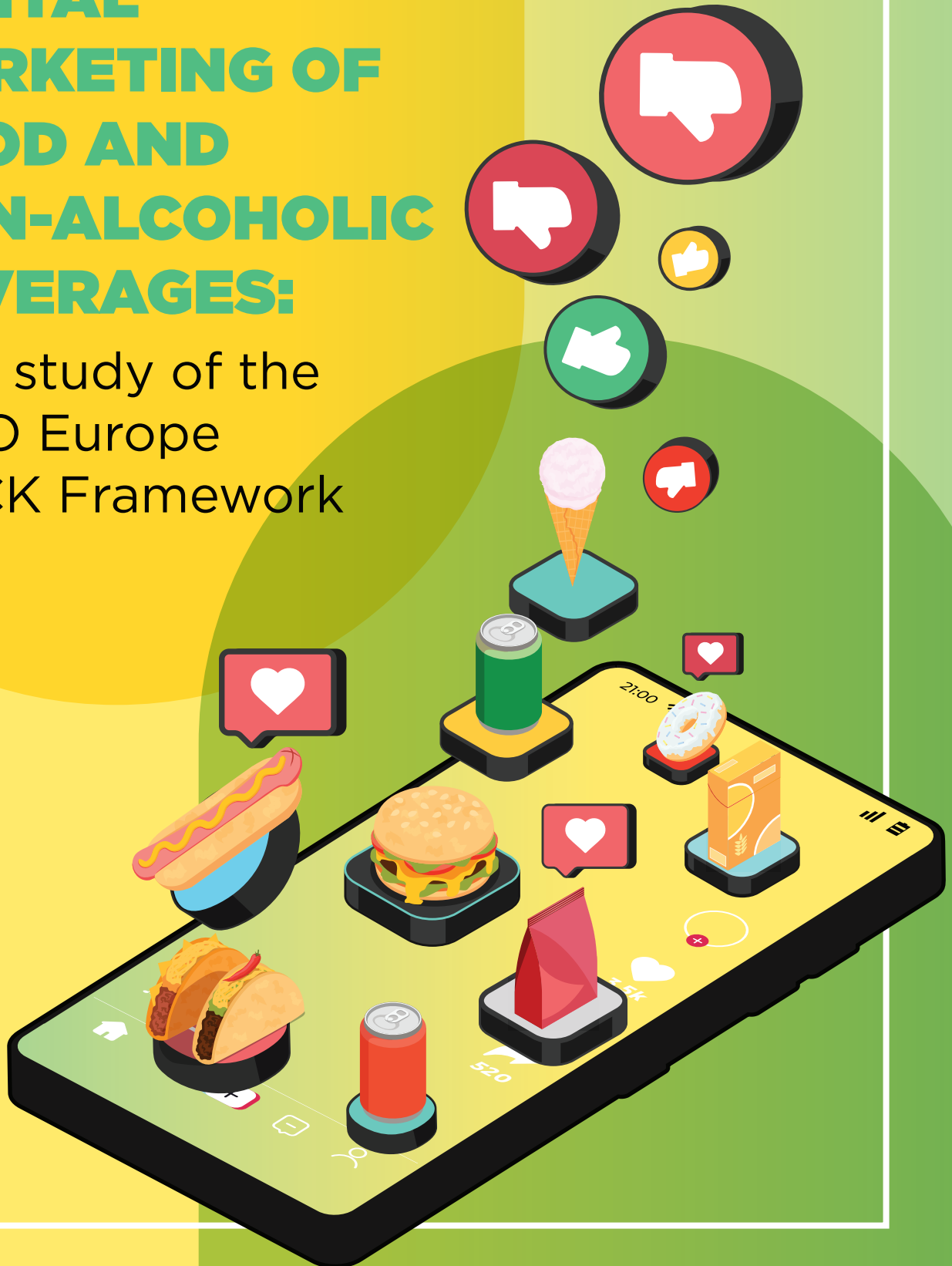


EXPOSURE OF PORTUGUESE CHILDREN TO DIGITAL MARKETING OF FOOD AND NON-ALCOHOLIC BEVERAGES:

pilot study of the
WHO Europe
CLICK Framework



Exposure of Portuguese children to digital marketing of food and non-alcoholic beverages: pilot study of the WHO Europe CLICK Framework

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INTRO DUCTION

Food marketing is one of the elements contributing to the obesogenic environment in which children live nowadays. Children are regularly exposed to food marketing, particularly to unhealthy food marketing. Evidence has shown that such exposure influences the food preferences and dietary patterns of children and adolescents. Additionally, evidence has demonstrated that children with overweight and obesity are more vulnerable to the influence of food marketing and that children from lower socioeconomic backgrounds are the ones more exposed to food marketing.

