011; Warren, Wicks, Wicks, Fosu, & Chung, 2008). We therefore strongly suggest avoiding such a risk based on the concepts of precaution and prevention of potential health harm to children and adolescents (Martuzzi, Tickner, & Organization, 2004).

We suggest the addition of the word "comprehensively" to "restrict food marketing" and adding the phrase "irrespective of creative content, setting or context, or intended audience" to realize the suggestion in Recommendation 2 that the policy "be broad enough to minimize the risk of migration of marketing to other channels, to other spaces within the same channel or to other age groups; and restrict the power of food marketing to persuade." These additions would also serve Remark 4: "Given that the impact of marketing is a function of both exposure to marketing and power of marketing, policies should address children's exposure to food marketing, irrespective of timing, venue or intended audience, and should therefore go beyond children's media."



We suggest using "children and adolescents (0 to 19)" instead of "children" when referring to the regulation target population. This age range is coherent with WHO definition of children and adolescents (Requejo et al., 2022) and UNICEF definition of children (UN General Assembly, 1989). This suggestion is also in line with Recommendation 2: "protect children of all ages, including those older than 12 years" and the evidence provided in Remark 2: "Most policies currently restrict marketing to young children and define a child as less than 12 years of age. However, evidence indicated that policies designed to restrict food marketing to children that included children older than 12 years were more likely to report desirable effects." Separating the recommendation weakens the message and might give room for misunderstandings given information is not provided all at once. Further, the evidence available shows food marketing is associated with increased intake, choice, preference, and purchase requests in both children and adolescents (E. Boyland, McGale, Maden, Hounsome, Boland, Angus, et al., 2022). Additionally, both children and adolescents are vulnerable populations and should be protected from food marketing as their cognitive, emotional, and neurobiological immaturity (Harris, Yokum, & Fleming-Milici, 2020; Leslie et al., 2009; Pechmann et al., 2005; Potvin Kent, Pauzé, Roy, de Billy, & Czoli, 2019; Tatlow-Golden & Garde, 2020) and age-related behavioral factors such as high media use contribute to high marketing exposure (Potvin Kent et al., 2019; Tatlow-Golden & Garde, 2020) and overall increased vulnerability to this marketing. Given the evidence of the effectiveness of food marketing policies with populations older than age 12 (E. Boyland, McGale, Maden, Hounsome, Boland, & Jones, 2022), we suggest clearly stating in Recommendation 1 that the target population of food marketing mandatory policies is children and adolescents from 0 to 19 years old.

Noted in a previous comment, the conditional recommendation and very low certainty designation is derived from an application of the GRADE method that is known to be biased toward lower certainty if not adapted for public health and policy evaluation research. Even considering the low levels of certainty derived from this application of GRADE, we suggest that stronger recommendations be proposed based on the 'precautionary principle' promoted by WHO. Namely, "The precautionary principle: protecting public health, the environment and the future of our children" (Martuzzi et al., 2004) notes that the lack of full scientific certainty should not be a reason to postpone required preventive interventions. Rather, available evidence should be used for preventing potential health harm and encouraging further research instead of postponing interventions and reacting when the population has been harmed already (Martuzzi et al., 2004). We therefore suggest "Strong recommendation" rather than "Conditional recommendation" in addition to noting children's right, namely that this recommendation aligns "with the UN Convention on the Rights of the Child (UNCRC)." Further, it is important to qualify the certainty of evidence with "based on GRADE (not adapted for public health)" to acknowledge an application of GRADE that has not been adapted to better treat observational and other research used to evaluate policy interventions. This is if a certainty assessment is necessary to include. We would actually suggest excluding the GRADE assessments from all recommendations due to its biases.



2.2 Recommendation 2

Proposed recommendation: "To maximize effectiveness of food marketing restrictions, WHO suggests that policies:

- Be mandatory;
- Protect children of all ages, including those older than 12 years;
- Use a nutrient profile model to classify foods to be restricted from marketing;
- Be broad enough to minimize the risk of migration of marketing to other channels, to other spaces within the same channel or to other age groups; and
- Restrict the power of food marketing to persuade.

