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| <b>Institution:</b> The Open University   |                                  |  |
| <b>Unit of Assessment:</b> C23 Education  |                                  |  |
| <b>Title of case study:</b> Tackling the negative effects of digital food marketing to children   |                                  |  |
| <b>Period when the underpinning research was undertaken:</b> 2016-2020  |                                  |  |
| <b>Details of staff conducting the underpinning research from the submitting unit:</b>  |                                  |  |
| <b>Name(s):</b>   | <b>Role(s) (e.g. job title):</b> | <b>Period(s) employed by submitting HEI:</b> |
| Mimi Tatlow-Golden  | Senior Lecturer                  | September 2016 to present                    |
| <b>Period when the claimed impact occurred:</b> November 2016 - November 2020   |                                  |  |
| <b>Is this case study continued from a case study submitted in 2014?</b> No   |                                  |  |
| <b>1. Summary of the impact</b>   |                                  |  |
| <p>The research underpinning this case study has revealed the detrimental impact of the digital marketing of unhealthy foods to children and young people. This has resulted in an impact on national and international <b>public policy, law, and services</b> in that the work of government and non-governmental organisations with a responsibility for public health in Europe, Asia and Latin America has been shaped and informed by the research. In addition, the research has had an impact on the <b>understanding and learning</b> of 1,766 parents and educators.</p>  |                                  |  |
| <b>2. Underpinning research</b>   |                                  |  |
| <p>Overweight and obesity in children and young people are rising globally with consequences for long term health and well-being. Whilst there is strong evidence that the marketing of unhealthy High Fat, Sugar and Salt (HFSS) foods contributes to overweight and obesity, much of this evidence is drawn from research regarding TV advertising. How the digital media marketing ecosystem works and the impact of digital marketing of unhealthy foods to children and young people has been poorly understood and under-researched. The interdisciplinary body of research underpinning this impact case study sought to address this gap in knowledge and the results have challenged assumptions that effective and appropriate solutions should focus solely on developing the capacity of children and young people to resist digital food advertising. Taken as a whole, the key messages from this body of research are:</p>   |                                  |  |
| <ul style="list-style-type: none"> <li>i) in digital media, food marketing effects are magnified by behavioural targeting and persuasive design.</li> <li>ii) young people respond more to unhealthy food ads.</li> <li>iii) a satisfactory approach to assuring children's participation rights (to information, and to express their views) while respecting their protection rights (to health and privacy) has not yet been developed.</li> </ul>   |                                  |  |
| <p><b>Exploring awareness and responses among children, young people and parents regarding digital food marketing:</b> Two experimental studies were conducted that created a mock-up of social media profile pages to identify the responses of teens to three types of adverts in social media. Adverts for unhealthy foods, healthy foods, and non-food items likely to be popular with teens (music, sports gear, makeup, etc). An eye-tracking study involving 81 adolescents aged between 13 and 17 measured the number and duration of fixations on the target posts. Results indicated that the teens devoted more attention to adverts for unhealthy, compared to healthy or non-food ads. A memory and social identity study with 72 adolescents found that teens recall and recognise unhealthy brands more; they prefer peers whose profiles contained unhealthy, compared to healthy or non-food ads, and are more likely to share profiles with these adverts [O1].</p> |                                  |  |
| <p><b>An examination of how the digital media marketing ecosystem works and what the regulatory implications are:</b> In 2016, an interdisciplinary review of food marketing research was undertaken. The first of its kind, it examined how the digital media marketing ecosystem works, how children are targeted within digital media and the implications for children's rights. This review concluded that: i) existing regulations are insufficient to address challenges such as adolescents' vulnerability to HFSS food advertising and ii) while children have a right to</p>  |                                  |  |

participate in digital media, they also have a right to protection of their health, privacy and not to be economically exploited [O2]. A further review of evidence focused on whether, how and to what extent children in Europe are affected by marketing (particularly for unhealthy foods) across non-digital and digital media. The evidence indicated that new techniques such as advergames and emotional advertising were being employed in digital media as well as personalised targeting that increased its power and reach. This is significant given that both statutory policy and industry regulation have to date focused solely on protecting young children from advertising that is consciously, cognitively processed [O3]. Drawing on international legislation relating to both children's rights and data protection, a position paper argued that digital marketing is exploitative because it is designed to extract personal data from children and attract their attention in order to generate value for digital platforms, marketers and companies to the detriment of their health and rights, particularly the right to privacy and the right to be free from exploitation. A case is made for underpinning potential regulatory solutions with a child rights approach [O4]. Finally, evidence used by consultants to the Department of Culture, Media and Sport and the Department of Health and Social Care in assessing the impact of exposure to digital marketing on children's health was examined. For each of the 7 analytic steps undertaken by the government consultants, their validity was tested against industry and academic evidence. This examination concluded that in its underlying premise, as well as all 7 steps, the methodology had resulted in underestimates of both market scale and children's exposure, thus underestimating the impact of potential online advertising restrictions on health [O5].

