

# Are advertising policies affirmative in restricting the marketing of foods high in fat, salt and sugar (HFSS) in India?: evidence from SWOT Analysis



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## Summary

The regulatory Indian environment for advertising high fat, salt, and sugar (HFSS) foods and non-alcoholic beverages, on various media was reviewed. Identified national-level policies were categorised as mandatory or self-regulatory based on legal content. For each mandatory regulation, Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was undertaken to determine how existing policies could be strengthened to safeguard children from unhealthy food advertisements. Thirteen policies (nine mandatory; four self-regulatory) relevant to advertising in India were identified. Of the nine mandatory policies, Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022, is the only policy that restricts HFSS food advertisements to children across all media. There are key shortfalls, including limited scope of ‘child-targeted’ advertisements and lack of criteria to define HFSS foods. A robust regulatory framework is needed to protect children from HFSS food marketing, not just what is ‘directed’ at them, with clear evidence-based food classification criteria.

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## Introduction

In India, there exists a dual burden of overnutrition (obesity or overweight) and undernutrition.<sup>1</sup> The World Obesity Atlas 2023 predicts an annual rate of increase in obesity among children to be 9.1% between 2020 and 2035.<sup>2</sup> This could be due to the complex interactions between the societal, environmental, food industry and individual factors.<sup>3</sup> The daily average calorie consumption in India is below the recommended 2503 kcal/capita/day across groups irrespective of income, regions and sectors (rural/urban), with the exception being the richest 5% of the population. It is worth noting that on an average Indian household derives more calories from processed foods than fruits,<sup>4</sup> highlighting their significant contribution to total calorie intake. Due to the economic upsurge, the role of various foreign players

from the food industry and aggressive marketing, Indians have been increasingly exposed to ultra-processed, high sugar, salt and fat foods (HFSS) foods.<sup>5</sup>

Marketing encompasses all efforts to advertise or otherwise promote a product or service. While advertising is a form of marketing that specifically refers to the paid public presentation and promotion of ideas, goods, or services by a sponsor, intended to bring a product to the attention of consumers through various media channels.<sup>6</sup>

Marketing of HFSS foods negatively affects consumption patterns, particularly of young children,<sup>7</sup> leading to increased lifetime risks of weight gain, overweight, obesity, and non-communicable diseases (NCDs).<sup>8–11</sup> Children are exposed to HFSS food advertisements through message content<sup>6,11</sup> on many different channels, including broadcast media (television, radio, print), non-broadcast media (online, retail, sports, food packaging), schools and advertising in public spaces (billboards).<sup>12,13</sup> Consistently, across all media and settings, HFSS foods and beverages are portrayed as fun, cool, and exciting.<sup>14</sup> Young children and adolescents are particularly

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vulnerable to HFSS food marketing as they lack cognitive ability to discern the commercial intent.<sup>15</sup> They are reward-driven, impressionable, and get easily influenced by brands and products that provide immediate gratification.<sup>16</sup> Consistent global evidence links marketing using different communication channels, times, and settings<sup>17</sup> of HFSS foods and non-alcoholic beverages with increased brand loyalty, preference for marketed products, and total energy intake, undermining healthy diets.<sup>8,10,18</sup> With the advent of technology, children are hooked to social networking sites and are exposed to HFSS advertising.<sup>19</sup> Children must therefore be protected from the marketing of HFSS foods.

Policies restricting food marketing to children are recognized as cost-effective policy tools in the long-term.<sup>20</sup> India is a signatory to the UN Convention on the Rights of the Child and therefore has a legal obligation to ensure all children have the right to health (Article 24), and are protected from arbitrary or unlawful interference with privacy (Article 16). Additionally, India is obligated to protect children from material injurious to well-being (Article 17).

