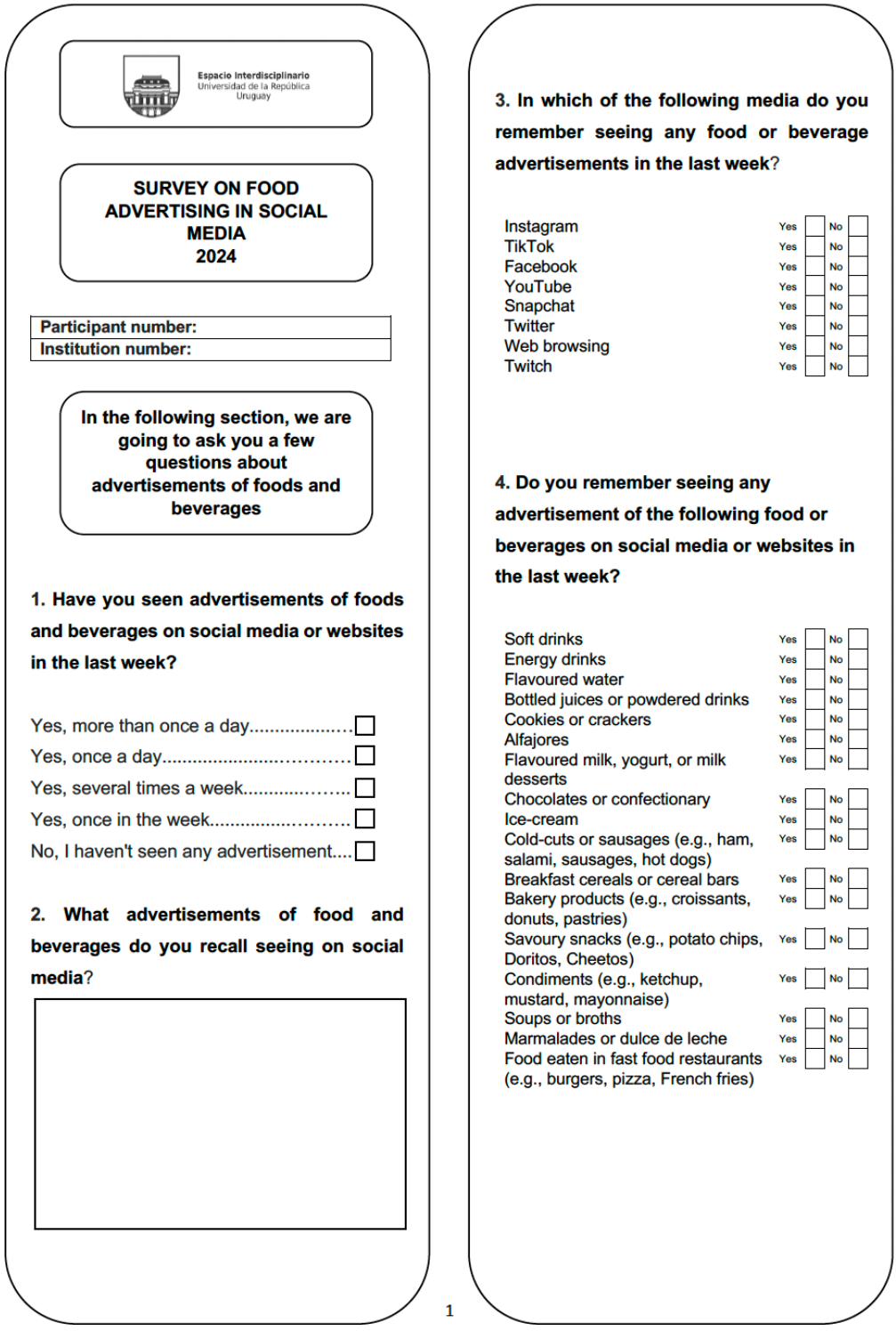
**Supplementary material**

**Figure 1.** English translation of the questionnaire.



Espacio Interdisciplinario
Universidad de la República
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**SURVEY ON FOOD ADVERTISING IN SOCIAL MEDIA 2024**

| |
|---|
| **Participant number:** |
| **Institution number:** |

**In the following section, we are going to ask you a few questions about advertisements of foods and beverages**

**1. Have you seen advertisements of foods and beverages on social media or websites in the last week?**

- Yes, more than once a day..... ☐
- Yes, once a day..... ☐
- Yes, several times a week..... ☐
- Yes, once in the week..... ☐
- No, I haven't seen any advertisement.... ☐

**2. What advertisements of food and beverages do you recall seeing on social media?**

**3. In which of the following media do you remember seeing any food or beverage advertisements in the last week?**

| | | |
|---|---|---|
| Instagram | Yes ☐ | No ☐ |
| TikTok | Yes ☐ | No ☐ |
| Facebook | Yes ☐ | No ☐ |
| YouTube | Yes ☐ | No ☐ |
| Snapchat | Yes ☐ | No ☐ |
| Twitter | Yes ☐ | No ☐ |
| Web browsing | Yes ☐ | No ☐ |
| Twitch | Yes ☐ | No ☐ |

