DEPLOYMENT AND FOOD OFFER OF THE MAIN AGGREGATORS OF ESTABLISHMENTS WITH FOOD DELIVERY SERVICE PRESENT IN THE SPANISH MARKET

GOBIERNO DE ESPAÑA
MINISTERIO DE DERECHOS SOCIALES, CONSUMO Y AGENDA 2030
agencia española de seguridad alimentaria y nutrición

estrategia naos
¡come sano y muévete!

DESIGN, CONDUCT OF THE STUDY, DATA ANALYSIS AND REPORTING OF RESULTS
Spanish Agency for Food Safety and Nutrition - Ministry of Social Rights, Consumers Affairs and Agenda 2030
Almudena Rollán Gordo
María José Yusta Boyo
Elena Jarrín Pérez
Marta García Solano
Enrique Gutierrez González
Isabel Peña-Rey

FIELDWORK AND DATA PROCESSING
High Remark
Deyanira Espejo

Recommended Citation: Deployment and food offer of the main aggregators of establishments with food delivery service present in the Spanish market (2022). Deputy Directorate General for Nutrition. Spanish Agency for Food Safety and Nutrition. Ministry of Social Rights, Consumers Affairs and Agenda 2030.

Edited:

Agencia Española de Seguridad Alimentaria y Nutrición (AESAN)
https://cpage.mpr.gob.es/

NIPO: 236-24-010-7
Publication date: 2024

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EXECUTIVE OVERVIEW

Food environments are the physical, economic, political and socio-cultural contexts in which relationships between consumers and the food system are established. They directly influence diet and the risk of noncommunicable diseases. Over the last few years, a rapid expansion has taken place in digital food environments, including food delivery applications.

The use of such applications has increased in recent years due to reasons such as convenience, fastness and the variety of food choices available. Mobility restrictions put in place during the COVID-19 pandemic also contributed to the growth of food delivery applications. However, it is not clear how this type of service can change eating behaviour.

This report analyses the characteristics of the food offer of the main aggregator platforms of food delivery present in the Spanish market, since a better understanding of the way they operate and the food offer they present on these types of applications can help to identify interventions to improve citizens' diets.

To this end, we first reviewed the implementation and degree of penetration of this type of services in the Spanish market by consulting secondary sources and analysing the responses to an online questionnaire on the consumption habits linked to these services. The questionnaire was completed by 445 participants (68.9 % women; 29.7 % men and 0.5 % non-binary gender).

Subsequently, the food supply of the aggregator platforms present in the Spanish market was analysed in different locations, according to previously established criteria of population size and income level. A total of 36 different locations were analysed during the lunch and dinner time slots, applying search criteria previously defined by AESAN. For each location, the name of the restaurant and the description of the type of food (label) that appears in the aggregator platform were collected. A total of 432 simulations (reproduction of a real purchase) were carried out for each aggregator, collecting a total of 6,277 logs.

According to the information obtained in the first phase of the study, the food delivery aggregators operating in Spain are Glovo, Just Eat and Uber Eats.

The results of the survey, not designed to be representative of the national territory, show that slightly more than one-third of the participants use this type of service several times a month, with Glovo as the operator chosen by most of the participants as their first choice, being its greater variety of restaurants the main reason for it.

People who took part in the survey to find out the degree of penetration of these services report that they use food delivery services mainly due to convenience and during the dinner time slot. Chinese and American food were the predominant choices for cost reasons. Therefore, it would be a matter of a convenient and effortless consumption, selecting fast food offers and the cheapest food options available. The results of the simulations show that the 3 main food delivery aggregators operating in Spain generally offer a nationwide service coverage. There are aggregators that do not operate in some of the cities or in a specific location associated with a particular income though. In this case, the food offer is generally linked to the supply available in that area, therefore, localities with a smaller number of inhabitants have less supply and less variety of food offered in these aggregators.

American food is the one that appears most frequently among the first results in the 3 aggregators, both when no search criteria is applied and when the terms “most popular menus”, restaurants with “special offers” or "children" and "family" are used as search criteria.

It should be pointed out the description of the type of food offered by the establishments is self-reported, which is a key limitation. It is worth mentioning that the same restaurant´s description differed depending on the aggregator or time slot in some cases.

However, deepening our knowledge and understanding of the digital environment and food delivery services such as those analysed in this report can help identify new public health interventions that enable easier access to healthier and more sustainable food choices.

INTRODUCTION

Obesity and overweight have been identified as a serious global public health challenge and a major determinant of disability and death in the World Health Organization's (WHO) European region (1). In Spain, the Spanish Agency for Food Safety and Nutrition (AESAN), within the framework of the Observatory of Nutrition and the Study of Obesity, participates in the WHO's European Childhood Obesity Surveillance Initiative (COSI)), through the ALADINO study (Study on Food, Physical Activity, Childhood Development and Obesity). The data from the 2019 ALADINO study show that the prevalence of overweight is 23.3 % (24.7 % in girls and 21.9 % in boys) and the prevalence of obesity is 17.3 % (19.4 % in boys and 15 % in girls) in the Spanish child population aged 6 to 9, according to the WHO weight status standards. Within obesity, 4.2 % of the schoolchildren studied have severe obesity (6.0 % in boys and 2.4 % in girls) (2). According to data from the ENE-COVID study (April-June 2020) with provincial representation, in the child and adolescent population (10,543 participants aged 2 to 17 years), the prevalence of obesity, excess of weight and severe obesity was higher in boys than in girls (obesity: 13.4 % vs. 7.9 %; excess of weight: 33.7 % vs. 26.0 %; severe obesity: 2.9 % vs. 1.2 %) (3). In the adult population, the results of the ENE-COVID study (57,131) adult participants) showed that the prevalence of obesity and excess of weight is higher in men than in women (obesity: 19.3 % vs. 18 %; excess of weight: 63.7 % vs. 48.4 %) while severe obesity is more prevalent in women than in men (5.3 % vs. 4.5 %) (4).

Food environments directly influence diet and the risk of overweight, obesity and non-communicable diseases. Food environment refers to the physical, economic, political and socio-cultural context in which consumers engage with the food system to make their decisions about acquiring, preparing and consuming food (5).

In recent years, a rapid expansion of food environments towards the digital dimension has been observed. Digital food environments are the online settings through which flows of services and information that influence people's food and nutrition choices and behaviour are directed. They include social media, digital food marketing, online food retail and, increasingly, food delivery apps (6).

Food delivery apps are online services that connect the population with restaurants and food establishments. The use of these services has increased globally in recent years due to reasons such as convenience, speed or the variety of the

offer available. The mobility restrictions implemented as a result of the COVID-19 pandemic also contributed to the growth of this type of service. The increasing digitisation of the population and the speed with which the use of mobile devices with Internet connection has expanded has also contributed to the fact that many citizens have become users of food delivery services.

According to the Digital 2021 Global Overview Report (7), the food delivery applications sector grew by 27 % in 2020, with the value of this sector estimated at more than 112 billion euros. According to data for Spain, 45.2 % of Spanish Internet users between the ages of 16 and 64 have placed an online order for food at home in the months of 2020; this data is similar to that of the US (45.3 %), Australia (45.3 %) or the United Kingdom (45.5 %). In Spain, food delivery grew during the health crisis caused by COVID-19, to double its previous figures, reaching a turnover of 1,770 million euros in 2020.

Food delivery orders can be placed directly through the delivery services of retail establishments, or through third-party platforms (aggregator platforms or food delivery aggregators) and although some applications offer access to a single restaurant or chain of restaurants, there are aggregators from which it is possible to access a much broader range of food delivery.

Aggregators maintain two-way communication channels with customers that allow, in addition to requesting the home delivery of food, to assess the full service (from the quality of the food to the price or the delivery service), make queries, report incidents such as errors in the delivery of orders, request information about the presence of allergens or make special requests. On the other hand, computer tools are used to generate automatic notifications and offers (pop-up messages that appear on a user's screen) based on location or previous order history, allowing these types of applications to create specially targeted advertising (for example, if users have requested pizza in the past, they may be the target of promotions and offers for pizza or a particular pizzeria). The information provided by users is also used to offer restaurant options with better ratings and to know what other users think of the restaurants offered.

According to the WHO report on the out-of-home food environment (8), foods consumed out of home tend to be less healthy than foods prepared at home, due to their higher energy density and higher content of salt, saturated fats, trans fats and sugars. Food delivery applications facilitate the access to the offer of food prepared out of home, being able to increase the possibility of exposure and consumption of food and beverages with high energy density, salt, saturated fats and sugars. The food offered by these services tends to be less healthy and in larger portions than food prepared at home, and it is promoted with large marketing budgets.