Conditional recommendation, very low certainty evidence"

Suggested revisions: "To maximize effectiveness of food marketing restrictions, WHO suggests that policies:

- Be mandatory;
- Protect children of all ages, from age 0 to 19;
- Use a **government-mandated** nutrient profile model to classify foods to be restricted from marketing;
- Be broad enough to minimize the risk of migration of marketing to other channels, to other spaces within the same channel or to other age groups to ensure children and adolescents are not exposed to any direct or indirect form of paid, owned, or earned marketing of products, services, or brands under the regulation; and
- Restrict the power of food marketing to persuade, ensuring strategies relevant or appealing to children and adolescents, including strategies with universal appeal, such as emotional and health-related appeals, are not used:
- Have measures in place to ensure compliance, including a robust monitoring mechanism, for example a combined institutionalized and civil monitoring system, and meaningful penalties for non-compliance.

Strong recommendation aligning with the UN Convention on the Rights of the Child (UNCRC), very low certainty evidence **based on GRADE (not adapted for public health)**

Regarding the child age range, we suggest using "from (0 to 19)" instead of "including those older than 12 years." We have suggested this change as a revision to Recommendation 1 and have explained our rationale in our comments for Recommendation 1. In addition to that rationale, the phrase "including those older than 12 years" is ambiguous, as it does not clearly state that children and adolescents should be the target of the regulation.



Another comment on the application of GRADE notes issues with the inclusion of both studies of mandatory policy and industry self-regulation in the same pool, given what appears to be a clear contextual difference in that mandatory policy is both more effective and more clearly and consistently defined and applied than are industryled measures. In line with these observations, which are noted on p. 43 of the Draft Guidelines, we recommend adding "government-mandated" to the point about the nutrient profile model to clarify that any profile should be a part of the mandatory policy.

We suggest emphasizing the target population and comprehensive marketing definition by adding "to ensure children and adolescents are not exposed to any direct or indirect form of paid, owned, or earned marketing of products, services, or brands under the regulation" to the following point: "be broad enough to minimize the risk of migration of marketing to other channels, to other spaces within the same channel or to other age groups." We have offered and explained a suggested broadening of the marketing definition in another comment.

We suggest emphasizing the comprehensive definition of marketing power by adding "ensuring strategies relevant or appealing to children and adolescents, including strategies with universal appeal, such as emotional and health-related appeals, are not used" to the following point: "restrict the power of food marketing to persuade." We have offered and explained a suggested broadening of the marketing power definition in another comment.

Although the monitoring and policy enforcement are discussed in Section 5 (Implementation Considerations) of the Draft Guidelines, we strongly encourage adding a recommendation on the critical role of monitoring and enforcement in maximizing the effectiveness of food marketing restrictions. As research on food marketing policies shows, the lack of robust monitoring and evaluation systems can limit the impact of regulations(King et al., 2011; Reeve et al., 2018), whereas communication of monetary penalties and continuous monitoring can strengthen regulation enforcement (World Health Organization, 2016). The further indicates monitoring, evaluation, enforcement and meaningful penalties are central contextual factors for food marketing policy feasibility (World Health Organization, 2021). The relevance of these policy factors is reflected in the WHO Framework Convention on Tobacco Control: Guidelines for Implementation, which indicates: "Recommendation: Parties should introduce and apply effective, proportionate and dissuasive penalties. Parties should designate a competent, independent authority to monitor and enforce the law and entrust it with the necessary powers and resources. Civil society should be involved in the monitoring and enforcement of the law and have access to justice," (Organization, 2013, p. 111). Following this example, we suggest adding the recommendation "have measures in place to ensure compliance, including a robust monitoring mechanism, for example a combined institutionalized and civil monitoring system, and meaningful penalties for **non-compliance**" to emphasize these key factors impacting policy effectiveness.