WHO<sup>21</sup> urged governments to address increasing obesity prevalence by implementing several of population-based interventions, including restrictions on the marketing of HFSS foods and non-alcoholic beverages to children.<sup>22</sup> The WHO (2022) urges states to implement comprehensive policy approaches to restrict the marketing of foods that contribute to unhealthy diets of children.<sup>5,10</sup> Countries across the globe also started to act. In alignment with the commission set up by the WHO, the United Nations Children's Fund (UNICEF), and WHO–UNICEF–Lancet Commission, it is essential to protect children from harmful marketing that encourages unhealthy diets.<sup>23</sup> Recently in India, the Guidelines for Prevention of Misleading Advertisements (2022) were released by the Central Consumer Protection Authority (CCPA), covering all media for advertisements.<sup>24</sup> Even before the release of these guidelines, multiple other policies have been in vogue to regulate advertisements across different media. However, the strengths of these different policies to protect children from unhealthy food marketing in India is unclear. This review aims to analyse existing policy instruments being implemented by the Indian government pertaining to advertising across media platforms. Additionally, it assesses if and how these policies regulate the advertisement of HFSS foods and non-alcoholic beverages. In doing so, the review identified how the existing policy environment can be strengthened to combat growing childhood obesity in India.

### Existing regulatory environment on HFSS food and non-alcoholic beverage advertisements on various media in India

Thirteen policies dealing with advertisements on various media including television, radio, internet, print, phone,

were identified. [Table 1](#) describes the nature of each policy, the issuing authority, and the media it catered to.

Only the mandatory regulations/guidelines (n = 9) restricting the advertisement content on media were considered for the SWOT analysis ([Supplementary Table S1](#)). The following section describes the strengths, weaknesses, opportunities, and threats for each of the nine mandatory policies identified, and categorised them according to the media that the policy is relevant to.

### All media

#### Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022

These Guidelines were introduced in June 2022 by the Central Consumer Protection Authority (CCPA) under the Ministry of Consumer Affairs, in the exercise of powers conferred by the Consumer Protection Act, 2019 (35 of 2019).<sup>24</sup> These guidelines are comprehensive and apply to all forms, formats, and media. According to these guidelines, an advertisement of any goods, products or services that addresses or targets children shall not give any impression that such goods, products or services are better than natural or traditional food that children may be consuming. The Guidelines also discourage any advertisement that offers promotional gifts to persuade children to buy goods, products or services without necessity or promotes illogical consumerism.

The guidelines introduce new concepts, including 'bait advertisements,' 'free claims advertisements,' and 'child-targeted advertisements'. The guidelines not only set out conditions that must be complied with, with respect to 'bait advertisements,' but also prohibit surrogate or indirect advertisements, including brand extensions, and regulate 'free claims' advertisements. Among other restrictions, the guidelines prohibit unsubstantiated health claims in advertisements targeting children, and advertisements that condone or encourage practices detrimental to children's physical health or mental well-being. Of relevance to food marketing, the guidelines specifically preclude advertisements of 'junk foods', including chips, and carbonated beverages' during a 'program' or on a 'channel' meant for children or on a channel meant 'exclusively for children'. They also forbid celebrity endorsements for products that require health warnings to be included in such advertisements or for products that cannot be purchased by children. Restrictions on advertisements, including restrictions on 'junk food', do not consider media/locations visited/ accessed by children that are often not those 'directed at' or 'targeting' or 'meant exclusively' for children, but are instead those providing access to a wide range of content (e.g., social media). Although the guidelines seek to include regulation of 'junk food' advertisements, ambiguity exists around terms like what constitutes 'junk food', 'programs' or meant 'exclusively for children',