Food marketing is not a novel challenge. However, the transition from traditional media to digital has contributed to health policies devoting more attention to this issue, considering that digital environment allows for more persuasive strategies and amplifies the exposure. Alongside, monitoring and evaluating children's exposure to digital marketing is a great challenge, which has prompted the development of new technological tools to address this challenge.

Portugal implemented in 2019 a set of restrictions to food advertising directed to children under 16 years old (Law No. 30/2019, of 23 of April), covering



digital advertising. Consequently, it is required to measure the Portuguese children's exposure to food digital marketing.

In this regard, this study was implemented by the Directorate-General of Health with the support of the World Health Organization Regional Office for Europe (WHO Europe). The study aimed to monitor the Portuguese children's exposure to food digital marketing, as well as testing the potential of the digital tools to collect such data.

METHODS



CLICK Monitoring Framework



STUDY DESIGN

This is an observational cross-sectional study that followed the protocol developed for the “Investigate exposure” step of the WHO CLICK monitoring framework. The “Investigate exposure” step is one of the 5 steps of the CLICK framework, which aims to collect the exposure to paid-for digital marketing.

This study protocol was submitted to and approved by the Ethics Committee of the Faculty of Nutrition and Food Sciences of the University of Porto (Ethical Approval Reference No. 03/2020/CEFCNAUP/2020). The participants have been informed about the objectives and procedures of the study prior to signing in. There were no incentives to the participation and the participants could uninstall the app at any time, without any consequence.

DATA COLLECTION

Data was collected through the application Reality Meter, developed by the company Reality Mine. This app collects information on the paid-for advertisements that the participants are exposed to on different social media applications. The app was installed on the participating children’s devices (smartphones or tablets). When children didn’t have their own devices, the app was installed in their guardian device, with a “dual user” mode (participant and guest), in order to only collect exposure of the participants and not from the other family members. Data was collected from YouTube®, Instagram®, Facebook®, TikTok® and Twitter®. The application collects data on the ad title, description of the post, advertiser, data and time of the exposure and duration of the ad (only on YouTube®), as well as in which app the user was exposed to the add.



ANALYSIS

A descriptive analysis of the data on children’s exposure to digital marketing of food and beverages was conducted, following the analysis protocol (Boyland & Tatlow-Golden, 2020). The food products were categorized and classified according to the Portuguese nutrient profile model, published by the Dispatch No. 7450-A/2019, of 21 of August, and within the scope of the Law No. 30/2019, of 23 of April, which introduced restrictions on food advertising targeted at children under 16 years old. The nutrient profile model identifies which foods should not be advertised to children and adolescents, in accordance with the current Portuguese law.

CHARACTERISTICS

OF SAMPLE

44 PARTICIPANTS



55%



45%

48%

3-9 years

32%

10-12 years

20%

13-16 years

On average, participants had the application installed for **64.7 ± 42.3 days**.

