Sweet-sounding adverts that leave a sour taste:

Social-media marketing of unhealthy food to children in East Asia and Pacific
Acknowledgements

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Impact of marketing of unhealthy food through social media on children

East Asia and Pacific is facing an epidemic of overweight and obesity among children. By 2030, it is estimated that 83 million children of school age will be living with obesity (extreme overweight).¹

The rise in child overweight and obesity, alongside food poverty, is being driven by a food environment characterised by increasing availability of cheap, highly processed food and drink. These products are energy dense, packed with sugar, salt and unhealthy fats but nutrient poor.² Childhood diets full of highly processed foods lead

to overweight, obesity, chronic diseases, poor school performance, depression and stigmatization.\(^3\)\(^4\)

This trend is accompanied by increasing screen-time and use of social media that is dominating children’s lives across economic groups. Food and beverage companies have been quick to adapt to the digital trend and are investing more and more in marketing through digital media. Unfortunately, most of this advertised food and drink is unhealthy.

There is unequivocal research evidence that food marketing affects children’s food and beverage preferences, requests, purchases and consumption including via requests to caregivers (‘pester power’) who seek to offer children love and fun through food.\(^5\) Food marketing creates a desire for highly processed products and life-long brand allegiances starting from an early age before children have developed knowledge about food and nutrition.\(^6\)

Adolescents engage actively with unhealthy food marketing through social media. Evidence shows that adolescents look longer at ads for unhealthy items, compared to ads for healthy items or popular non-food items. They also share these ads more, prefer peers with unhealthy content in their social media, and remember unhealthy brands more.\(^7\)

Digital marketing for unhealthy foods also breaches children’s rights under the United Nations Convention on the Rights of the Child, including rights to health, privacy and right to be free from exploitation.\(^8\)

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Tactics employed to market unhealthy food

Food and drink adverts
Food and drink adverts are designed to appear on children’s screens as they browse the internet, watch videos and follow their favourite celebrities. A click onto one advert will lead to a cascade of similar adverts flooding in for many weeks. Even looking at an ad for a fraction of a second longer than another generates information about a child’s preferences. Data about all social media users, including children, is extracted so that they can be targeted more accurately with similar adverts.9,10

The messaging used in adverts relies on clever and creative designs that often appeal to children even if they are not specifically designed for children. In social and digital media, marketing power is further amplified by ‘persuasive design’. This means that digital media interfaces are designed to capture users’ attention and hold it for as long as possible. Furthermore, ‘likes’ and ‘shares’ encourage users to spread marketing content through their social media networks. In this way, children become transmitters themselves, and marketing extends far and wide.9,10

Social media influencers
Food marketing is also increasingly being done through social media influencers. These influencers come in many forms – from celebrities and sports stars to individuals posting home-made videos. The number of their followers range from a few hundred to several million and their popularity depends on frequent posting and engaging with their audience. For food and beverage companies, social media influencers provide a direct channel to scores of children eager to emulate their role models. What better way to get your products viewed by millions of children than by sponsoring social media influencers?

UNICEF commissioned the market research company, Quilt.AI, to identify the digital marketing tactics being used to attract children to consume unhealthy food and drink in China, Indonesia, Malaysia, Mongolia and the Philippines. Understanding the ‘power’ of marketing is important for developing effective strategies to protect children from harm and exploitation.

Quilt.AI extracted a total of 18,500 social media marketing posts from 186 food and beverage marketing accounts on Facebook, Instagram and Weibo in the five countries. These were analysed through their proprietary machine learning model, SLATE, that identifies 18 emotions. Text and language patterns were analysed with Word2vec natural language processing, and sentiment analysis was carried out with the Google Cloud Natural Language Sentiment Machine, identifying positive, negative, or neutral text. Qualitative analysis of ads identified under the respective emotions was then carried out.

Quilt.AI identified social media influencers with the greatest reach among children through examining influencers’ following across popular social media channels such as YouTube, Instagram and Facebook. The content of influencers’ videos was then explored to identify unhealthy food marketing.
Methods

Quilt.AI identified top brands for up to seven unhealthy food and beverage categories in each country. Categories were identified based on the WHO Nutrient Profile Model for South-East Asia. Nutrient profiling is a scientific method for categorizing food and beverages according to their nutritional composition. Items categorised as ‘unhealthy’ are individual or composite food and beverages that are high in energy, sodium, sugar and/or low in other beneficial nutrients such as protein, vitamins, minerals, fibres, non-nutrient compounds. These are less likely to be part of a healthy diet.