| S. No | Policy  | Issuing authority                                    | Nature of the policy        | Media covered   |
|-------|---|--|-----------------------------|---|
| 1     | Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements, 2022, read with the Consumer Protection Act, 2019 (35 of 2019)     | Central Consumer Protection Authority (CCPA)         | Mandatory                   | All advertisements regardless of form, format, or medium  |
| 2     | IT (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 issued under the Information Technology Act, 2000   | Ministry of Electronics and Information Technology   | Mandatory                   | Part II-Social media intermediaries<br>Part III- News and current affairs, online curated content   |
| 3     | Universal Self-Regulation Code for Online Curated Content Providers, 2020   | Internet and Mobile Association of India (IAMAI)     | Self-Regulatory             | Streaming channels (Netflix, Amazon Prime, Zee 5, Disney + Hotstar, etc.)   |
| 4     | Cable Television Network Rules, 1994<br>Cable Television Network (Amendment) Rules, 2021<br>Read with the Cable Television Networks (Amendment) Act, 1995                 | Ministry of Information and Broadcasting             | Mandatory                   | Cable television networks   |
| 5     | Guidelines for Influencers Advertising in Digital Media, 2021   | The Advertising Standards Council of India (ASCI)    | Self-Regulatory             | Digital media<br>- Internet (in-game advertising, teasers, viral advertising, augmented reality, influencers, etc.)<br>- Mobile broadcast, mobile, communications content, websites, blogs, apps, etc.<br>- NSTV (non-standard television)<br>- DDHE (digital delivery home entertainment)<br>- DTT (digital terrestrial television)<br>- On-demand platforms video, subscription video on demand, near movie on demand, free video |
| 6     | Food Safety and Standards (Advertising and Claims) Regulation, 2018   | Food Safety and Standards Authority of India (FSSAI) | Mandatory                   | Print, electronic media, internet, or website and includes any notice, circular, label, wrapper, or other documents. e-platforms where marketers operate  |
| 7     | Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act, 1992 amended as Infant Milk Substitute Act (IMS), 2003 | Ministry of Women and Child Development              | Mandatory                   | Information on containers and labels of infant milk substitutes of infant foods, advertisements or promotion  |
| 8     | Telecom Commercial Communications Customer Preference Regulations (TCCCPR), 2018  | Telecom Regulatory Authority of India (TRAI)         | Mandatory                   | Text messages or voice calls  |
| 9     | ASCI Code on Self-regulation guidelines of advertising of foods and beverages, 2013   | The Advertising Standards Council of India (ASCI)    | Mandatory for cable service | Press, cinema, radio, television, hoardings, hard bills, direct mail, posters, internet, digital, etc.  |
| 10    | Indian Broadcasting Foundation Content Code & Certification Rules, 2011 (IBF)   | Indian Broadcasting Foundation                       | Self-Regulatory             | Television, radio   |
| 11    | Code of Ethics and Broadcasting Standards, 2008   | News Broadcasters and Digital Association (NBDA)     | Self-Regulatory             | Electronic media  |
| 12    | Norms of Journalistic Conduct, 2010 under Press Council Act, 1978   | Press Council of India                               | Mandatory                   | Newspapers, Pamphlets   |
| 13    | Advertising Code of the Prasar Bharati (2022) under the Prasar Bharati (Broadcasting Corporation of India) Act, 1990  | Ministry of Information and Broadcasting             | Mandatory                   | Doordarshan, All India Radio  |

**Table 1: Identified policies relevant to advertisements in India (n = 13).**

which may not, in their traditional meaning, include *new media*. These guidelines also do not have specific objective criteria for ‘brand extension’ and ‘indirect advertisement’. The opportunity that existed in these guidelines is to define junk foods and broaden the regulatory scope from ‘child-directed’ marketing to all marketing that children are exposed to across all media and settings.

### IT (Intermediary Guidelines and Digital Media Ethics Code) rules 2021 issued under the information technology act, 2000

To protect children from viewing content that is not age-appropriate on the internet, the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 recognize the need for a higher category of classification

of films or serials that portray substance use/misuse, smoking, and tobacco consumption, and have a mechanism for age verification. On the contrary, these guidelines do not cover the portrayal of the consumption of HFSS foods and non-alcoholic beverages in films or serials. Therefore, dedicating a category of classification aimed at curbing HFSS foods and non-alcoholic beverages may be considered for inclusion. However, the major threat undermining the effectiveness of such a measure is the inflow of online marketing from other countries, inaccuracies in age verification mechanisms and inadequacy of parental controls.<sup>25,26</sup>