Considering that aggregator platforms are based on convenience consumption, they can cause food choices and eating habits to be directed towards offers of fast food or cheaper and lower quality foods. There is also evidence that people with lower socioeconomic status have more exposure to unhealthy food choices, which adds a potential element of inequality (9). In addition, and by delivering food directly to homes or workplaces, its use avoids having to dedicate time and effort to the purchase and preparation of food, encouraging more sedentary behaviours (10).

However, it is still unclear how digitisation can modify eating behaviour. On the one hand, there are not enough studies that research the nutritional content or the type of foods included in the menus ordered through these aggregator platforms. This is a sector in constant and rapid evolution, in which small or medium-scale companies also operate, which makes it difficult to monitor. Food delivery applications pose a challenge to public health, but they also offer an opportunity to perform interventions to improve the nutritional quality of the diet of all citizens (11).

Hence, AESAN has considered it necessary to explore the degree of deployment and the characteristics of the food offer of the main food delivery aggregators present in the Spanish market, as a preliminary step to the identification of public health interventions that allow promoting, through this type of digital tools, healthier and more sustainable food options.

For the purposes of this study, aggregator platforms are understood as food delivery companies, through which the customer can choose and buy menus available on websites or mobile applications, applying previous filters such as the type of food, location of the restaurant, price ranges, offers, ratings of other customers, etc.

For food delivery, the aggregators have their own employees, responsible for ensuring that the orders arrive in a timely manner, also offering the customer the possibility of knowing the status of their order or the approximate time of arrival.

OBJECTIVES

The main objectives of this study are as follows:

1. Know the deployment and degree of penetration in the Spanish market of aggregator platforms of food delivery establishments.

2. Describe the food offer of the aggregator platforms present in the Spanish market based on the user's location of said service according to the previously established population and income level criteria.

METHODOLOGY

To respond to the objectives set, the study was divided into two phases. In each phase, the data were collected according to different methodologies.

The data collection in both phases was carried out by the company HIGH REMARK (FIELD WORK & DATA SL), in accordance with the specifications established by AESAN in the tender.

Study objectives

1. Phase 1: Deployment and degree of penetration of the aggregator platforms of food delivery establishments present in the Spanish market.
   Methodology: secondary sources queries and online survey of panellists.

2. Phase 2: Information on the food offer of the aggregator platforms present in the Spanish market based on the user's location according to the previously established population and income level criteria.
   Methodology: actual simulations with aggregators.

Methodology Phase 1: Deployment and degree of penetration of the aggregator platforms of food delivery establishments present in the Spanish market

Data were obtained from queries in secondary sources and from the responses to an online survey completed by a group of panellists from the company HIGH REMARK, who stated that they had previously used the services of a food delivery platform.

Secondary source queries

The initial search criteria on Google were "food delivery companies", "food delivery in Spain". The links of the web pages consulted are as follows:

- https://www.tpvcenter.com/empresas-reparto-comida-domicilio/
- https://marketing4ecommerce.net/empresas-delivery-apps-de-reparto-de-comida-a-domicilio-a-nivel-mundial/
- https://www.lahostelera.com/blog/listado-de-plataformas-de-entrega-a-domicilio-food-delivery/
- https://sivarious.com/gestion/asi-ha-evolucionado-el-food-delivery-por-la-pandemia-en-espana-20220803-0723/)
- https://www.innovaspain.com/evolucion-del-delivery-en-espana/

The actual websites of the food delivery companies operating in Spain have also been consulted:

- https://glovoapp.com/
- www.just-eat.es
- www.ubereats.com

Online surveys

The surveys were carried out by the company HIGH REMARK using an online methodology (CAWI - Computer Assisted Web Interviewing).

The questionnaire used for the study includes 19 questions (Annex I), some with a single answer option and others with multiple answers. This questionnaire was agreed with AESAN in order to unify the objectives and adapt them to the study's requirements.

The survey was carried out only on people who reported having used aggregator platforms of food establishments with home delivery service, specifying if they had used it in the last six months or more. The estimated time to complete the questionnaire was approximately five minutes.

The survey was sent during the month of November 2022 to a total of 5,000 panellists from the company HIGH REMARK, who had previously given their consent to participate in research studies, providing socio-demographic data or data related to consumption habits. The 5,000 panellists received an email invitation to participate in the study, which included a link that redirected them to the online survey for their participation. This link was for single use only, and the survey can be answered only once by each participant, re-

gardless of the device used for it (computer, tablet, mobile device, etc.). To increase their participation in the study, the panellists were encouraged through four draws in which they could obtain gift cards, and no reminders were given for the panellists who had been invited and did not participate.

The panel to which the survey was sent is made up of participants resident throughout Spain, active in the last three months (i.e. who have participated in some other survey or project during this period) without following demographic criteria (sex, age or population) since it was not intended to obtain a specific or extrapolated sample of the total Spanish population, but to have primary information for the first phase of the study.

The panel that the survey was sent to was composed of 53.9 % women and 46.1 % men, divided into the following age groups:

- Under 18 years old (6.2 %).
- 19 to 34 years old (27.5 %).
- 35 to 50 years old (38.8 %).
- 51 to 66 years old (21.9 %).
- Over 66 years old (5.6 %).

The participants did not provide their exact age but selected the age range to which they belonged. The percentage of participation was 8.8 %, obtaining a response from 445 effective surveys. 1,532 panellists viewed the survey and 979 started it.

A database was generated in Excel format with the information collected. Database cleaning and statistical analysis was performed using the STATA program version 16.1.

Given the methodology for the sample selection and the low participation, the survey results do not enable conclusions to be drawn that can be extrapolated to the entire Spanish population, but they can guide the design of future studies in this area.

Methodology Phase 2: Food offer of aggregator platforms present in the Spanish market based on the user's location, according to population and income level criteria

Simulations

The fieldwork was carried out by the company HIGH REMARK through actual simulations with the aggregator platforms. **Simulation** is understood as the reproduction of the actions that a real customer or consumer would perform when making use of this type of services without performing the complete operation, i.e. without completing the order through its payment, but accessing the service from actual addresses to analyse the information offered by each aggregator.

The simulations were carried out by accessing each aggregator's website, using a personal computer, or through the application installed on mobile devices.

Locations to perform the simulations

Although this study aims to be a first approximation that allows a better knowledge of this type of services and does not aim to obtain data that can be extrapolated at the national level, in order to obtain a better knowledge of the operations of these aggregators, previously determined socio-demographic and economic criteria such as the number of inhabitants of the selected municipalities and the average income per household in each province were taken into consideration. A total of nine geographical areas were selected based on their population size and four income brackets.

To establish the locations for carrying out the field work, 9 populations were first selected according to the criteria of number of inhabitants and autonomous community. Subsequently, 4 census sections were selected according to the average income bracket. A total of 36 different locations were established.

Selected Populations	Locations within each population
A. Three populations of more than 1,000,000 inhabitants of three different autonomous communities	Census section of average income bracket 1
	Census section of average income bracket 2
	Census section of average income bracket 3
	Census section of average income bracket 4
B. Two populations from 250,000 to 999,999 inhabitants of two autonomous communities other than those of section A and C	Census section of average income bracket 1
	Census section of average income bracket 2
	Census section of average income bracket 3
	Census section of average income bracket 4
C. Two populations of more than 50,000 to 249,999 inhabitants of two autonomous communities other than those of section A and B	Census section of average income bracket 1
	Census section of average income bracket 2
	Census section of average income bracket 3
	Census section of average income bracket 4
D. Two populations of 49,999 inhabitants or less from two autonomous communities	Census section of average income bracket 1
	Census section of average income bracket 2
	Census section of average income bracket 3
	Census section of average income bracket 4
Total population: 9	**Total Locations: 36**

According to the latest available data from the National Institute of Statistics (Annex III), the following were considered for the purposes of the study:

- Census section of income bracket 1: that between 0 and 74.9 % of the average income of households in the province.
- Census section of income bracket 2: between 75 % and 124.9 % of the average income of households in the province.
- Census section of income bracket 3: between 125 % and 199.9 % of the average income of households in the province.

- Census section of income bracket 4: that greater than or equal to 200 % of the average income of the households in the province.

The postal addresses were chosen randomly respecting the average income bracket per household, avoiding that the same street could coincide with another income bracket depending on its numbering. In addition, for the different incomes, the distance between the addresses has been prioritised, covering greater geographical dispersion (Annex III).