Categories of products were identified in which the nutrient thresholds for marketing frequently exceed permitted levels. These were: Savoury Snacks, Sugary Foods, Convenience Foods, Breakfast Cereals, Milk Drinks, and Carbonated Beverages and Sweet Juices. For the Philippines, Quilt.AI also added “sweet tea” as a new category, based on its popularity in search behaviour and advertisements.

Location-specific official Facebook, Instagram, or (for China) Weibo accounts were identified for food and beverage products and brands marketing these foods and marketing accounts with over 1000 followers were selected.

<table>
<thead>
<tr>
<th>Country</th>
<th>Platforms</th>
<th>Brand accounts</th>
<th>Number of posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>Facebook, Instagram</td>
<td>42</td>
<td>4701</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Facebook, Instagram</td>
<td>40</td>
<td>2554</td>
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<tr>
<td>Philippines</td>
<td>Facebook, Instagram</td>
<td>42</td>
<td>2395</td>
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<td>Instagram</td>
<td>20</td>
<td>641</td>
</tr>
<tr>
<td>China</td>
<td>Weibo</td>
<td>42</td>
<td>8209</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>186</td>
<td>18,500</td>
</tr>
</tbody>
</table>

Posts were extracted and subject to emotion detection, sentiment analysis, and text and language pattern analysis. Ads were analysed in SLATE, Quilt.AI’s proprietary machine learning model to read emotions. Slate categorises images into the following 18 emotions: Affection, Bonding, Creativity, Despair, Emotional, Eroticism, Excitement, Expressive, Fear, Happy, Joy, Loneliness, Sadness, Sensuality, Striking, Nostalgia, Vitality. Slate includes 60 linguistic and 15 visual categories. The Slate model was trained with 1.3 million images (100,000 per category), based on how the person who placed the social media post has tagged it, or how people reacted to the image post. For example, if someone tagged their social media post as “joy,” or “fear,” or “sensuality,” or adjacent keywords, the post was classified into that emotion, and used to train the machine.

Qualitative analysis was carried out of posts allocated to the respective emotions. The Google Cloud Natural Language Sentiment Machine inspected text to identify positive, negative, or neutral text. Upbeat, happy phrases are tagged positive (“bringing joy to your everyday”). Factual sentences (“We offer three different flavours”) are tagged neutral. Negative messages are, e.g., “you will regret it if you don’t make this purchase”, “80% sugar.”

Word2vec natural language processing identified text and language patterns used in ads about unhealthy food and beverages.
Four popular messaging tactics for marketing to children

Across the five countries, the analysis found that four clusters of similar messaging tactics were used to persuade children to purchase and consume unhealthy products.

1. Cool Crowd

These ads aim to communicate excitement and energy. They elicit a sense of youthfulness, exclusivity, urban chic and being cool. Using bright graphics and strong colours, the ads frequently reference popular culture from youtube vlogs, comic books and movie titles. They use images of celebrities or aspirational young people and create a buzz through competitions, exclusive offers and events.

   Examples of wording:
   “While watching variety shows, don’t forget to match it with this cool ice cream.”
   “Youth is about freedom. Drink sugar-free soft drinks!”
2. Tasty and Fun
These ads and posts focus on flavour, indulgence, fun, informality and emotions. The advertised food is associated with pleasure and enjoyment, and ads often adopt youth-centred, informal language with exclamations, extended words (‘yayyy’, ‘mmmmm’) and emoji. Descriptive words help consumers visualise the taste and smell while ‘you deserve it’ statements encourage consumers to indulge themselves.

Examples of wording:
“Hot and sweet. You can feel happiness only when you put it in your mouth.”
“Brighten your day with a sweet and savoury one.”

3. Family Harmony
These ads emphasize family togetherness and happiness, while evoking a sense of peace and tranquillity. They frequently feature family members engaging cheerfully together. The ads use conventional cues to signal the desirability and wholesomeness of products that are often depicted as part of a main meal or traditional dishes. Warm colours, icons and stickers suggest familiarity and family comfort.

Examples of wording:
“Prepare a loaded snack for today's movie marathon with the family!”
“There will always be a place for milk in our childhood memories.”