### Cable Television Network rules, 1994

Program and Advertising Code under the Cable Television Network Rules, 1994<sup>27</sup> regulates the content of

any program or advertisement transmitted through cable television and provides penalties for violation of the Code. The Code requires cable service providers to conform to provisions prohibiting the direct and indirect advertisement of cigarettes, tobacco, wine, and other similar products. The rules also comprehensively ban any kind of promotion of Infant Formula, Feeding Bottles and Infant Foods for 0–2 years in alignment with the IMS Act.<sup>28</sup> It does not have any provision for restricting the advertising of HFSS foods and non-alcoholic beverages. Imposition of restrictions by prescribing watershed hours i.e., a time when a high number (not proportion) of children are likely to be watching, listening, or being exposed to broadcast media, based on evidence of children’s television viewing patterns in India, would strengthen this regulation. However, there can be multiple threats such as continuous exposure of children to indirect advertisements, brand extensions, sponsorship, and product placement in movies or television shows, which must be addressed within a comprehensive framework that targets children’s exposure to the marketing of HFSS foods and non-alcoholic beverages. On average, Indian children have been found to watch television for about 2–3 h a day on weekdays and more during weekends.<sup>29</sup> The introduction of watershed hours may help curtail exposure to HFSS advertisements during time slots when children are more likely to be watching television.

### **ASCI code on self-regulation: guidelines of advertising of foods and beverages, 2013**

ASCI is a voluntary body of the industry that promotes self-regulatory mechanisms introduced to protect consumers. However, Rule 7 (9) of the Advertising Code prescribed under the Cable Television Networks Rules, 1994 states: *‘No advertisement which violates the code for self-regulation in advertising, as adopted by ASCI, Mumbai for public exhibition in India, from time to time, shall be carried in the cable service.’* This has given the ASCI Code a statutory flavour,<sup>30</sup> thereby making compliance mandatory for cable service providers. For this reason, this regulation was included in the SWOT analysis. The ASCI Code states that advertisements should not undermine the role of parental care and guidance in ensuring proper food choices are made by children.<sup>31</sup> It prohibits children from being featured in advertisements for tobacco and alcohol products but fails to mention any regulation regarding HFSS foods and non-alcoholic beverages advertisements. Thus, highlights the scope to amend this and restrict HFSS foods and beverages. Apart from the Code’s application to cable service providers, the ASCI can only recommend the removal of advertisements upon receiving a complaint; and in case of non-compliance, forward complaints to an authorized officer under the Cable Television Networks Act, who is then empowered to prohibit the broadcast of the advertisement. However, compliance

with the Programme and Advertisement Code is mandatory for transmitting programs and advertisements on television channels.

### **Advertising Code of Prasar Bharati (2022) under the Prasar Bharati (Broadcasting Corporation of India) act, 1990**

The Advertising Code of Prasar Bharati, India’s state-owned public broadcaster, provides a basic guiding framework to regulate advertised products, services, and content in the best interest of consumers. It applies to advertisers and advertising agencies and is to be read in accordance with the objectives of the Prasar Bharati Act, 1990,<sup>32</sup> which ensures that the All India Radio (AIR) and Doordarshan (DD) Television Network safeguard the citizen’s right to be informed freely, truthfully and objectively. The Advertising Code of Prasar Bharati prohibits the direct and indirect advertisements of alcohol, tobacco products, cigarettes, wine, liquor, and other intoxicants. It also prohibits advertisements that endanger the safety of children or advertisements that create any interest in unhealthy practices or depict them begging or in any undignified manner. While the Code does not specifically elaborate on “unhealthy practices”, it mandates compliance of AIR, DD, and Digital Services of Prasar Bharati to the Code for self-regulation in advertising as adopted by the ASCI. The Code lacks reference to any form of restriction on HFSS foods and non-alcoholic beverage advertisements on the radio. There is neither a classification prohibiting such advertisements during children’s programs, nor are there watershed hours for protecting children from advertisement exposure on this medium. The major threat that may expose children to advertisements includes the possibility of surrogate advertisements on the radio.