**4. Do you remember seeing any advertisement of the following food or beverages on social media or websites in the last week?**

| | | |
|---|---|---|
| Soft drinks | Yes ☐ | No ☐ |
| Energy drinks | Yes ☐ | No ☐ |
| Flavoured water | Yes ☐ | No ☐ |
| Bottled juices or powdered drinks | Yes ☐ | No ☐ |
| Cookies or crackers | Yes ☐ | No ☐ |
| Alfajores | Yes ☐ | No ☐ |
| Flavoured milk, yogurt, or milk desserts | Yes ☐ | No ☐ |
| Chocolates or confectionary | Yes ☐ | No ☐ |
| Ice-cream | Yes ☐ | No ☐ |
| Cold-cuts or sausages (e.g., ham, salami, sausages, hot dogs) | Yes ☐ | No ☐ |
| Breakfast cereals or cereal bars | Yes ☐ | No ☐ |
| Bakery products (e.g., croissants, donuts, pastries) | Yes ☐ | No ☐ |
| Savoury snacks (e.g., potato chips, Doritos, Cheetos) | Yes ☐ | No ☐ |
| Condiments (e.g., ketchup, mustard, mayonnaise) | Yes ☐ | No ☐ |
| Soups or broths | Yes ☐ | No ☐ |
| Marmalades or dulce de leche | Yes ☐ | No ☐ |
| Food eaten in fast food restaurants (e.g., burgers, pizza, French fries) | Yes ☐ | No ☐ |

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**In the following section you will see a list of foods and beverages. We will ask you to indicate how often you have eaten or drunk them last week.**

**5.** How many days last week did you eat **fruits**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**6.** How many days last week did you eat **vegetables**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**7.** How many days last week did you eat **beef, chicken or pork**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**8.** How many days last week did you eat **fish**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**9.** How many days last week did you drink **milk or eat cheese**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**10.** How many days last week did you drink **soft drinks**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**11.** How many days last week did you drink **energy drinks**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|

**12.** How many days last week did you drink **flavoured water**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|

**13.** How many days last week did you drink **bottled juices or powdered drinks**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**14.** How many days last week did you eat **cookies or crackers**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**15.** How many days last week did you eat **alfajores**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**16.** How many days last week did you drink **flavoured milk or yogurt** or eat **dairy desserts**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**17.** How many days last week did you eat **chocolates or candies**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**18.** How many days last week did you eat **ice-cream**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**19.** How many days last week did you eat **cold cuts or sausages** (e.g., ham, salami, sausages, hot dogs)?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**20.** How many days last week did you eat **breakfast cereals or cereal bars**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**21.** How many days last week did you eat **bakery products** (e.g., croissants, donuts, pastries)?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**23.** How many days last week did you eat **savoury snacks** (e.g., potato chips, Doritos, Cheetos)?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**24.** How many days last week did you eat **ketchup, mustard or mayonnaise**?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**25.** How many days last week did you eat or ordered **at a fast-food restaurant** (e.g., burgers, pizza, French fries)?

| 0 days | 1 day | 2 to 3 days | 4 to 6 days | 7 days |
|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ |

**The following questions are related to social media and TV**

**26.** On a normal weekday, how much time do you use **Instagram**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**27.** On a normal weekday, how much time do you use **TikTok**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**28.** On a normal weekday, how much time do you use **Facebook**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**29.** On a normal weekday, how much time do you use **Twitter**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**30.** On a normal weekday, how much time do you use **YouTube**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**31.** On a normal weekday, how much time do you use **website browsing**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**32.** On a normal weekday, how much time do you use **Snapchat**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**33.** On a normal weekday, how much time do you use **Twitch**?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**34.** On a normal weekday, how much time do you **watch TV** (including cable TV, Netflix, Disney+ or other platforms)?

| I don't use | Less than 15 minutes | 15 to 30 minutes | 30 minutes to 1 hour | 1 to 2 hours | 2 to 3 hours | 3 to 4 hours | More than 4 hours |
|---|---|---|---|---|---|---|---|
| ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

**The last questions are about yourself**

**37.** What is your gender?

Feminine..... ☐
Masculine..... ☐
Other..... ☐

**36.** How old are you?

**Age** _____

**37.** In which neighbourhood do you live?

**Neighbourhood** _____

**You have reached the end of the questionnaire.**

**Thank you very much!**

**Table 1.** Results of the ordinal logistic regressions analysing the association between consumption frequency of specific ultra-processed product categories and self-reported exposure to an advertisement of the food category on digital media in the previous week and total social media use (hours), while controlling for gender, age range, socio-economic status and TV watching time. Results of the Lipsitz goodness of fit and Pulkstenis-Robinson chi-squared tests are also shown.