OWNER OF THE MOBILE DEVICE



70%

Child



30%

Parents

PERCEIVED HOUSEHOLD FINANCIAL WELL-BEING

45%

Comfortable or very comfortable

50%

Reasonable

5%

Difficult or very difficult

FROM STUDY



CLICK step
Investigate exposure



Date and duration of the study
28 February 2022 – 20 January 2023



Number of participants
44



Investigated platforms
YouTube®, Facebook®, Instagram®, TikTok® and Twitter®



Method used to classify advertisements
Portuguese Nutrient Profile Model



Age range of children
3-16 years

RESULTS

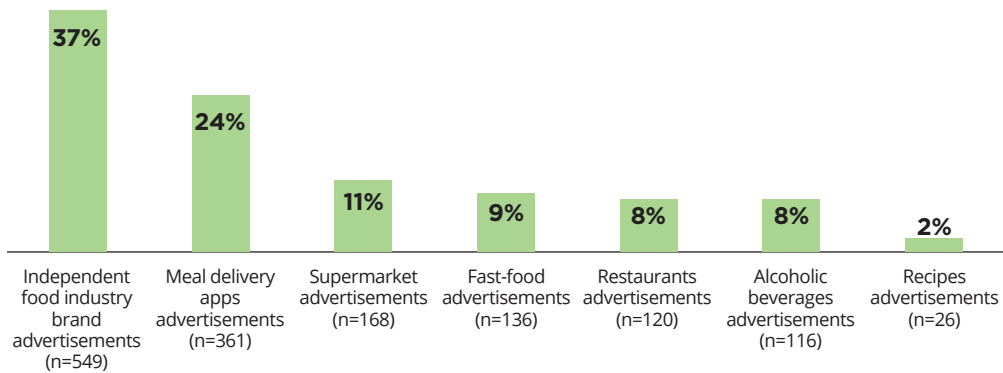
CHILDREN'S EXPOSURE TO DIGITAL MARKETING

18 469 advertisements

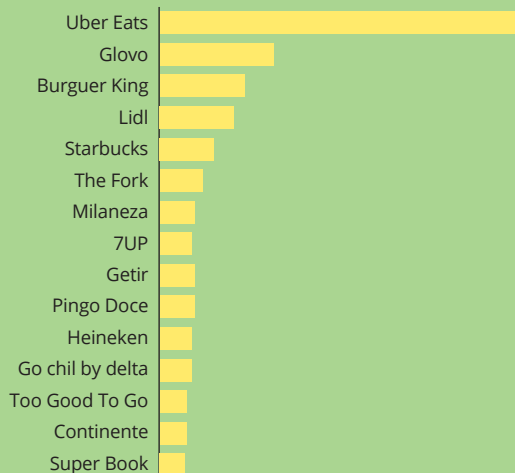
8%

1 476 food and drink advertisements

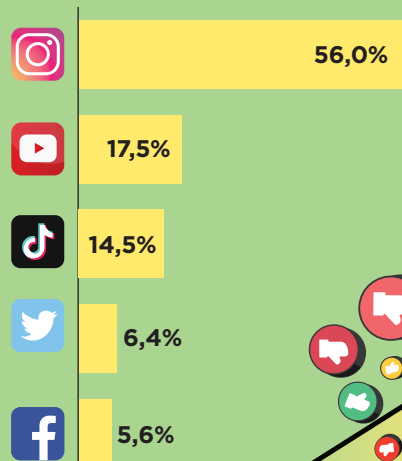
TYPES OF FOOD AND DRINKS ADVERTISEMENTS (N=1476)



MOST FREQUENTLY ADVERTISED BRANDS (N=1476)