### 3. References to the research

O1, O3, O4 and O5 are in peer reviewed journals.

- O1.** Murphy, G., Corcoran, C., **Tatlow-Golden, M.**, Boyland, E., & Rooney, B. (2020) See, Like, Share, Remember: Adolescents' Responses to Unhealthy, Healthy and Non-Food Advertising in Social Media. *International Journal of Environmental Research and Public Health*, 17(7), article no. 2181. <https://doi.org/10.3390/ijerph17072181>.
- O2.** **Tatlow-Golden, M.**, Boyland, E., Jewell, J., Zalnieriute, M., Handlsey, E., & Breda, J. (November 2016) Tackling food marketing to children in a digital world: trans-disciplinary perspectives. Children's rights, evidence of impact, methodological challenges, regulatory options, and policy implications for the WHO European Region. The World Health Organization Regional Office for Europe. <http://oro.open.ac.uk/55662/>
- O3.** Boyland, E., & **Tatlow-Golden, M.** (2017) Exposure, power, and impact of food marketing on children: Evidence supports strong restrictions. *European Journal of Risk Regulation*. Issue no. 2, 224-236. <https://doi.org/10.1017/err.2017.21>.
- O4.** **Tatlow-Golden, M.**, & Garde, A. (2020) Digital food marketing to children: Exploitation, surveillance, and rights violations. *Global Food Security*, 27, p.100423. <https://doi.org/10.1016/j.gfs.2020.100423>.
- O5.** **Tatlow-Golden, M.**, & Parker, D. (2020) The Devil Is in the Detail: Challenging the UK Government's 2019 Impact Assessment of the Extent of Online Marketing of Unhealthy Foods to Children. *International Journal of Environmental Research and Public Health*, 17(19), p.7231. <https://doi.org/10.3390/ijerph17197231>

### 4. Details of the impact

Key beneficiaries who have engaged with Tatlow-Golden and her research are: i) national and international public health organisations and government agencies who have invited Tatlow-Golden to act as an expert advisor and contribute to high level policy workshops, working parties, reports and consultations and ii) parents and educators who have engaged in educative material that Tatlow-Golden has designed. By engaging with these beneficiaries, the research has had an impact on **public policy, law and services** through shaping the agenda of public health organisations regarding food marketing to children and supporting governmental and non-governmental organisations to generate evidence regarding the impact of food marketing. In addition, it has had an impact on the **understanding and learning** of parents and educators by raising their awareness of the marketing strategies used to influence children's emotions and behaviours.

### Shaped the agenda of public health organisations regarding food marketing to children

The Head of the European Office for the Prevention and Control of Non- Communicable Diseases at the WHO Regional Office for Europe states that Tatlow-Golden's research has "*contributed to a large extent*" to the WHO's understanding that there is a connection between exposure to marketing and impact on children's health and development. Her research has supported the integrity of WHO work in this area and enabled them to make a robust defence against stakeholders (particularly from industry) who might seek to discredit WHO's position. They also note that Tatlow-Golden's research has shaped their understanding of the subject [C1]. Tatlow-Golden has collaborated with the WHO on a number of reports that translate her (and others') research including the WHO's first report on the digital marketing of foods and non-alcoholic beverages to children in 2016 [O2] and the 2018 evaluation of the WHO set of recommendations on the marketing of foods and non-alcoholic beverages to children. The 2018 report concluded that member states needed to adopt a more comprehensive approach to HFSS food marketing regulation, one which incorporated the digital sphere of advertising and extended to include adolescents, not just younger children. In May 2019, a forum of US and EU consumer organisations which develops and agrees on joint consumer policy recommendations to the US government and European Union (Trans-Atlantic Consumer Dialogue) drew on the 2018 WHO report in their resolution on the protection of children from digital food marketing [C2].