| **Food group** | **Exposure to a food advertisement** (Yes vs. No) | **Total social media use** (hours) | **Socio-economic status** (Low vs. High) | **Socio-economic status** (Medium vs. High) | **Age range** (15.19 vs. 11-14) | **Gender** (Male vs. Female) | **TV use** (hours) | **Lipsitz test** | **Pulkstenis-Robinson test** |
|---|---|---|---|---|---|---|---|---|---|
| Soft drinks | **<0.001** | **<0.001** | 0.17 | 0.69 | 0.169 | 0.255 | **<0.001** | 0.886 | 0.499 |
| Energy drinks | **<0.001** | **<0.001** | 0.35 | 0.73 | **0.029** | **0.022** | 0.904 | 0.827 | 0.148 |
| Flavoured water | **<0.001** | 0.241 | 0.494 | 0.489 | 0.301 | 0.718 | 0.071 | 0.916 | 0.094 |
| Bottled juices or powdered drinks | **0.016** | **0.003** | 0.106 | 0.072 | **<0.001** | 0.292 | 0.057 | 0.52 | 0.719 |
| Savory snacks | **<0.001** | **<0.001** | 0.565 | 0.648 | **0.028** | 0.705 | 0.077 | 0.304 | 0.669 |
| Bakery products | **<0.001** | **0.001** | 0.068 | **0.047** | **0.549** | **0.443** | **<0.001** | 0.256 | 0.407 |
| Cookies or crackers | 0.988 | 0.150 | 0.988 | 0.617 | 0.129 | 0.637 | **0.028** | 0.619 | 0.576 |
| Alfajores | **<0.001** | **<0.001** | 0.413 | 0.704 | 0.093 | 0.093 | 0.08 | 0.275 | 0.762 |
| Breakfast cereals or cereal bars | **<0.001** | 0.487 | **0.019** | **0.003** | 0.63 | 0.936 | 0.234 | 0.478 | 0.516 |
| Flavoured milk, yogurt or dairy deserts | **<0.001** | **<0.001** | 0.629 | 0.114 | **<0.001** | 0.586 | 0.767 | 0.982 | 0.186 |
| Ice-cream | **0.006** | 0.098 | **0.008** | **0.005** | 0.215 | 0.883 | 0.956 | 0.63 | 0.623 |
| Chocolates or confectionary | **<0.001** | **0.004** | 0.197 | **0.032** | 0.098 | **<0.001** | 0.052 | 0.645 | 0.567 |
| Cold cuts and sausages | **0.002** | **0.047** | **0.002** | 0.328 | **0.752** | **<0.001** | **0.009** | 0.241 | 0.846 |
| Ketchup or mayonnaise | **<0.001** | **<0.001** | 0.702 | 0.746 | 0.472 | **0.011** | **0.015** | 0.99 | 0.513 |
| Fast food | **0.050** | **<0.001** | 0.414 | **<0.001** | 0.345 | **0.011** | 0.489 | 0.757 | **0.002** |

Notes: Participants with missing data (n=24) or whose self-reported gender identities (n=9) different from males and females were not considered in the model. The reference in the model for consumption frequency was '0 days' compared to '1 day', and '2-3 days', '4-6 days' and '7 days'. p-values highlighted in bold are significant at 0.05.

**Table 2.** Results of the ordinal logistic regressions analysing the association between consumption frequency of specific food groups and self-reported exposure to digital food marketing in the week prior to the survey and total social media use (hours), while controlling for gender, age range, socio-economic status and TV watching time. Results of the Lipsitz goodness of fit and Pulkstenis-Robinson chi-squared tests are also shown.

| **Food group** | **Exposure to a food advertisement** (Yes vs. No) | **Total social media use** (hours) | **Socio-economic status** (Low vs. High) | **Socio-economic status** (Medium vs. High) | **Age range** (15.19 vs. 11-14) | **Gender** (Male vs. Female) | **TV use** (hours) | **Lipsitz test** | **Pulkstenis-Robinson test** |
|---|---|---|---|---|---|---|---|---|---|
| Fruits | 0.311 | **<0.001** | **<0.001** | **<0.001** | 0.613 | **<0.001** | 0.636 | 0.171 | 0.16 |
| Vegetables | 0.298 | **0.009** | 0.088 | **0.02** | **0.005** | **<0.001** | 0.466 | 0.052 | 0.101 |
| Meats | 0.646 | 0.169 | 0.102 | 0.795 | **0.039** | **<0.001** | 0.466 | 0.416 | 0.274 |
| Fish | 0.928 | 0.206 | 0.074 | 0.053 | 0.73 | **<0.001** | 0.654 | 0.910 | **<0.001** |

Notes: Participants with missing data (n=24) or whose self-reported gender identities (n=9) different from males and females were not considered in the model. The reference in the model for consumption frequency was '0 days' compared to '1 day', and '2-3 days', '4-6 days' and '7 days'. p-values highlighted in bold are significant at 0.05.