Simulations time slot

The simulations were carried out in two time slots from Monday to Saturday:

- Lunch time slot: from 12:30 pm to 4:00 pm.
- Dinner time slot: from 8:00 pm to 10:30 pm.

Search criteria for simulations

The search criteria used in the simulations were as follows:

- Analysis of the companies or restaurants and the type of food that occupy the **top 30 positions** (15 in the lunch time slot and 15 in the dinner time slot) in the aggregator for each of the locations. For this analysis, no cuisine type or search criteria were applied.
- Description and composition of the **10 "most popular" menus** (5 in the lunch time slot and 5 in the dinner time slot). In this case, aggregators allow you to filter by the most popular restaurants, without the need to include cuisine type or search criteria.
- Description and composition of the **top 10 menus for which there are offers** (5 in the lunch time slot and 5 in the dinner time slot) in each aggregator. For this analysis, aggregators allow you to filter for restaurants with offers, without the need to include cuisine type or search criteria.
- Description and composition of the **top 10 menus or products intended for children** (5 in the lunch time slot and 5 in the dinner time slot). To analyse the restaurants that offer this type of food, search criteria such as "child", "children" and "family" have been used.
- Description of the **top 10 menus or products classified as "healthy" or similar** (5 in the lunch time slot and 5 in the dinner time slot). In this case, search criteria such as "healthy" have been used.
- Description of the **top 10 menus or products classified as "vegan" or similar** (5 in the lunch time slot and 5 in the dinner time slot). In this case, search criteria such as "veggie" or "vegan" were applied.

Each of the results obtained from the simulation is called a **log**.

The same number of simulations were established at both times for all aggregators, towns/cities and incomes, with the aim of collecting a total of 2,880 logs for each aggregator (80 logs for each income and 320 for each town/city) provided that the aggregator's offer in each income bracket and town/city allowed it.

> *Example of simulation: at Calle Felisa Méndez, 6 in Madrid (income bracket 1) and in the Lunch time slot, the website or app of a given aggregator is accessed and a search is made for the term "vegan". The first 5 logs offered by the aggregator are collected as a result of this search.*

Once the search criteria were entered, restaurant names and the cuisine type that accounted for the majority of each restaurant's offering were collected. Information was also collected on whether the restaurant was sponsored or not.

Personal and material resources for data collection

All simulations were performed using six desktop computers each connected to different IPs and maintaining this IP throughout the study.

The information was collected by six different technicians.

The information collected with desktop computers has been contrasted with searches through mobile devices, differentiating between carrying out simulations directly from the aggregator's website and through the mobile application. No notable results have been observed, only one aggregator offers the possibility of sponsoring restaurants through the mobile application, but not in searches carried out through the web.

Classification of logs according to the cuisine type

When working with different aggregators throughout the national territory that apply their own search engines and that use their own cuisine type classification (which do not always coincide between aggregators for the same establishment or restaurant) it was necessary to standardise the results obtained based on the type of restaurant or food offered.

On the other hand, a restaurant can be classified with more than one cuisine type. In these cases, the cuisine type that appears as the majority was selected. For example, a restaurant in which ¾ of the menu is Indian food but also offers hamburgers and pizzas is classified as Indian food, although the restaurant also includes the American and even Italian cuisine type.

The following table identifies all the cuisine types collected and a description of each of them.

CUISINE TYPE	DESCRIPTION
German	Typical German dishes.
American	American pizzas, burgers and fries.
Argentinian	Meat prepared in the Argentinian style and empanadas (meat/ savoury-filled pastries).
Baguettes/Sandwiches	Menu usually made up of sandwiches.
Grill	Chargrilled meat.
Brazilian	Typical Brazilian dishes.
Home cooking	Home cooking style food, usually Mediterranean (roasted chick-ens, casseroles, stews, etc.).
Chinese	Oriental rice, noodles, rolls, meats prepared in the Asian style.
Colombian	Typical Colombian dishes.
Korean	Typical Korean dishes.
Breakfast	Savoury and/or sweet breakfast menus. Own breakfast dishes in cafés.
French	Typical French dishes.
Galician	Typical Galician food.
Greek	Traditional Greek cuisine
Hawaiian	Typical Hawaiian dishes, usually low in calories.
Ice-cream shops	Production of dairy and non-dairy ice cream, as well as other sweet products.
Indian	Traditional Indian cuisine such as rice dishes and meats prepared in traditional sauces.
English	Typical English dishes.
International	Includes English food.
Italian	Pastas and pizzas made in the Italian style. Usually from Italian restaurants.
Japanese	Sushi.
Latin American	Chilean, Ecuadorian cuisine.
Lebanese	Traditional Lebanese cuisine.
Moroccan	Traditional Moroccan cuisine.
Mediterranean	Rice, Spanish cuisine.
Mexican	Tacos, burritos and totopos.
Nepalese	Typical Nepalese dishes.
No cuisine type	There is no identified a cuisine type for the restaurant.

CUISINE TYPE	DESCRIPTION
Bakery	Homemade bread.
Pastry/Confectionery	Homemade sweets and traditional pastries.
Peruvian	Typical Peruvian dishes.
Portuguese	Typical Portuguese cuisine.
Healthy	Dishes classified as low-calorie, pokes that are not in other categories such as Hawaiian or Japanese, etc.
South African	Typical South African dishes.
Thai	Typical Thai dishes.
Tapas	Usually, home cooking, and Mediterranean food served in small portions.
Turkish	Kebab and durums.
Vegan/Vegetarian	Dishes prepared and identified as free from products of animal origin.
Venezuelan	Typical Venezuelan dishes.
Vietnamese	Typical Vietnamese cuisine.

To classify restaurants and their menus, the information offered by the actual aggregator has been taken into account as a first criterion, equating the information between aggregators by synonyms of their cuisine type. In other words, if for the same establishment an aggregator details the offer as "American" and another as "Hamburgers", the "American" cuisine type has been established as common to both, since it is considered to better reflect the type of food it represents.

In contrast, when the cuisine type of an aggregator has been considered too generic, losing qualitative information with it, it has been segmented based on different cuisine types used by other aggregators. In other words, if an aggregator classifies the restaurant as "Asian" and another aggregator as "Chinese" or "Japanese" for the same restaurant, the one that provides more information in this case "Chinese" or "Japanese" has been taken as the reference cuisine type.

A total of 6,277 logs were collected (Annex III).

A database was generated in Excel format with the information collected. Database cleaning and statistical analysis was carried out using the STATA program version 16.1

RESULTS

The results are shown in accordance with the study phase:

Phase 1: Deployment and degree of penetration of the platforms of establishments with food delivery service present in the Spanish market.

Analysis of the information obtained from secondary sources queries that allows identifying the main platforms that operate in the Spanish territory and analysis of the responses of online surveys on consumption habits of these services.

Phase 2: Information on the food offer of the aggregator platforms present in the Spanish market based on the user´s location of the application according to the population and income level criteria.

Analysis of the information obtained from the actual simulations on the websites or applications of the main aggregator platforms operating in Spain.

Phase 1 results: Deployment and degree of penetration of food delivery service platforms present in the Spanish market

Secondary source queries

According to data from TPVcenter[1], the aggregator platforms for food delivery that operated in Spain in 2022 were Glovo, Just Eat and Uber Eats. The results of the online survey confirm this information.

In recent years, there has been a positive economic growth of this type of company, mainly driven by the pandemic, but with the prospect of this business model continuing to grow and expand its services. This is shown by the data presented by the NDP group at the AECOC Retail & Foodservice Knowledge conference "Desgranando el food delivery" (Insights into food delivery),[2] which consolidated food delivery companies reaching 7 % of the market share in the catering sector in 2022. Overall, NPD Group data shows that more than 400 million food delivery orders are made annually in Spain, with a turnover of 2.6 billion euros.

1 Main food delivery companies in Spain (tpvcenter.com)
2 This is how food delivery has evolved due to the pandemic in Spain (sivarious.com)

According to information published by Innovaspain[3] the growth of food delivery services has been 172 % since the pandemic began. The two main Spanish cities, Madrid and Barcelona, have the most marked results in terms of growth, with an increase of 45.8 % and 43.3 %, respectively, between 2020 and 2021. It is also worth noting that the number of restaurants and premises subscribed to these aggregators has quadrupled.