### **Telecom commercial communications customer preference regulations (TCCCPR), 2018**

The 2018 TCCP Regulations regulate commercial communications (which include advertisements), transactional messages, and service messages/service calls.<sup>33</sup> Silent calls and Robo-calls also fall within the ambit of these regulations. It prohibits Unsolicited Commercial Communications (UCC) from sending via SMS and calls and requires all telemarketers to register with respective telecom service providers under the respective regulations. The Regulations also require telecom licenses to establish ‘codes of practice’ to prevent the flow of UCC on their networks. However, it does not address any specific category of communication subject to the restriction of HFSS foods and non-alcoholic beverage advertisements. Considering the scope of this regulation, restrictions on advertisements of HFSS foods and non-alcoholic beverages through SMS and calls could be introduced to prevent children’s access to promotional activity by the industry.

### **Norms of Journalistic Conduct, 2010 under Press Council act, 1978**

The Norms of Journalistic Conduct, 2010 set out by the Press Council of India, aims at maintaining norms of professionalism in the print media that are universally recognized.<sup>34</sup> It covers the press media (newspapers, magazines, pamphlets) and restricts advertisements of tobacco, alcohol, and other intoxicants. The norms, however, fail to make any reference to the marketing of HFSS and non-alcoholic beverage advertisements. There exists an opportunity to include a prohibition of HFSS foods and non-alcoholic beverage advertisement along with other demerit goods despite the issue of surrogate advertisements.

### **Food Safety and Standards (Advertising and Claims) Regulation, 2018**

The 2018 Food Safety and Standards (Advertising and Claims) Regulation intends to establish fairness in claims and advertisements of food products and make food businesses accountable for such claims and advertisements to protect consumer interests. The regulation comprises several sections detailing definitions; general principles for claims and advertisements; criteria for nutrition claims (nutrient content or nutrient comparative claims), non-addition claims (non-addition of sugars and sodium salts), health claims (reduction of disease risk), claims related to dietary guidelines or healthy diets, and conditional claims (e.g., naturally low sugar food). It also specifically prohibits certain claims (e.g., recommended by health professionals); and procedures for approval of claims and redressal of non-compliances under this regulation.<sup>35</sup> For instance, usage of words such as “natural”, “fresh”, “pure”, “authentic” etc. are not permissible for use unless the product meets the specified criteria laid down under this regulation. Words such as “homemade” or “homemade” have been prohibited. However, the regulation fails to address or classify HFSS foods and non-alcoholic beverage advertisements. Food Beverage Operators (FBOs) often find loopholes to avoid adhering to general principles.<sup>36</sup> Such advertisements also undermine national efforts for the promotion of healthy eating habits among children from an earlier age.<sup>37</sup> To address this, we may wish to provide health claims that state the consequences of consumption of HFSS foods and non-alcoholic beverages.

### **Infant milk substitutes, Feeding Bottles and Infant Foods (regulation of production, supply and distribution) act, 1992, amended as Infant Milk substitute Act (IMS), 2003 no. 38 of 2003**

The IMS Act, 1992,<sup>28</sup> as amended in 2003 aim to strengthen regulation and prevent formula companies from evading the law. It imposes a comprehensive ban on all forms of promotion and advertisement for the distribution, sale, and supply of infant milk substitutes, feeding bottles, and infant foods to children up to the

age of two years, but does not explicitly mention HFSS foods and non-alcoholic beverages. It also imposes a ban on financial inducement or gifts, including funding for seminars, research, or sponsorship provided to health professionals for promotion. It also prohibits the provision of incentives offered to consumers for the use or sale of such products. Labels on infant formula products are required to conspicuously mention that “mother’s milk is best for your baby” and portray the nature of infant milk substitutes only as an alternative to mother’s milk which ought to be used under the guidance of a health worker. It also requires educational material, audio or visual on feeding infants to contain information on the health hazards posed by the improper use of milk substitutes and feeding bottles. It also covers the penalties for violation of the IMS Act, 1992, which would amount to a criminal offence, and involve fines and imprisonment. Through an advisory issued by FSSAI in 2020,<sup>38</sup> all FBOs, including e-commerce platforms, are required to strictly adhere to the provisions of the IMS Act, and desist from adopting surrogate promotions. However, lucrative advertisements by the industry to popularise formula milk are rampant and a threat to children’s health.<sup>39</sup>

### **Recommendations to strengthen the HFSS food and non-alcoholic beverage advertising regulation in India**

The review provides evidence to support the Government of India and its agencies to strengthen HFSS food advertisement regulations to provide an enabling environment for children and their caregivers, to make safe and nutritious food choices thereby leading to their optimal growth and development.