Using the same rationale as we have offered for Recommendation 1, we likewise suggest the conditional recommendation be changed to **Strong** recommendation noting that this recommendation aligns "with the UN Convention on the Rights of the Child (UNCRC)." Further, we recommend qualifying the certainty of evidence with "based on GRADE (not adapted for public health)" if a certainty assessment is necessary. Again, we would actually suggest excluding the GRADE assessments from all recommendations due to its biases.



3. Research gaps

We appreciate the sample research questions offered in the Draft Guidelines. We would like to add to the need for research assessing differential effects of food marketing appeals based on the age of the child and based on the type of exposure channel. Currently, the sample questions focus on comparisons only against the absence of marketing. However, examining interactions between appeal, exposure type, and child age are important to identify the marketing strategies that are most powerful depending on age group.

We would also like to add **the need for research comparing brand marketing versus product marketing**, in addition to the proposed comparisons against the absence of marketing. This type of research is important to provide additional evidence for the discussion of brand marketing noted on p. 53 of the Draft Guidelines. As in, this research is important for understanding the nature of brand spillover effects, and this research might also provide insights into any intersection between brand spillover and health halo effects (Provencher & Jacob, 2016), wherein the marketing for a healthier version of a product within a brand family might create both a brand spillover and health halo effect for a less healthy product within the same family.

4. References

Arrúa, A., Curutchet, M. R., Rey, N., Barreto, P., Golovchenko, N., Sellanes, A., . . . Ares, G. (2017). Impact of front-of-pack nutrition information and label design on children's choice of two snack foods: Comparison of warnings and the traffic-light system. *Appetite*, 116, 139-146. doi:10.1016/j. appet.2017.04.012

Boyland, E., McGale, L., Maden, M., Hounsome, J., Boland, A., Angus, K., & Jones, A. (2022). Association of Food and Nonalcoholic Beverage Marketing With Children and Adolescents' Eating Behaviors and Health: A Systematic Review and Meta-analysis. *JAMA Pediatrics*, e221037-e221037.

Boyland, E., McGale, L., Maden, M., Hounsome, J., Boland, A., & Jones, A. (2022). Systematic review of the effect of policies to restrict the marketing of foods and non-alcoholic beverages to which children are exposed. *Obesity Reviews*, e13447.

Boyland, E. J., & Halford, J. C. (2013). Television advertising and branding. Effects on eating behaviour and food preferences in children. *Appetite*, 62, 236-241.

Brooks, R., Christidis, R., Carah, N., Kelly, B., Martino, F., & Backholer, K. (2022). Turning users into 'unofficial brand ambassadors': marketing of unhealthy food and non-alcoholic beverages on TikTok. *BMJ Global Health*, 7(6), e009112.

Buijzen, M., & Valkenburg, P. M. (2002). Appeals in television advertising: A content analysis of commercials aimed at children and teenagers. In: Walter de Gruyter.

Carpentier, F. R. D., Correa, T., Reyes, M., & Taillie, L. S. (2020). Evaluating the impact of Chile's marketing regu-

lation of unhealthy foods and beverages: pre-school and adolescent children's changes in exposure to food advertising on television. *Public Health Nutrition*, 23(4), 747-755.

Correa, T., Fierro, C., Reyes, M., Taillie, L. S., Carpentier, F. R. D., & Corvalán, C. (2022). Why Don't You [Government] Help Us Make Healthier Foods More Affordable Instead of Bombarding Us with Labels? Maternal Knowledge, Perceptions, and Practices after Full Implementation of the Chilean Food Labelling Law. *International Journal of Environmental Research and Public Health*, 19(8), 4547.