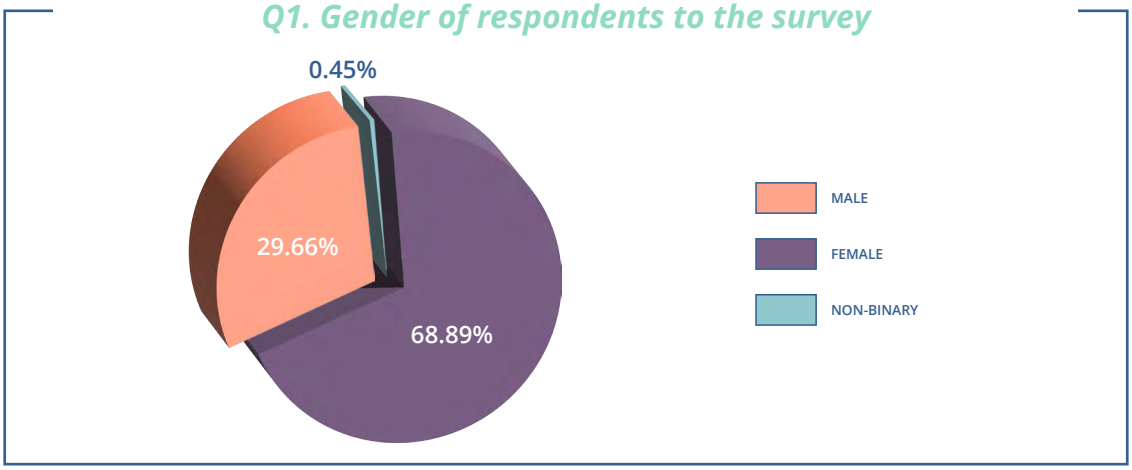
The websites of the three aggregators provide information on the locations where the service operates. All have expansion at a national and international level.

Online surveys

The survey includes 19 questions (Annex I). The tables with the results of the surveys are shown in Annex II.

SOCIO-DEMOGRAPHIC DATA

The surveys were completed by a total of 445 participants, of whom 69.9 % were women (Annex II Q1).



60.2 % of participants (N=268) indicated being between 31 and 45 years old (Annex II Q2), this being the majority age group indicated by both men and women (62.9 % of men and 59.2 % of women).

As for the postal code in which they reside (Annex II Q3), 271 unique codes were obtained. The highest number of participants indicating the same postal code was four, for 4 postal codes (Annex II Q3).

3 The spectacular evolution of delivery in Spain: A momentary phenomenon or is it here to stay? (innovaspain.com)

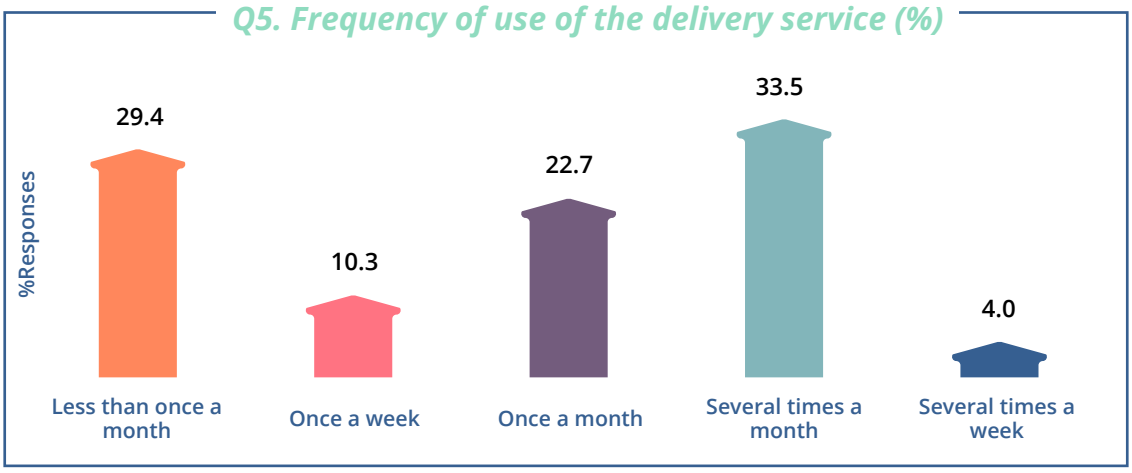
CONSUMPTION HABITS

87 % of respondents (N=387) reported having used one of the food delivery service platforms in the last six months (Annex II Q4).

Based on gender, 87.9 % of men and 86.5 % of women reported using food delivery platforms in the last six months.

Among the age groups, 92.2 % of participants between the ages of 19 and 30, 89.2 % of participants between the ages of 31 and 45, and 80.7 % of participants between the ages of 46 and 65 have reported using food delivery platforms in the last six months.

Regarding the frequency of use (Annex II Q5), 33.5 % of respondents claim to use this type of service several times a month and 29.4 % less than once a month.



If we consider only those participants who have reported consuming delivery in the last six months (N=387), the highest consumption frequency is several times a month (37.5 %), followed by once a month (25.8 %). 20.4 % of participants reported using these services less than once a month (Annex II Q5). Among participants who reported not having requested food delivery in the last six months, 89.7 % indicated doing so less than once a month.

Considering that all participants had declared that they had used food delivery services at some point, that the majority (87 %) declare that they had done so in the last six months and that the objective of the survey is to show indicative results, the responses of all participants have been considered.

Regarding aggregator preferences, 78.7 % of respondents have selected one of the three proposed aggregators (Uber Eats, Glovo or Just Eat) as their first option and 21.3 % of respondents (N=95) have selected option "Others" (Annex II Q6). 29.7 % of respondents have selected Glovo as the first option, followed by Just Eat, which has been selected as the first option by 28.3 % of respondents. Uber Eats has been selected as the first choice by 20.7 %.

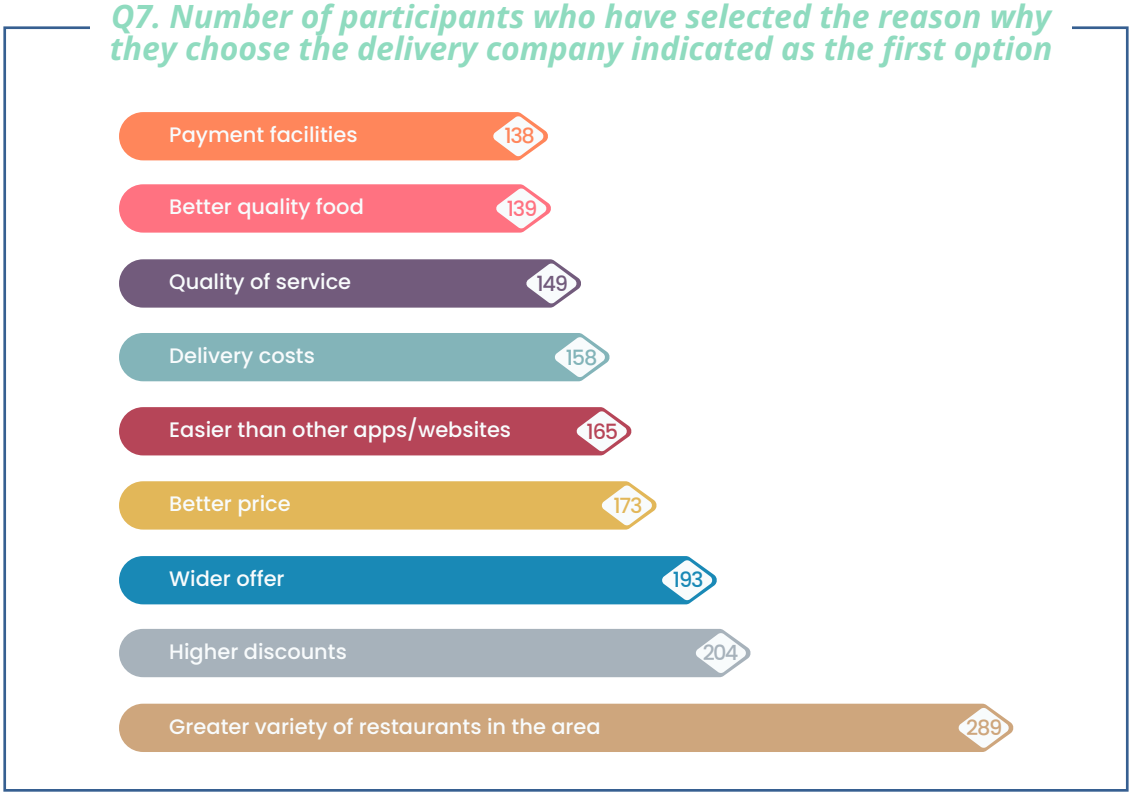
One person interviewed indicated only preferences 1 and 2, the rest of the participants have put in order the 4 preferences indicated.