Before the year 2022, none of the legal instruments restricted advertisement of HFSS foods and non-alcoholic beverages across all media. Out of the nine mandatory regulations evaluated; only the Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements (2022), prohibits advertisements of junk food to children on all media, but lacks specificity in defining ‘junk food’. These guidelines present an opportunity to strengthen HFSS food and non-alcoholic beverages advertisement regulation in the country, across all media and settings.<sup>24</sup> Given the comprehensive nature of these guidelines, the need to amend earlier policies may not be required once its shortcomings are addressed. This review indicates the presence of several limitations in the existing regulations, which can be addressed by engaging various regulatory authorities such as the CCPA, FSSAI, etc. for shaping future policy.

#### *Expanding the scope of guidelines that regulate advertisements targeted at children*

The existing 2022 guidelines regulate advertisements that specifically ‘address or target or use children’ across



all media, and specifically on broadcast, to limit ‘junk food’ advertisements during a ‘program meant’ or on a ‘channel meant exclusively for children’.<sup>17</sup> This focus on ‘child-targeted’ marketing is limited as children share many of the same physical and virtual spaces as adults and therefore are exposed to much more HFSS food and non-alcoholic beverage advertisements than just those that are ‘directed’ at them. Evidence from United Kingdom (2017) showed 64% of children’s viewing occurred during adult airtime. Viewership ranged between 53% for the younger age group (4–9 years) and 79% for the older (10–15 years). As a result, a substantial proportion of children’s exposure to HFSS food advertisements in both traditional and digital media is unlikely to be covered by the existing guidelines. Thus, regulations should be designed to capture all HFSS food and non-alcoholic beverage advertisements that children are exposed to, not just the advertisements that are ‘directed’ at them.

When designing regulations for broadcast media, restricting children’s exposure to HFSS food and non-alcoholic beverage marketing can be achieved using a watershed approach. Watershed timings should be sensitive to the local context and cultural considerations and cover the time period where a large number of children are in the audience. This kind of approach has been implemented in other countries like South Korea,<sup>40</sup> Chile,<sup>41,42</sup> Taiwan<sup>43</sup> and passed into law (though not yet implemented) in the United Kingdom.<sup>44</sup> An impact evaluation of the policy implemented in South Korea in 2012 showed a reduction in the volume of unhealthy food advertising on television during regulated hours (from

1296 advertisement placements in 2009 to 243 advertisement placements in 2010) and product reformulation.<sup>45</sup> Chile, in 2016, had focused its restrictions only on unhealthy food advertising directed at children. However, in 2018, their law was updated to a 10 p.m. watershed approach on broadcast media, recognizing children’s exposure to a high volume of unhealthy food advertisements beyond the regular ‘children’s programming’.<sup>46</sup> Post implementation of a time-based restriction on child-directed advertisements between 6 a.m. and 10 p.m. in Chile, a significant reduction was observed in high-in advertisement exposure among children.<sup>47</sup> Also in the UK, a modelling study assessing the potential impact of restricting HFSS television advertising between 05:30 h and 21:00 h, suggests meaningful contribution to reduction of childhood obesity.<sup>48</sup> Besides time restrictions, Singapore introduced a novel approach where all food and beverage products primarily targeting children (<12 years) must adhere to the nutritional criteria prescribed by Health Promotion Board (HPB)<sup>49</sup> when advertised on any media. Specifically, regarding television advertising, food that do not adhere to the country’s nutritional criteria cannot be advertised during times when viewership is high among children. Only foods with beneficial nutrients such as fibre and calcium, as well as limited content of sodium, saturated fat, and total sugar, can be advertised.