The Technical Officer for Nutrition at the WHO Regional Office for Europe testifies that the 2016 report led directly to policy dialogues with "*countries, with funding agencies, and with other inter-governmental organisations*" [C3]. For example, WHO was invited to present the report at a meeting of a high-level group of the European Union, with senior representatives of 28 member states working on the topics of nutrition and obesity. Following the publication of the WHO report, two EU presidencies (Malta and Bulgaria) have included the topic of digital marketing on their agenda. Tatlow-Golden was invited to present to the Maltese presidency, again with high level policy makers from 28 countries present (February 2017), and the Bulgarian presidency included digital marketing in their Council Conclusions. They attribute a funding call from CHAFAEA, the public health agency at the European Commission level, as a direct consequence of the digital marketing report. This call addressed a key message from the report; that there are currently no adequate measures to monitor online marketing to children. Tatlow-Golden has also been an invited expert to both WHO and European Commission expert workshops on marketing of food to children [C3]. As a result, the Head of the European Office for the Prevention and Control of Non- Communicable Diseases notes that "*We have seen the number of member states that have increased their attention to these issues rise dramatically*", for example [in the European region] 44% of countries have increased activities that limit marketing of unhealthy foods through actions such as strengthening regulations, implementing monitoring tools and adapting the WHO nutrient profiling. They are "*strongly convinced*" this is due to the work undertaken by WHO and supported by Tatlow-Golden [C1]. Furthermore, the Technical Officer for Nutrition notes, "*really our work as WHO Europe is recognised as a benchmark globally and that is due in large part to the contributions from Tatlow-Golden*". They add that Tatlow-Golden's research has "*directly contributed to work in countries and to discussions at a political level*", and "*has transformed the debate around food marketing to children [...] and helped shape the agenda and dialogue on these topics*" [C3].

In October 2017, the National Institute of Public Health (NIPH) in Slovenia funded a meeting in Ljubljana that included Tatlow-Golden, the WHO and The European Commission. This workshop explored digitalisation across six lifestyle areas. In an interview, a Head at NIPH stated, "*really [Mimi] has opened completely new areas in digital marketing*", and that her sense of urgency to take action on marketing with respect to nutrition, and the use of big data to influence people's lives, was a catalyst for NIPH to recognise the nature and scale of the challenge and to take action on these topics across all its lifestyle areas. They also noted that in May 2018 the WHO held a general assembly to debate a resolution for reducing pressure of marketing to infants and young children. Despite opposition, the resolution was eventually passed. Evidence from Tatlow-Golden's research was used to support a robust argument in favour of the resolution [C4].

A Co-Director of the US-based Center for Digital Democracy (CDD) testifies that Tatlow-Golden's research and policy contributions have had *'an enormous impact on civil society advocacy and government policy making'* and are critical to CDD's efforts which have affected policies in major companies. They give the example of CDD's 2018 complaint to the Federal Trade Commission regarding YouTube's failure to comply with the US Children's Online Privacy Protection Act, which restricts gathering personal information from children. A settlement resulted in a *"significant change in YouTube's policies that restricts food marketing to young children"* [C5].

### **Supported governmental and non-governmental health organisations to generate evidence regarding the impact of food marketing**

Underlying all regulation and its successful implementation and evaluation is the need for structured monitoring of the marketing of unhealthy food and beverages to children in order to provide evidence of the nature and extent of the issue. In 2018, The Council of Nordic Ministers funded the Norwegian Directorate of Health to produce a protocol to monitor marketing of unhealthy food and beverages towards children and young people. Tatlow-Golden was one of the expert contributors to this protocol. An Advisor to the Norwegian Directorate of Health, testifies that Tatlow-Golden was *"a key person to get this through"*. The outcome of that evaluation contributed to an assessment of existing policy, where the decision was made to uphold policy with no change needed at this time. The protocol is also being used by advocacy groups such as the NCD Alliance (a network of 2,000 organisations in 170 countries), Norwegian Consumer Council and the Norwegian Cancer Society, who all want to see stronger regulation of marketing to children [C6]. In June 2018, Tatlow-Golden was one of the invited experts at a meeting convened in Moscow by the WHO (Regional Office for Europe) on the monitoring of digital marketing. The outcome was the 5-step 'CLICK Monitoring Framework, an overarching set of principles and approaches to monitoring digital marketing of unhealthy products to children, which can be adapted to different national contexts [C7].

Alongside the 'CLICK Monitoring Framework', Tatlow-Golden (with Boyland) developed a more practical, detailed set of WHO protocols, embedded within a training toolkit that offers step-by-step monitoring guidance and support; teaches about marketing, child development and related psychological issues; and provides the tools for countries to generate comparable evidence of the impact of food marketing practices. Intended users of this 'WHO Monitoring Training Unit' (<https://tinyurl.com/y3p96j64>) include public health practitioners, NGOs and policy analysts. UNICEF has supported the implementation of this training toolkit in Asia and Latin America. As part of this initiative Tatlow-Golden (with Boyland) ran two training workshops for 19 UNICEF staff and research agency staff (Manilla, February 2020 & Buenos Aires, May 2020). Following this, commissioned by UNICEF, research agencies in Argentina, Mexico and Philippines are using the toolkit to collect data about digital marketing to children. The Nutrition specialist at UNICEF who commissioned the training and use of the toolkit testifies that in these countries, as well as Russia: *"The training toolkit has met a recognised need [...] it is the only thing that is out there, as a common good, for people to use."* He also states that it generates the knowledge necessary to start conversations with governments [C3]. The co-ordinator of the Mexican component of this work states that the protocols have stimulated them to look at variables they had not considered before and as a result has enabled them to report findings that have engaged the Mexican media and contributed to public discourse around the lack of regulation of digital marketing. The Argentinian co-ordinator states that the protocols have enabled them to *"be sure we would have robust evidence, by using a methodology you know you can defend"*. The Philippines co-ordinator testifies that without the protocols they would not have attempted to build an evidence-base for legislation change in the way they have [C8].