Q6. Order of preference of the used delivery companies				
Order of preference	Uber Eats	Glovo	Just Eat	Others
1	20.67%	29.73%	28.31%	21.35%
2	19.33%	32.43%	37.53%	10.79%
3	34.38%	22.52%	22.02%	20.90%
4	25.62%	15.32%	12.13%	46.74%

Of the 95 participants who selected “others” as the first option, 80 did not mention which one. The rest mostly indicate that they buy through the webpage or application of the establishment or restaurant itself.

Regarding the reason why participants select the aggregator indicated as the first option, 9 possible multiple choice answers were considered (Annex II Q7).

Q7. Number of participants who have selected the reason why they choose the delivery company indicated as the first option

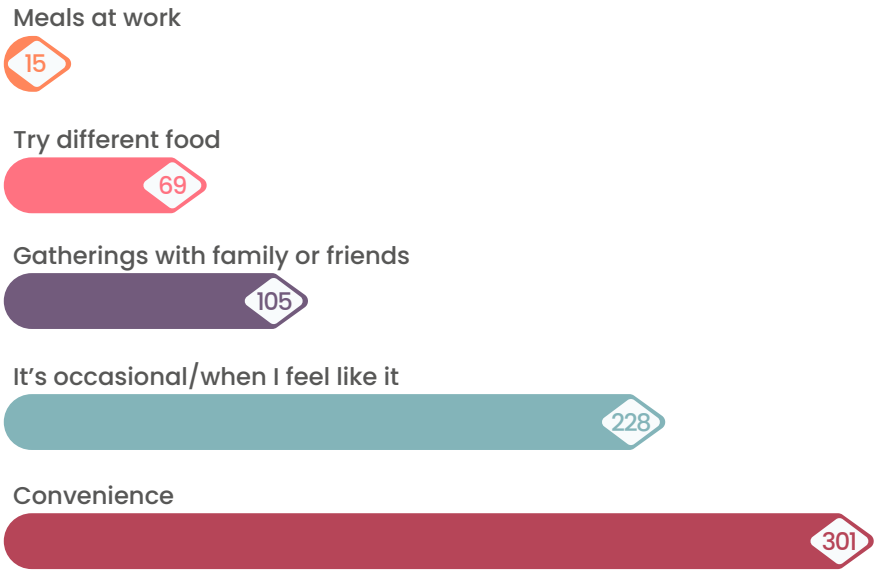


The reason that more participants selected was "It has a greater variety of restaurants in my area" (N=289 participants) followed by "I receive higher discounts" and "The offer is wider" selected by 204 and 193 participants respectively (Annex II Q8).

The least selected reasons were "Payment facilities" and "Netter quality food", indicated by 138 and 139 participants, respectively.

On the reasons why respondents use the food delivery service, multiple choice answers were also considered (Annex II Q8).

Q8. Number of participants who have selected the reason why they use delivery



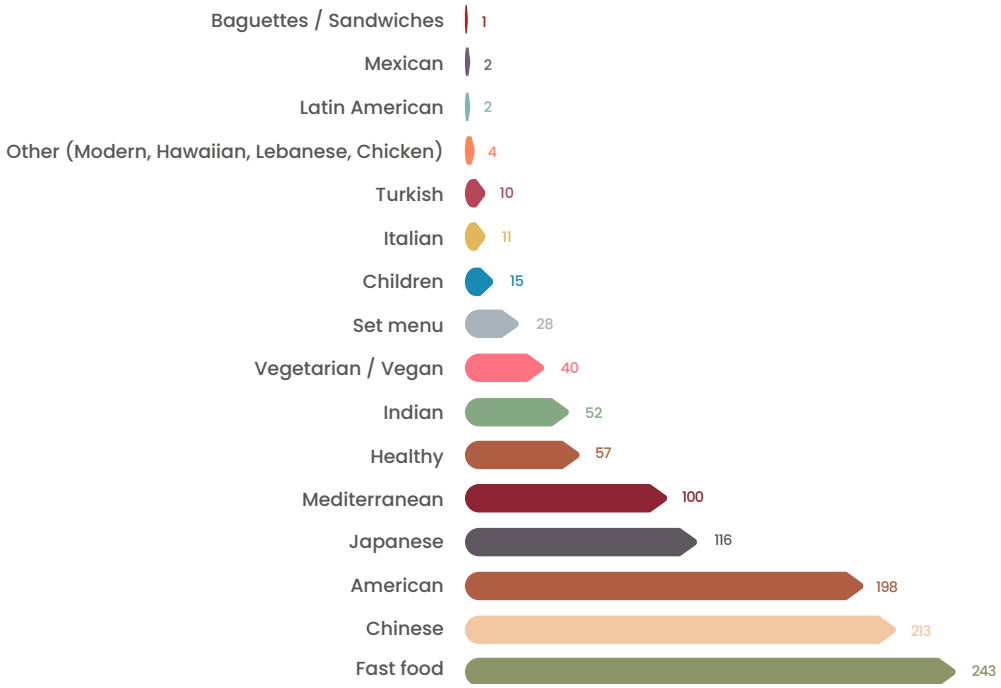
The most selected option was convenience, selected by 301 participants. The most highly demanded time of use was dinner indicated by 81.4 % of the participants, compared to lunch (17.3 %) and breakfast and snack selected by less than 1 % (Annex II Q10).

Regarding the average spend of the consumers who participated in the survey, the majority (51.9 %) indicate spending between €21 and €35.

52.1 % of respondents say that the COVID-19 pandemic has not changed the frequency with which they order food at home, while 34.2 % have answered yes and 13.7 % that during the pandemic yes, but not now. Therefore, almost half of the participants in the survey consider that during the COVID-19 pandemic their habits regarding frequency of use of food delivery changed and the other half that it did not (Annex II Q11).

As for the most ordered types of restaurants and food (Annex II Q12), among 16 multiple choice options, fast food was selected by 243 participants (54.6 %), Chinese food by 213 (48 %) and American food by 198 (44.5 %) participants.

Q12. Number of participants who have selected the most ordered type of food



On the other hand, 92.1 % of participants say that the most attractive option when ordering food at home is home delivery, compared to 7.9 % who indicate ordering and collecting (Annex II Q13).

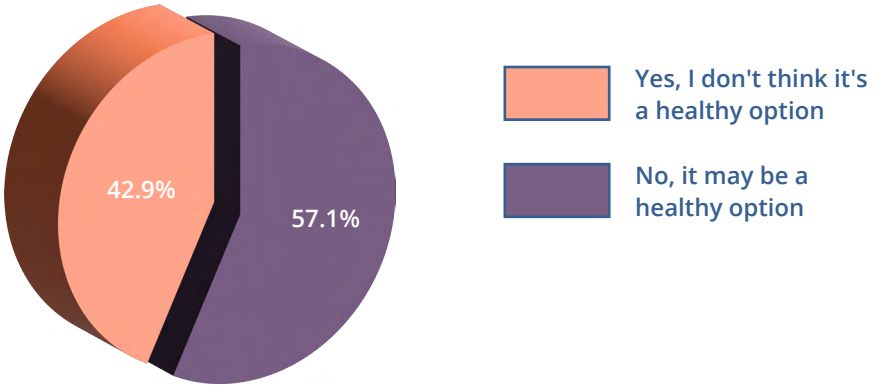
Respondents say that the choice of the type of food or restaurant is mainly influenced by the price; 224 participants selected this option. Offers and recommendations or best ratings were selected by 174 and 168 participants respectively (Annex II Q14).

Q14. Number of participants who have selected the reason why they are influenced by the choice of the type of food

PERCEPTION OF THE QUALITY OF THE AGGREGATOR'S OFFER

Regarding the perception that respondents have about aggregators and their relationship with food quality, 57.1 % indicated that they do not consider ordering food at home as an unhealthy food option, while 42.9 % consider that ordering food at home is an unhealthy option (Annex II Q15).

Q15. % answers to the question do you consider ordering delivery as an UNHEALTHY option for food?