### *Developing a food classification system built on evidence-based models*

A key weakness in existing regulatory frameworks is a lack of a system defining what constitutes HFSS food or

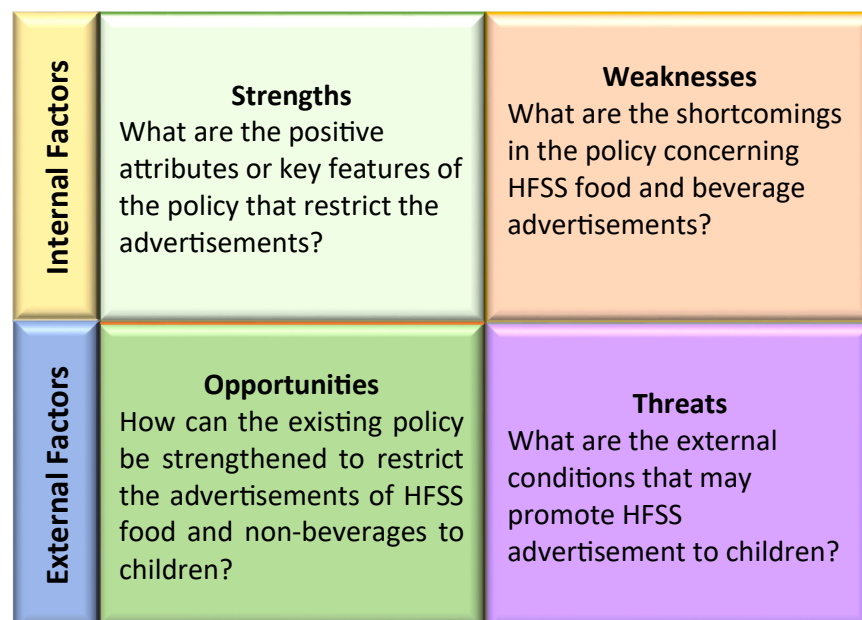


Fig. 1: Tool used for analysing internal and external factors of mandatory advertising regulation.

non-alcoholic beverages. Lack of evidence-based food classification model is a detriment to the policy as it makes implementation ineffective. Foods and non-alcoholic beverages can be distinguished in several ways by using national dietary guidelines, definitions set by specific bodies [e.g., FSSAI under the Food Safety and Standards (Labelling and Display) Regulations, 2020] or specific food categories, or by posing restrictions using nutrient thresholds (usually using a nutrient profile model). The evidence demonstrates that the choice of a food classification model used can have a material effect on the amount of HFSS food advertising seen by children, even where legally binding regulations apply.<sup>50</sup> Depending on the local context, the Indian government could examine the adoption and adaptation of the WHO nutrient profile model for South-East Asia Region (SEAR).<sup>51</sup> As suggested by the Food and Agriculture Organisation, the NOVA classification system can be used<sup>52</sup> which classified foods into four groups, according to the level of processing ranging from unprocessed foods to ultra-processed foods.<sup>53</sup>

#### Health warnings during HFSS advertising

Health warnings on HFSS food and non-alcoholic beverage products are critical in a regulatory environment where food marketing bans are incomplete, as they are in India. This may include introducing a provision to display health warnings and health promotion messages whenever HFSS food and non-alcoholic beverage is advertised in any form or any media, however, this should not replace the development of legal measures to implement a comprehensive HFSS food marketing ban. A similar approach has been adopted by France through the Public Health Act, 2004, imposing health warnings in advertisements of HFSS foods and non-alcoholic beverages.<sup>54</sup> Health warnings on HFSS foods would serve an immediate purpose wherein advertisements of HFSS foods on non-children programs would display messages that would discourage the consumption of HFSS foods and also encourage healthy eating habits. As stated under the 2022 Guidelines,<sup>55</sup> celebrities are also required to exercise due diligence and satisfy themselves about the advertiser's ability to substantiate claims made in an advertisement while endorsing goods, products or services.