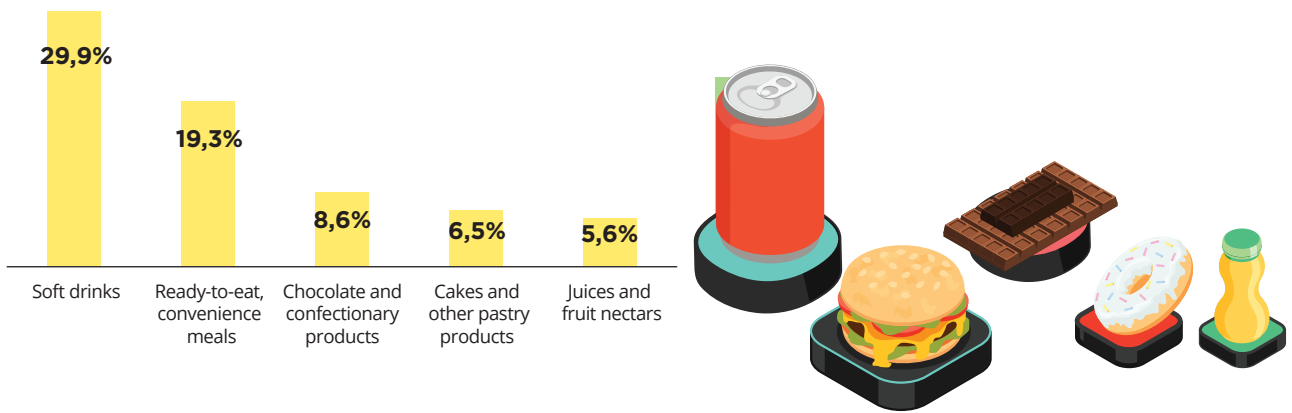


FOOD AND DRINK ADVERTISEMENTS

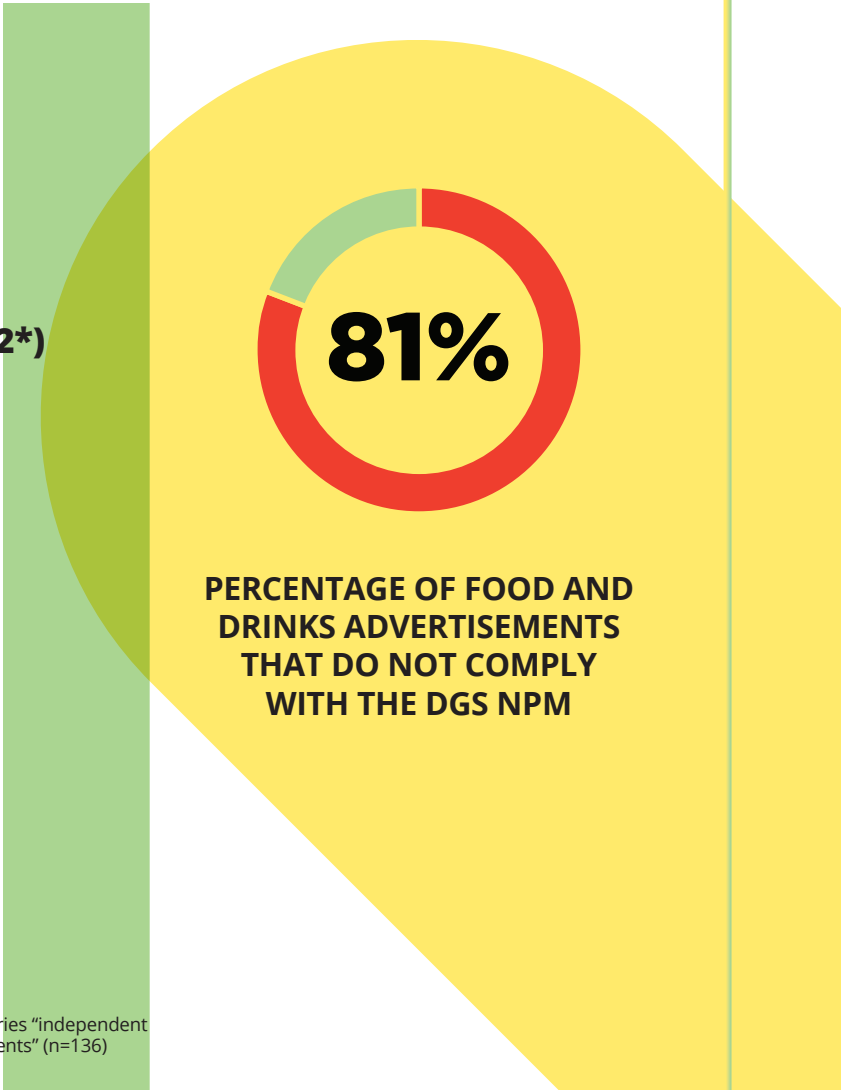
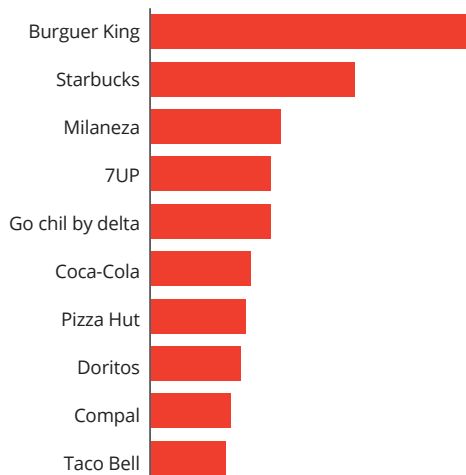


of **642**
 (independent food industry brands and fast food)
food and drinks advertisements analysed