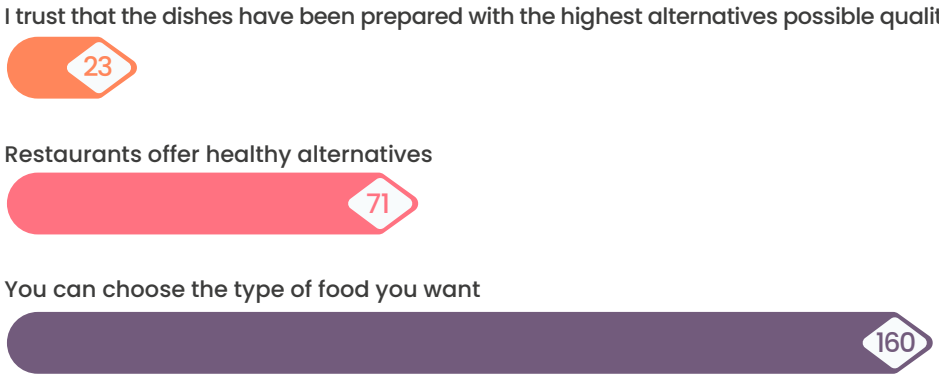
If we consider only the answers of the 58 participants (13 %) who did not order food delivery in the last six months, 57 % answered "Yes, I don't think it is a healthy option"; i.e. they consider that ordering food through delivery services is an unhealthy food option. To go into this aspect in greater depth, they were asked for the reasons for their opinions, both for those people who answered that it was a healthy option and for those who said they saw it as unhealthy.

Of the 191 participants who indicated that they DO consider ordering food at home as an unhealthy option, 44 % (84 participants) selected the option "Encourage people to change their diet to a less healthy one" and 35.1 % (67 participants) "Because prices are usually lower for unhealthy food" (Annex II Q16).

Q16. Number of participants who indicate the reason why they consider ordering delivery an unhealthy option

Of the 254 participants who considered that ordering food at home is not an unhealthy option, 63 % (160 participants) selected the option "you can choose the type of food you want" (Annex II Q17).

Q17. Number of participants who indicate the reason why they consider that ordering delivery is not an unhealthy option



Regarding the aspects that participants feel is lacking in this type of service, 6 possible multiple choice answers were given, with "greater distribution in my area" being the option that more respondents selected (186 participants) (Annex II Q18).

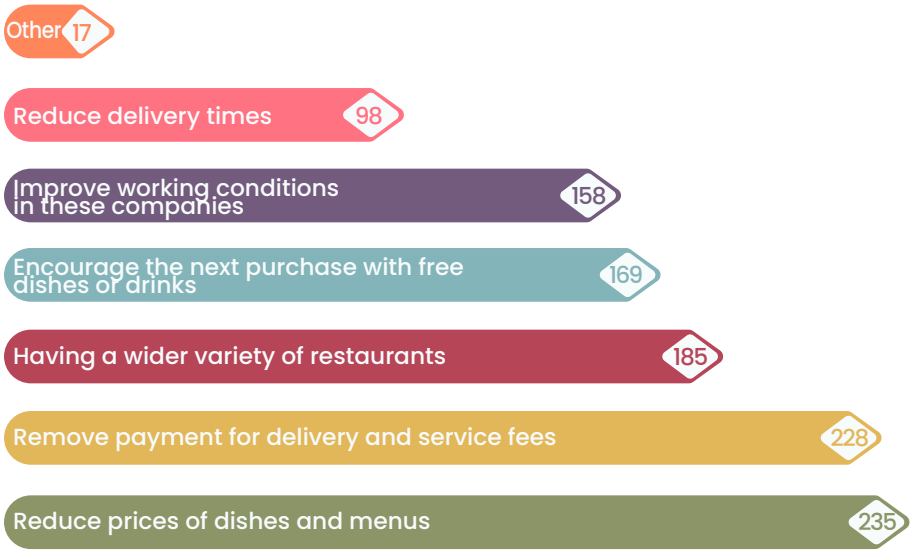
Q18. Number of participants who have selected the option they feel is lacking in this type of service

The responses of the 25 participants who indicated “other” option are variable and include the price and offers, possibility of being able to change the ingredients of the menus, more information about the ingredients, presentation of the menus and status in which they receive the order and ease of correcting order errors and complaints and better working conditions of the workers.

Finally, and in relation to those aspects that would increase food consumption through this type of service, 7 multiple choice options were presented. The options that most respondents have selected are "reduce the price of dishes and menus" and "eliminate delivery costs" (253 and 228 respondents, respectively), both related to the final price.

Among the 17 participants who selected “other” options, answers were promoting food that is going to be wasted, offering more food for the same price, considering environmental sustainability more, not having time to cook.

Q19. Number of participants who have selected the reason that would make them increase their food consumption through these services



In short, the results of an internet search and an online survey completed by 445 participants, who had used the services of food delivery aggregation platforms at some point, show that the food delivery aggregation platforms in Spain are Glovo, Just Eat and Uber Eats.

Most of the men (87.9 %) and women (86.5 %) who completed the survey reported using these services in the past six months, 37.5 % of them reported doing this several times a month.

As for the order of preference by the aggregator platform, Glovo was selected by the largest number of participants as the first choice, followed by Just Eat and finally Uber Eats. The reason why the interviewees indicated the operator selected in the first place is because it has a greater variety of restaurants in the area.

In general, respondents use the food delivery service for convenience. 92.1 % also declare that the most attractive option is home delivery versus the option to pick up at the establishment. 81.4 % of respondents stated that the preferred time to order food at home is dinner (81.4 %), followed by lunch (17.3 %).

The type of food selected by the largest number of participants is fast food, followed by Chinese and American. The choice of the type of food is mainly influenced by the price. Only 10.3 % spend more than €35 on these services.

As for the perception of the quality of the service, 57.1 % considered that food delivery can be a healthy option because you can choose the type of food you want. Among participants who stated that these services are not a healthy option, 44 % consider that it is because they encourage them to change their diet to a less healthy one and 20.9 % because they do not know the ingredients.

Most respondents said they felt the lack of a greater distribution in their area and more food options available with special preparation.

Finally, the options related to prices, both for menus and delivery and service costs, are the ones that would increase the use of food delivery services.

Phase 2 Results: Food offer of the aggregator platforms present in the Spanish market based on the user's location, according to the population and income level criteria

According to the results of Phase 1 of the study, the food delivery aggregators operating in Spain are Glovo, Just Eat and Uber Eats. Hence, these 3 aggregator platforms are the ones used in the simulations.

For each aggregator, 432 simulations have been performed (6 search criteria, 2 time slots and 4 incomes) and a total of 6,277 logs have been collected.

In general, the results obtained from the simulations with the 3 aggregators show some similarities and differences in terms of their operational performance.

Similarities between the 3 aggregators:

- They have the possibility of accessing the service via the website and app, performing the entire process in a similar way in both formats.
- They have a wide offer, being more relevant in larger cities, a fact related to the existing offer on the street.
- They base their services on the home delivery of already prepared food in the restaurants and in some cases also from shops or supermarkets.
- In many cases, although not always, restaurants operate with the three aggregators, which may lead to the assumption that the conditions that each one offers to the restaurants are different.

Differences between the 3 aggregators:

- The number of logs collected varied depending on the aggregator: 2,355 logs for Aggregator A, 2,050 logs for Aggregator C, and 1,872 logs for Aggregator B. The initial target was to collect 2,880 logs per aggregator.

- Not all aggregators operate in all areas evaluated. It may occur that the operator does not serve in all areas of a town/city, or that it does not reach areas with a certain income level. One aggregator does not offer coverage in Calatayud in any of the four incomes analysed or in income 1 in the city of Seville.

- The same restaurant may be identified with a different cuisine type depending on the aggregator.

- Search availability for specific menus varies by aggregator. The children's menu is not a search criterion offered by one of the aggregators.

- The identification of sponsored restaurants is also different in each aggregator. For one of them, there were no sponsored restaurants listed under any search criteria.

In general, the search criteria related to more specific cuisine types (vegan, healthy, etc.) present greater difficulties when purchasing through these aggregators, since they do not exist or do not operate with those cuisine types in all cases. Normally, in those locations where menus of specific categories have not been located, it is because the offer of restaurants in the area does not provide it in itself. It is usually populations with fewer inhabitants that have these lacks.

In small towns with little supply, the restaurants with which the aggregators operate are usually the same for the entire town, regardless of the income level of the different census sections. They tend to be restaurants with less exotic food, limiting the offer generally to American, Turkish or Italian food.

On the other hand, differences have been found in terms of the offer of the type of food within the same chain of establishments. In other words, two restaurants of a chain that each distribute in a different area have different offers and, therefore, can be identified as different cuisine types.

It has also been observed in some cases that the offer of restaurants varies according to the time slot and even that the same restaurant is classified as a different type of food according to the time slot.