Corvalán, C., Reyes, M., Garmendia, M. L., & Uauy, R. (2019). Structural responses to the obesity and non-communicable diseases epidemic: Update on the Chilean law of food labelling and advertising. *Obesity Reviews*, 20(3), 367-374. doi:10.1111/obr.12802

Dillman Carpentier, F. (2021). "Cambios en marketing de alimentos después de la implementación de la Ley de Etiquetado" Paper presented at the Sociedad Latinoamericana de Nutrición Annual Conference.

Effertz, T., & Wilcke, A.-C. (2012). Do television food commercials target children in Germany? *Public Health Nutrition*, 15(8), 1466-1473.

Elliott, C., & Truman, E. (2019). Measuring the power of food marketing to children: A review of recent literature. *Current Nutrition Reports*, 8(4), 323-332.

Hallez, L., Qutteina, Y., Raedschelders, M., Boen, F., & Smits, T. (2020). That's my cue to eat: A systematic review of the persuasiveness of front-of-pack cues on food packages for

PAGE 14 of 16



children vs. adults. Nutrients, 12(4), 1062.

Harris, J. L., Yokum, S., & Fleming-Milici, F. (2020). Hooked on Junk: Emerging Evidence on How Food Marketing Affects Adolescents' Diets and Long-Term Health. Current Addiction Reports, 1-9.

Hawkes, C., & Harris, J. L. (2011). An analysis of the content of food industry pledges on marketing to children. Public Health Nutrition, 14(8), 1403-1414.

Hilton Boon, M., Thomson, H., Shaw, B., Akl, E. A., Lhachimi, S. K., López Alcalde, J., . . . Mustafa, R. A. (2021). Challenges in applying the GRADE approach in public health guidelines and systematic reviews: a concept article from the GRADE Public Health Group.

Jensen, M. L., Carpentier, F. D., Adair, L., Corvalán, C., Popkin, Mediano Stoltze, F., Reyes, M., Smith, T. L., Correa, T., B. M., & Taillie, L. S. (2021a). Examining Chile's unique food marketing policy: TV advertising and dietary intake in preschool children, a pre-and post-policy study. Pediatric Obesity, 16(4), e12735.

Jensen, M. L., Carpentier, F. R. D., Adair, L., Corvalán, C., Popkin, B. M., & Taillie, L. S. (2021b). TV advertising and dietary intake in adolescents: a pre-and post-study of Chile's Food Marketing Policy. International Journal of Behavioral Nutrition And Physical Activity, 18(1), 1-11.

Katz, H. (2016). The media handbook: A complete guide to advertising media selection, planning, research, and buying: Routledge.

Keller, K. L. (2003). Brand synthesis: The multidimensionality of brand knowledge. Journal of Consumer Research, 29(4), 595-600.

Kent, M. P., & Pauzé, E. (2018). The effectiveness of self-regulation in limiting the advertising of unhealthy foods and beverages on children's preferred websites in Canada. *Public Health Nutrition*, 21(9), 1608-1617.

King, L., Hebden, L., Grunseit, A., Kelly, B., Chapman, K., & Venugopal, K. (2011). Industry self regulation of television food advertising: responsible or responsive? International Journal of Pediatric Obesity, 6(2Part2), e390-e398.

Leslie, F., Levine, L., Loughlin, S., & Pechmann, C. (2009). Adolescents' psychological & neurobiological development: Implications for digital marketing. Memo prepared for the Second NPLAN. Paper presented at the BMSG Meeting on Digital Media and Marketing to Children for the NPLAN Marketing to Children Learning Community, Berkeley, CA.

Lopez, R. A., Liu, Y., & Zhu, C. (2015). TV advertising spillovers and demand for private labels: the case of carbonated soft drinks. Applied Economics, 47(25), 2563-2576.

Martuzzi, M., Tickner, J. A., & Organization, W. H. (2004). The precautionary principle: protecting public health, the environment and the future of our children: World Health Organization. Regional Office for Europe.