The review included published online literature to identify relevant existing policies at the national level. It is possible that we missed relevant policies that are not available online and/or are adopted at the sub-national level in India. Strengths of this review include the use of comprehensive and well-established methods to examine the strengths, weaknesses, opportunities, and threats relevant to the existing food advertisement regulatory landscape in India, and the practical application of our findings to policy making in India.

#### Search strategy and selection criteria

All potential media avenues for marketing, including television, radio, internet, print, billboard, hoarding and phone, were included in the review. Key terms representing these marketing platforms were combined with keywords related to policy (e.g., "act", "regulations", "rules" "guidelines," "code") and marketing (e.g., "advertisements") and "India" were used to search relevant national level policies on Google (search engine). The search was conducted between February and July 2022. Additionally, relevant food regulations suggested by domain experts (in the area of public health and law) within the research team were also included. Only national level policies were considered for inclusion. Each identified regulation was categorised as either self-regulatory or mandatory,<sup>58</sup> by examining the source and intent. Regulations or guidelines passed by legislative authorities or legislations enacted by the parliament were classified as mandatory, while those issued by industry associations or groups not having legislative authority and with the intent of ensuring voluntary compliance were categorised as self-regulatory. Information on self-regulatory approaches was used only as contextual information due to the lack of power to enforce as compared to the mandatory regulations.<sup>59</sup> Hence, self-regulatory policies were excluded from the analysis. For each of the mandatory regulations, a SWOT (Strength, Weakness, Opportunity, and Threat) analysis was performed to identify its strengths, weaknesses, opportunities, and threats in safeguarding children from HFSS food and non-alcoholic beverage advertisements. SWOT analysis has been used previously in analysing the programs and policies for diabetes,<sup>60</sup> education<sup>61,62</sup>, and strengthening the occupational therapy workforce.<sup>63</sup> SWOT was considered a suitable method for this review as it assists in determining where change is possible and help in identifying the priorities as well as possibilities.<sup>64</sup> SWOT analysis considers both internal and external factors. Internal factors, including strengths and weaknesses, reside within the program or policy, while external factors, opportunities, and threats, are external to the program or policy.<sup>65</sup> For each domain, i.e., 'Strength', 'Weakness', 'Opportunity' and 'Threat', a tool with key questions was developed for analysing each mandatory regulation (Fig. 1).

#### Conclusion

India has tried to address a critical policy gap by introducing the Guidelines for Prevention of Misleading Advertisements and Endorsements for Misleading Advertisements (2022). This policy has the potential to protect children from exposure to junk food advertisements. Despite identifying several regulations that have the potential to ban HFSS food and non-alcoholic beverage advertisements in India, including the comprehensive 2022 guidelines to regulate 'child-targeted' advertisements and advertisements specific to HFSS foods, many regulatory gaps still exist. These include the need to broaden the regulatory scope from 'child-directed' advertising to all advertising that children are exposed to, adoption of food classification systems for defining junk foods, need to expand the regulatory scope to include other forms of commercial communication, including sponsorship, product placement, point-of-purchase displays, and packaging. Additionally, watershed hours for advertisements through broadcast media during periods where child viewership is the highest may be considered. As there is a higher prominence of single TV households in India, TV

co-viewership is predominantly between 6 p.m. and 11 p.m.<sup>56</sup> Restricting HFSS advertisements from being displayed during this period may lead to a reduction in exposure among children. Robust regulation, strengthening legal measures and further research will play a pivotal role in protecting children from the harmful impacts of these marketing activities in India.<sup>57</sup>

## Contributors

MA, SB, VS and DB conceptualized this policy analysis. SB, DB, SG and KA were involved in policy review analysis and interpretation. SB, DB, and SG drafted the manuscript. MA, VS, KB, GB, SMG, SGJ, NB, KA, IK, GM, AW and PM, critically reviewed the manuscript. All authors are responsible for the overall content as guarantors.

## Declaration of interests

None.

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## Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.lansea.2023.100315>.

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