MOST FREQUENTLY ADVERTISED FOOD CATEGORIES (N=642*)



MOST FREQUENTLY ADVERTISED FOOD AND DRINK BRANDS (N=642*)



* This analysis was only conducted for the advertisements in the categories "independent food industry brand advertisements" (n=549) and "fast-food advertisements" (n=136)

RESULTS

6 ± 10,6
ADVERTISEMENTS TO FOOD AND BEVERAGES, PER WEEK

2,2 ± 4,2
ADVERTISEMENTS TO FOOD AND BEVERAGES THAT **DON'T COMPLY WITH THE DGS NPM^a**, PER WEEK

CHILDREN'S AVERAGE EXPOSURE TO FOOD AND DRINK ADVERTISEMENTS, PER WEEK *

| | Mean number of food and drink advertisements per week (n=1 471) | Mean number of food and drink advertisements that don't comply with the DGS NPM ^a per week (n=517) |
|--|---|---|
| Gender |  3,6 ± 3,4 advertisements | 1,4 ± 1,3 advertisements |
| |  8,7 ± 14,7 advertisements | 3,1 ± 4,9 advertisements |
| Age | 3 - 12 3,1 ± 3,6 advertisements | 1,0 ± 1,2 advertisements |
| | 13 - 16 15,2 ± 18,8 advertisements | 6,0 ± 7,5 advertisements |
| Perceived household financial well-being |  Comfortable or very comfortable 4,7 ± 4,1 advertisements | Comfortable or very comfortable 1,4 ± 1,7 advertisements |
| |  Reasonable/Difficult or very difficult 6,9 ± 13,2 advertisements | Reasonable/Difficult or very difficult 2,6 ± 5,2 advertisements |

AVERAGE TIME SPENT VIEWING FOOD AND BEVERAGES ADS (N=97)**



9,8 ± 8,7 seconds

9,9 ± 9,5 seconds

9,3 ± 5,0 seconds

TOTAL FOOD AND BEVERAGE ADVERTISEMENTS (N=97)
ADVERTISEMENTS THAT **DON'T COMPLY WITH THE DGS NPM^a** (n=76)

ADVERTISEMENTS THAT **COMPLY WITH THE DGS NPM^a** (n=21)

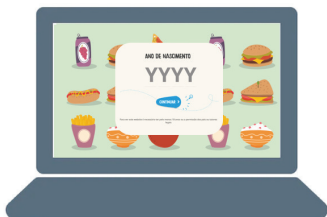
* For this analysis, participants with an exposure to 20 or less advertisements were excluded. This sample includes 29 participants.

** For this analysis only the data from the YouTube® platform was considered, once this variable was not collected in the other platforms.

a. This analysis was only conducted for the advertisements in the categories "independent food industry brand advertisements" (n=549) and "fast-food advertisements" (n=136)

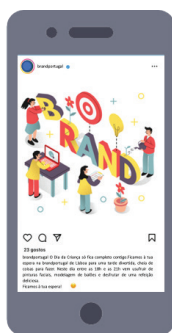
RESULTS

A more exploratory analysis of the information collected in this study allowed, additionally, to identify some strategies adopted to adjust to the existing legislation in Portugal, which aims to protect children from food advertising. In particular, the presence of age verification systems to access the content on the websites of certain food and beverage brands, as well as the increase in advertisements that only reference the brand without identifying a specific food product.



AGE VERIFICATION TOOLS

Limited access to websites content



BRAND MARKETING

Without the identification of a particular food or beverage

CONCLUSION

This study provided the first-time assessment of digital marketing for food and beverages targeted at children in Portugal. The results suggest that Portuguese children aged between 3 and 16 years old are exposed to multiple advertising campaigns, while using different social platforms through their smartphones or tablets. Out of all the advertisements identified in this study, 1 in every 12 promoted food and beverages. Among these, approximately 80% were related to unhealthy food as they did not meet the nutritional criteria defined by the Dispatch No. 7450-A/2019, of 21 of August, published under the Law No. 30/2019, of 23 of April, which introduces restrictions on food advertising targeted to children under 16 years old. This study also identified some adaptation strategies to the restrictions on food advertising aimed at minors in Portugal, which seem to continue allowing children to be exposed to unhealthy food marketing.

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