Mediano-Stoltze, F., Dillman Carpentier, F., Harris, J., Comello, M.L., Lazard, A., Reyes, M., & Taillie, L. S (2022). The effects of child-directed vs. general audience soda advertisements on children's attitudes and beverage choices: Underlying psychological mechanisms and policy implications. Paper presented at the 21st annual meeting of the International Society of Behavioral Nutrition and Physical Activity, Phoenix.

Mediano-Stoltze, F., Dillman Carpentier, F., Harris, J., Lazard, A., Comello, M.L., Taillie, L. S. & Reyes, M. (2022). Testing the assumptions underlying "child-directed" marketing regulations: children's attitudes toward child- vs. non-child-directed soda ads. Paper presented at the 72nd Annual International Communication Association (ICA) Conference, One World, One Network, Paris.

Corvalán, C., & Carpentier, F. R. D. (2019). Prevalence of Child-Directed Marketing on Breakfast Cereal Packages before and after Chile's Food Marketing Law: A Pre-and Post-Quantitative Content Analysis. International Journal of Environmental Research And Public Health, 16(22), 4501.

Montgomery, K., Grier, S., Chester, J., & Dorfman, L. (2011). Food marketing in the digital age: a conceptual framework and agenda for research. Center for Digital Democracy, Washington DC.

Mulligan, C., Kent, M. P., Christoforou, A. K., & L'Abbé, M. R. (2020). Inventory of marketing techniques used in child-appealing food and beverage research: A rapid review. *International Journal of Public Health*, 1-11.

Mulligan, C., Potvin Kent, M., Vergeer, L., Christoforou, A. K., & L'Abbé, M. R. (2021). Quantifying child-appeal: the development and mixed-methods validation of a methodology for evaluating child-appealing marketing on product packaging. International Journal of Environmental Research And Public Health, 18(9), 4769.

Norris, S. L., & Bero, L. (2016). GRADE methods for guideline development: time to evolve? In (Vol. 165, pp. 810-811): American College of Physicians.

Ofcom. (2008). Changes in the nature and balance of television food advertising to children: A review of HFSS advertising restrictions. Retrieved from https://www.ofcom.org. uk/ data/assets/pdf file/0028/23977/hfssdec08.pdf.

Ofcom. (2010). HFSS advertising restrictions: Final review. Retrieved from http://stakeholders.ofcom.org.uk/mar-retrieved ket-data-research/other/tv-research/hfss-final-review/

Organization, W. H. (2013). WHO framework convention on tobacco control: quidelines for implementation of article 5. 3, Articles 8 To 14: World Health Organization.

Pechmann, C., Levine, L., Loughlin, S., & Leslie, F. (2005). Impulsive and self-conscious: Adolescents' vulnerability to advertising and promotion. Journal of Public Policy & Marketing, 24(2), 202-221.

PAGE 15 of 16



Pina, J. M., Riley, F. D. O., & Lomax, W. (2013). Generalizing spillover effects of goods and service brand extensions: A meta-analysis approach. *Journal of Business Research*, 66(9), 1411-1419.

Potvin Kent, M., Dubois, L., & Wanless, A. (2011). Self-regulation by industry of food marketing is having little impact during children's preferred television. *International Journal of Pediatric Obesity*, 6(5-6), 401-408.

Potvin Kent, M., Martin, C. L., & Kent, E. A. (2014). Changes in the volume, power and nutritional quality of foods marketed to children on television in Canada. *Obesity*, 22(9), 2053-2060.

Potvin Kent, M., Pauzé, E., Roy, E. A., de Billy, N., & Czoli, C. (2019). Children and adolescents' exposure to food and beverage marketing in social media apps. *Pediatric Obesity*, 14(6), e12508.

Provencher, V., & Jacob, R. (2016). Impact of perceived healthiness of food on food choices and intake. *Current Obesity Reports*, 5(1), 65-71.

Reeve, E., Thow, A. M., Bell, C., Engelhardt, K., Gamolo-Naliponguit, E. C., Go, J. J., & Sacks, G. (2018). Implementation lessons for school food policies and marketing restrictions in the Philippines: a qualitative policy analysis. *Globalization and Health*, 14(1), 1-14.