4. Active Life
Despite the unhealthy nature of these highly processed items, these ads imply that the advertised products bring health and confidence. They focus on communicating nutritional claims for the products, the high quality ingredients they contain and how they can provide energy and enhance one’s health. Friendly, sporty images are used to suggest that consumers can tackle their everyday challenges. Bright colours suggest energy; earthy colours and simple graphics are used to suggest naturalness.

Examples of wording:
“A quick boost with just one bite can make you the best in every game!”
“With Champion Energy Nutrients, energy to stay active on the court or on the field.”
Four types of social media influencers who market food to children

Across the five countries, social media influencers used similar imagery to attract children. Four clusters of tactics were identified.

1. Mega Influencers
These are the influencers with more than a million followers who appeal to children and families and who post original content relating to food, toys or just having fun. Many are family posts and they frequently feature unhealthy highly processed food, brand names and logos.

2. Child Influencers
With more than a hundred thousand followers, these child influencers are increasingly popular and have high credibility among other children. These influencers also act as marketers for unhealthy highly processed foods, featuring their packaging, showing the products, and tasting them with pleasure and enjoyment in their videos.

3. Mommy Influencers
YouTube channels by mothers and caregivers cover subjects on motherhood, family life, relationships and children’s nutrition. Some are dedicated to sharing recipes often focusing on baking.

4. Mukbang Influencers
The Mukbang food bingeing craze is alive and popular amongst youth. These influencers binge eat unhealthy food, beverages and snacks like ramen, fried chicken and ice cream on video, discussing the effects of the foods and fuelling the acceptability of eating till it hurts.
Key qualities and messages that food adverts communicate to children

Across the five countries, the key qualities that are typically communicated through adverts for highly processed food and drinks relate to positive emotions such as warmth, cheerfulness, affection, playfulness, liveliness and creativity. The ads frequently adopt modern, post-2010s aesthetics with bright colours, surreal art elements and visuals that are native to Instagram. Brands use the social media caption space to engage in direct conversations with consumers, in colloquial, conversational language using first-person and second-person pronouns and emojis, and playing with capitalisation and punctuation. These conversational strategies establish a bond between consumer and brand, with the brand appearing as another friend that the consumer can follow on facebook, twitter or Instagram. Many advertisements are either entirely animated (cartoons) or contain graphic or animated elements. This creates an innocuous or innocent association with the brands and is especially appealing to children especially.

Social media influencers frequently allow their followers into their own homes to watch them taking part in food challenges, family games and having fun. The sense of being part of a family can be created whilst at the same time, unhealthy highly processed food and drink brands are on display.

The common marketing strategies that are being applied across five different countries in East Asia and Pacific are influencing the emotions, desires, tastes, and eating habits of a new generation to the detriment of their health. These tactics and techniques are purposeful with the aim of increasing sales of unhealthy food and drink and attracting children who may remain brand loyal for the rest of their lives.
Action to reduce the negative impact of social media food marketing on children

The current report highlights the need for governments to act decisively to stop the marketing of unhealthy food and drink to children through all media channels including social media. They need to:

1. **Enact legally binding regulations** to restrict marketing of unhealthy items and brands in digital media addressed to, and accessible to, children, in line with the principles of the United Nations Convention on the Rights of the Child, including General Comment no.25 on Children’s Rights in Relation to the Digital Environment, and the WHO Set of Recommendations on the Marketing of Foods and Non-alcoholic Beverages to Children. This includes national and relevant international cooperative efforts. Regulation should be independent of producers of unhealthy, highly-processed foods. Where possible regulation should build on any existing offline protections and existing legislation, regulation, and regulatory agencies.

2. **Ensure regulations are comprehensive** across media and restrict marketing to all children aged up to 18 years. Regulations should capture exposure (e.g. spanning multiple settings and modes such as social media marketing, online search, influencer marketing) and power (e.g. salient and emotive themes and appeals).

3. **Monitor and enforce regulations** for content creators, advertisers and digital platforms. Monitoring should be active, regular and carried out by independent bodies. Enforcement should involve a meaningful deterrent to non-compliance (e.g., a substantial monetary penalty tiered in relation to global revenue as well as a requirement for rapid remedial action, including removal of content). More severe penalties should apply to more serious or repeat breaches.

4. **Increase knowledge among professionals and the public** including children and caregivers about the impact of marketing for highly processed foods on children’s, adolescents’ and families’ attitudes, preferences, eating and health. Note that critical nutrition and media literacy, while important, is not sufficient. It cannot alone protect consumers from highly immersive, engaging marketing environments that consistently promote highly processed foods.