In March 2019, the UK Department of Health and Social Care (DHSC) and the Department of Culture, Media, and Sports (DCMS) launched a consultation regarding the potential introduction of further advertising restrictions on TV and Online for high HFSS products. The consultation document referred to the WHO 2016 paper [O2] in acknowledging the potential of a combination of online and broadcast marketing to amplify the effectiveness of HFSS marketing. Also

contained within this consultation document were assumptions regarding the minimal impact of online marketing on children which was based on commissioned work from a consultancy company. In order to inform their response to the consultation and this novel assumption in particular, the Obesity Health Alliance (OHA) asked Tatlow-Golden (with Parker) to analyse the validity of the methods used by the consultants to draw their conclusions. This analysis revealed that the exposure and thus potential impact had been significantly under-estimated [O5]. This evidence was submitted to the consultation exercise and as a result, in October 2019 OHA and Tatlow-Golden were invited to meet with DHSC and DCMS officials to discuss their evidence regarding the true scale of the impact of digital marketing in more detail. Due in part to this evidence, a 9pm watershed for HFSS advertising on TV was part of the announcement for the Obesity Strategy in July 2020. The Government also committed to a further consultation into whether there should be a total ban on HFSS advertising online. When the consultation was published in November 2020, it was with a revised estimate into children's exposure to HFSS advertising online (an increase from 0.7bn to 15.1bn). The lead for the OHA, testifies that Tatlow-Golden's research: i) enabled the OHA to make informed decisions about the position it wanted to take ii) made it difficult for the government to deny there was a problem ii) informed the method the government used to revise its estimate of exposure [C9].

### **Raised awareness among parents and educators of marketing strategies used to influence children's emotions and behaviours**

In 2018, Tatlow-Golden developed an online Open Learn course called 'Children and young people: Food and food marketing' which was designed to inform parents and educators of the marketing strategies used to influence children's emotions and behaviours. The course has achieved 2,885 enrolments and 1,766 completions. A survey of 198 participants who have completed the course revealed that taking the course had increased their awareness and understanding of: i) issues relating to food marketing of children (99%); ii) children's rights (94%) iii) what needs to be done relating to issues about food marketing for children (96%). In addition, 81% said they were more likely to talk to their child or pupil about food marketing. Follow-up interviews with six teachers, nursery or youth workers indicated that their increased awareness was informing their practice. Examples include seeking out more interesting health eating books to "combat the flashy marketing of unhealthy food"; contacting the local council about an illegal ad featuring unhealthy foods and creating a food marketing resource pack for colleagues [C10].

### **5. Sources to corroborate the impact**

- C1.** Interview. Impact on public health organisations. Head, World Health Organization European Office for the Prevention and Control of Noncommunicable Diseases.
- C2.** Policy document. Impact on public health organisations. Trans-Atlantic Consumer Dialogue.
- C3.** Interview and testimonial letter. Impact on public health organisations and on the generation of evidence regarding digital food marketing. Nutrition Specialist WHO Regional Office for Europe/UNICEF.
- C4.** Interview transcript. Impact on public health organisations. Head of the Centre for Analyses and Development of Health, National Institute of Public health, Slovenia.
- C5.** Letter. Impact on the generation of evidence regarding digital food marketing. Co-director of the Center for Digital Democracy.
- C6.** Interview transcript. Impact on public health organisations. Advisor to the Norwegian Directorate of Health Norwegian Directorate of Health.
- C7.** Report and Journal article. Impact on the generation of evidence regarding digital food marketing. World Health Organization European Office for the Prevention and Control of Noncommunicable Diseases.
- C8.** Letters. Impact on the generation of evidence regarding digital food marketing. Leaders of digital marketing studies in Mexico, Argentina, and Philippines.
- C9.** Letter. Impact on generation of evidence regarding digital food marketing. Lead, Obesity Health Alliance.
- C10.** Survey and interview data. Impact on parents and educators' awareness of digital marketing strategies. Students of the Open Learn course.