The classification of the cuisine type is a limitation of this study since only one cuisine type of those mentioned by the restaurant has been collected, depending on the main type offered in the menu. For future studies, it is considered necessary to establish previous criteria to classify the restaurants that consider not only the self-classification that is granted by the restaurant itself.

Below logs collected are shown, identified by the cuisine type offered, which have been obtained by applying each of the 6 search criteria established by aggregator, time slot, income and location.

Top menu results by aggregator, time slot, income and location

In the simulations to collect information from the first menus (15 in the lunch time slot and 15 in the dinner time slot) that appear in each of the aggregator platforms without applying any search criteria, data has been obtained from 2,652 logs (Annex III): 906 logs from Aggregator A, 903 from Aggregator B and 843 from Aggregator C.

In the simulations, some restaurants (logs) are identified or appear as sponsored. For the top menus that appear without performing any search, one aggregator did not list any restaurants as sponsored, while 13.9 % of the restaurants were sponsored for one aggregator and for the other aggregator the percentage was 3.9 %.

In total, 34 different cuisine types have been identified, with American food being the most frequent (33.1 % of total logs), followed by Mediterranean (13.2 %) and Turkish (11.7 %) (Annex IV). Although for the three aggregators the main food was American food, for Aggregator C and Aggregator A Mediterranean food appears in second place, while in Aggregator B it is Turkish.

Regarding the time slot, American food appears in a higher percentage of dinner offerings (37.3 %) compared to lunch (28.3 %). While Mediterranean food is the second type of food (16 % of the offer at lunch and 10.5 % of the offer at dinner), in the dinner time slot, the second type of food is Turkish (12.7 %).

In relation to income, American food is also the majority in the 4 types of income, in similar percentages (between 31 % and 35 %) followed by Mediterranean. Chinese food offer is double in income 1 compared to income 4 (5 % and 2.4 % respectively), while the offer of healthy food is higher in income 4 (7.7 %) compared to the supply in income 1 (4.2 %).

As for the 9 selected locations, American food also appears as the majority among the top 30 menus in all of them, except in Calatayud where the main food that appears among the top 30 menus is Turkish (79.6 %), followed by American, being the only two types of food that appear among the top menus. In this location, only 54 logs were obtained in total, none with the Aggregator C. In addition, in income 1 in the lunch time slot there are only 4 restaurants that offer food delivery and all of them are Turkish food. Globally, the second type of food is Mediterranean, as is the case in cities with a larger number of inhabitants such as Madrid, Valencia, Seville and Zaragoza. In cities with a smaller number of inhabitants, such as Cuenca, Lugo and Plasencia, the second type of food is Turkish.

American food is the one that appears mostly among the top menus that appear in the 3 aggregators without applying any search criteria, in all income brackets, in both time slots (especially dinners) and in 8 of the 9 selected locations. At lunchtime, Mediterranean food is also important. The towns with fewer inhabitants such as Calatayud and Plasencia have less variety in terms of the type of food offered through food delivery aggregator platforms.

Summary table 1. Majority type of meal (%) of first menus by locality, income, and time slot.

Top menus		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	American (28.9%)	American (31.8%)	American (31.1%)	American (40.0%)	American (37.8%)	American (28.9%)	American (26.7%)	American (37.8%)
	Barcelona	American (31.1%)	American (36.4%)	American (31.1%)	American (33.3%)	American (33.3%)	American (46.7%)	Baguettes/ Sandwiches (28.9%)	American (35.6%)
	Valencia	American (33.3%)	American (31.1%)	Mediterranean (35.6%)	American (40.0%)	American (24.4%)	American (31.1%)	American (24.4%)	American (35.6%)
Town/cities 250,000-999,999 inhabitants	Seville	Turkish (30.0%)	Turkish (26.7%)	American & Mediterranean (28.9%)	American (31.1%)	American & Mediterranean (26.7%)	American (44.4%)	American (31.1%)	American (55.6%)
	Zaragoza	Mediterranean (33.3%)	American (37.8%)	Baguettes/ Sandwiches (15.0%)	American (42.2%)	American & Mediterranean (13.3%)	American (26.7%)	Japanese (28.9%)	American (46.7%)
Town/cities 50,000-249,999 inhabitants	Lugo	American (26.7%)	American (33.3%)	American (28.9%)	American (33.3%)	American (31.1%)	American (33.3%)	American (33.3%)	American (35.6%)
	Cuenca	American (37.2%)	American (34.9%)	American (31.0%)	American (32.6%)	American (32.6%)	American (33.4%)	American (35.7%)	American (35.7%)
Towns/cities ≤49,999 inhabitants	Plasencia	American (61.5%)	American (52.4%)	American (62.5%)	American (62.5%)	American (62.5%)	American (68.8%)	American (54.6%)	American (62.5%)
	Calatayud	Turkish (100%)	Turkish (100%)	Turkish (75.5%)	Turkish (70.0%)	Turkish (77.8%)	Turkish (70.0%)	Turkish (100.0%)	Turkish (80.0%)

Popular menu results by aggregator, time slot, income and location

As for the top menus that appear when searching by favourites or most popular, data has been obtained from 1,062 logs: 436 from Aggregator A, 322 from Aggregator B and 304 from Aggregator C (Annex III).

For the top menus that appear when searching by most popular menus or favourites, some restaurants appear as sponsored. One aggregator did not list any restaurants as sponsored, while in the simulations of the other two aggregators 12.7 % and 1.5 % of restaurants are listed as sponsored.

In total, 29 cuisine types have been identified, with American food again appearing more frequently when searching for the most popular food overall (22.4 %), followed by Turkish (15 %) and Mediterranean (13.8 %) (Annex IV). For the Aggregator B platform, the food that appears most frequently among the popular ones is Turkish food, followed by American food. With the Aggregator A platform, the second type of food that most frequently appears is Mediterranean in a percentage close to American (23.9 % compared to 25.2 %). Japanese food is the second type of food in the Aggregator C.

In both time slots, the most popular type of food is American at a very similar percentage (22.8 % at dinners and 22.1 % at lunch), followed by Turkish at dinners (18.9 %) and Mediterranean at lunch (17.3 %). Japanese food is also important at dinners (15.4 %).

By income bracket, the most popular menus correspond mainly to American food in sections 2, 3 and 4 (23.2 %, 24.5 % and 22.7 % respectively), while in income bracket 1 (lower incomes) the most popular menus correspond to Mediterranean food (21.4 %) followed by American food (19.1 %). In income 4, Japanese food is the second most frequently found when searching for popular menus.

The main type of food within the most popular menus varies depending on the city, in cities with the largest number of inhabitants such as Barcelona, Madrid and Valencia, Japanese food is the most popular among the most popular offers. In Seville and Zaragoza the most popular menus correspond to Mediterranean food, while in Lugo,

Cuenca and Plasencia the most popular food is American. Finally, in Calatayud, Turkish food is the one that appears mostly as the most popular.

Although overall American food is the one that appears most frequently when a search is made for the most popular menus, other types of food are also important, for the Aggregator B platform Turkish food is the one that appears in the highest proportion. In both time slots, American food also appears more frequently, followed by Turkish at dinners and Mediterranean at lunchtime. As for the income level, American food is also the most popular in all income sections except in income bracket 1 where Mediterranean food is more frequently among the popular or favourite menus, although followed very closely by American. In the cities with the largest number of inhabitants, the food that appears in the search for the most popular menus is Japanese, in Seville and Zaragoza Mediterranean, in Lugo, Cuenca and Plasencia American and in Calatayud Turkish.

Summary table 2. Majority type of meal (%) of first popular menus by locality, income and time slot.