Rehfuess, E. A., & Akl, E. A. (2013). Current experience with applying the GRADE approach to public health interventions: an empirical study. *BMC Public Health*, 13(1), 1-13.

Requejo, J., Diaz, T., Park, L., Strong, K., Lopez, G., Borrazzo, J., . . . Felici, C. (2022). Child health and wellbeing dashboards: accountability for children's rights. *The Lancet*, 399(10338), 1847-1849.

Schünemann, H. B., Jan; Guyatt, Gordon; Oxman, Andrew. (2013). The GRADE Handbook Retrieved from https://gdt.gradepro.org/app/handbook/handbook.html#h.svwng-s6pm0f2

Signal, L. N., Stanley, J., Smith, M., Barr, M., Chambers, T. J., Zhou, J., . . . McKerchar, C. (2017). Children's everyday exposure to food marketing: an objective analysis using wearable cameras. *International Journal Of Behavioral Nutrition And Physical Activity*, 14(1), 137.

Taillie, L. S., Bercholz, M., Popkin, B., Reyes, M., Colchero, M. A., & Corvalán, C. (2021). Changes in food purchases after the Chilean policies on food labelling, marketing, and sales in schools: A before and after study. *The Lancet Planetary Health*, 5(8), e526-e533.

Taillie, L. S., Busey, E., Mediano Stoltze, F., & Dillman Carpentier, F. R. (2019). Governmental policies to reduce unhealthy food marketing to children. *Nutrition Reviews*.

Taillie, L. S., Reyes, M., Colchero, M. A., Popkin, B., & Corvalán, C. (2020). An evaluation of Chile's Law of Food

Labeling and Advertising on sugar-sweetened beverage purchases from 2015 to 2017: A before-and-after study. *PLOS Medicine*, 17(2), e1003015.

Tatlow-Golden, M., & Garde, A. (2020). Digital food marketing to children: Exploitation, surveillance and rights violations. *Global Food Security*, 27, 100423.

UN General Assembly. (1989). Convention on the Rights of the Child. United Nations, Treaty Series, 1577(3), 1-23.

United Nations General Assembly Human Rights Council's 46th Session. (2021). Artificial intelligence and privacy, and children's privacy. Report of the Special Rapporteur on the right to privacy. Retrieved from https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/015/65/PDF/G2101565.
pdf?OpenElement

Warren, R., Wicks, R. H., Wicks, J. L., Fosu, I., & Chung, D. (2008). Food and beverage advertising on US television: A comparison of child-targeted versus general audience commercials. *Journal of Broadcasting & Electronic Media*, 52(2), 231-246.

World-Health-Organization. (2012). A framework for implementing the set of recommendations on the marketing of foods and non-alcoholic beverages to children.

World Health Organization. (2014). WHO handbook for quideline development: World Health Organization.

World Health Organization. (2016). Tackling food marketing to children in a digital world: trans-disciplinary perspectives. Retrieved from http://www.euro.who.int/ data/assets/pdf file/0017/322226/Tackling-food-marketing-children-digital-world-trans-disciplinary-perspectives-en.pdf

World Health Organization. (2020). WHO guidelines on physical activity and sedentary behaviour: web annex: evidence profiles.

World Health Organization. (2021). Implementing policies to restrict food marketing: a review of contextual factors.

World Health Organization. (2022a, June 2022). Draft guideline on policies to protect children from the harmful impact of food marketing. DRAFT WHO GUIDELINE FOR PUBLIC CONSULTATION.

World Health Organization. (2022b). Food marketing exposure and power and their associations with food-related attitudes, beliefs and behaviours: a narrative review.

World Health Organization. (2022c). Nutrition Guidance Expert Advisory Group (NUGAG) Subgroup on Policy Actions Retrieved from https://www.who.int/groups/nutrition-guidance-expert-advisory-group-(nugag)/policy-actions