Popular menus		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	Mediterranean (23.8%)	Mediterranean (26.7%)	Mediterranean (19.1%)	Japanese (33.3%)	Baguettes/ Sandwiches (23.8%)	20.0%[1]	Japanese & Healthy (20.0%)	Healthy (33.3%)
	Barcelona	Mediterranean (26.7%)	Japanese (26.7%)	Japanese (25.0%)	Japanese (26.7%)	Americana & Baguettes/ Sandwiches (25.0%)	American (26.7%)	Baguettes/ Sandwiches (23.5%)	Japanese (40.0%)
	Valencia	Mediterranean (30.0%)	Japanese (26.7%)	Mediterranean (35.0%)	Japanese (26.7%)	Japanese & Healthy (20.0%)	Japanese (33.3%)	American & Mediterranean (19.1%)	Japanese (38.5%)
Town/cities 250,000-999,999 inhabitants	Seville	Mediterranean (37.5%)	Turkish (30.0%)	American (20.0%)	American & Chinese (20.0%)	15.4%[2]	Mediterranean (22.7%)	American & Mediterranean (25.0%)	American & Mediterranean (23.5%)
	Zaragoza	Mediterranean (52.4%)	Italian & Japanese (26.7%)	Latin American & Mediterranean (26.7%)	Japanese (25.0%)	American (29.4%)	American & Japanese (25.0%)	Japanese (26.3%)	Italian & Japanese (20.0%)
Town/cities 50,000-249,999 inhabitants	Lugo	American & Turkish (30.0%)	Turkish (47.1%)	American (50.0%)	Turkish (50.0%)	American (47.1%)	Turkish (35.3%)	American (28.6%)	Turkish (50.0%)
	Cuenca	American (42.9%)	Mediterranean (28.6%)	American (33.3%)	American (28.6%)	15.4%[3]	23.1%[4]	American (33.3%)	American (26.7%)
Towns/cities ≤49,999 inhabitants	Plasencia	American (55.6%)	American (55.6%)	American (60.0%)	American (57.1%)	American (66.7%)	American (61.5%)	American (50.0%)	American (61.5%)
	Calatayud	Turkish (100.0%)	Turkish (100.0%)	Turkish (66.7%)	Turkish (77.8%)	Turkish (66.7%)	Turkish (77.8%)	Turkish (100.0%)	Turkish (80.0%)

[1] corresponds to the cuisine type of Baguettes/Sandwiches, Chinese, Japanese and Mediterranean.
[2] corresponds to the American, Home cooking and Japanese cuisine types.
[3] corresponds to the American, Sandwiches, Italian and Turkish cuisine types.
[4] corresponds to the American, Mediterranean and Turkish cuisine types.

Menu results with offers by aggregator, time slot, income and location

In relation to the menus that have offers, data has been obtained from 905 logs: 319 from Aggregator A, 296 from Aggregator B and 290 from Aggregator C (Annex III).

Among the top menus that appear when performing a menu search with offers, some restaurants appear as sponsored in the simulations of two aggregators. For one aggregator, sponsored restaurants were 23 % and for the other 3.5 % of total restaurants.

In the case of menus with offers, 27 different cuisine types have been identified. On the other hand, 3 logs were not identified with the cuisine type.

Overall, the American cuisine type appears in more logs within the menus with offers (40.4 %) and for each of the aggregators. The second type of food that appears most frequently when searching for offers is healthy food for Aggregator A, Turkish food for Aggregator B and Japanese food for Aggregator C.

In both lunches and dinners, the food that appears most frequently when searching for offers is American. In dinners the second type of food that appears most often is healthy food, while in the lunch time slot is Turkish.

For the 4 income brackets, American food is the most frequent type of food that appears when using the offers search criterion, followed by Turkish for income 1, Mediterranean for income 2 and healthy for income 3 and 4.

As for the town/city, all also include American food as the most frequent when searching by offer, except in Calatayud where the food that most frequently appears when applying the offers criterion is Turkish, followed by American.

American food is the main food that appears when performing a search by the criteria "offers" in the three aggregators. It is also for the two time slots, in the 4 income sections and in all locations, except in Calatayud where the Turkish cuisine type is the one that appears in the highest proportion when searching for offers.

Summary table 3. Majority type of meal (%) of first menus with offers by locality, income and time slot.

Menus with offers		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	American (40.0%)	**American (60.0%)**	American (46.7%)	American (53.3%)	American (46.7%)	**Healthy (53.3%)**	American (33.3%)	**American (26.7%)**
	Barcelona	American (26.7%)	American (46.7%)	American (46.7%)	American (46.7%)	**Baguettes/ Sandwiches (33.3%)**	American (53.3%)	**Americana and Baguettes/ Sandwiches (26.7%)**	American (53.3%)
	Valencia	American (40.0%)	American (40.0%)	American (33.3%)	American (26.7%)	**American and Healthy (26.7%)**	**Healthy (40.0%)**	**Healthy (33.3%)**	American (46.7%)
Town/cities 250,000-999,999 inhabitants	Seville	**Turkish (40.0%)**	American (40.0%)	American (26.7%)	American (53.3%)	American (33.3%)	American (46.7%)	American (33.3%)	American (69.0%)
	Zaragoza	American (35.0%)	American (26.7%)	**Pastry/Confectionery(26.7%)**	**American and Mediterranean (20.0%)**	**Healthy (26.7%)**	American (40.0%)	**Healthy (26.7%)**	American (46.7%)
Town/cities 50,000-249,999 inhabitants	Lugo	**Turkish (33.3%)**	American (40.0%)	**Turkish (33.3%)**	American (26.7%)	**American and Mediterranean (20.0%)**	American (26.7%)	American (40.0%)	American (26.7%)
	Cuenca	American (64.3%)	American (53.9%)	American (67.7%)	American (54.6%)	American (58.3%)	American (58.3)	American (69.2%)	American (53.9%)
Towns/cities ≤49,999 inhabitants	Plasencia	American (71.4%)	American (75.0%)	American (77.8%)	American (81.8%)	American (80.0%)	American (77.8%)	American (83.3%)	American (70.0%)
	Calatayud	**Turkish (100.0%)**	**Turkish (100.0%)**	-[1]	**Turkish (75.0%)**	- [1]	**Turkish (75.0%)**	**Turkish (100.0%)**	**Turkish (75.0%)**

1 No data/No restaurants offering delivery.

Results of children's menus by aggregator, time slot, income and town/city

EIn the search for the children's menus criterion, data was obtained from 487 logs: 286 on Aggregator A and 201 on Aggregator C. In Aggregator B, no results were found when applying the search criteria for children's menus (Annex III).

No sponsored restaurants appeared for any of the 3 aggregators in the corresponding simulations.

Among the children's menus, 16 different types of food were observed, with American being the main food overall (33.7 %), followed by Turkish (18.3 %) and Mediterranean (15.4 %) (Annex IV). American food was the one that appeared most often when searching for children's menus in both aggregators, followed by Turkish in Aggregator A and baguettes/sandwiches in Aggregator C.

As for the time slot, the main types of food when searching for children's menus are still American, Turkish and Mediterranean in both lunch and dinner.

In the 4 income brackets, American food was the one that appeared in the highest number of logs, again followed by Turkish and Mediterranean food. Italian stands out in the income bracket 4.

In relation to the selected locations in which the simulations were carried out, in Calatayud no log was obtained and in Plasencia only for Aggregator A, where most of the logs correspond to Turkish food. In the rest of the towns/cities the majority of the food was American, although in Lugo it appears in the same proportion as Turkish food. Other types of food also frequent were Mediterranean in Barcelona, Turkish in Madrid and Italian in Seville.

Under the search criteria for children's food ("infant", "children" and "family"), most of the logs correspond to American food followed by Turkish and Mediterranean food for two aggregators, in both time slots and in the 4 income brackets. In the towns with the lowest number of inhabitants, the number of logs is lower, in Calatayud no logs were obtained and in Plasencia only from Aggregator A, the majority being Turkish food. This type of food was also relevant in Lugo and Cuenca. In the cities with the largest number of inhabitants such as Madrid and Barcelona, although the majority was American food, there was also a high presence of Turkish food in Madrid and Mediterranean food in Barcelona. In Seville there are also Italian restaurants offering children's menus.

Summary table 4. Majority type of meal (%) of first children´s menus by locality, income and time slot.

Children's menus		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	**Turkish (30.0%)**	**Turkish (40.0%)**	American & Turkish (30.0%)	Turkish (30.0%)	Turkish (30.0%)	Turkish (30.0%)	**American (40.0%)**	**American (40.0%)**
	Barcelona	American & **Mediterranean** (30.0%)	American & **Mediterranean** (40.0%)	**Mediterranean (40.0%)**	**Mediterranean (40.0%)**	American & **Mediterranean** (40.0%)	American & **Mediterranean** (40.0%)	American (40.0%)	**American (50.0%)**
	Valencia	American (50.0%)	American (40.0%)	American (50.0%)	American (50.0%)	American (40.0%)	**Indian (30.0%)**	**Mediterranean (30.0%)**	American and **Italian** (30.0%)
Town/cities 250,000-999,999 inhabitants	Seville	American (40.0%)	**Italian (40.0%)**	20.0%[1]	**Mediterranean (30.0%)**	American and **Italian** (30.0%)	**Italian** (30.0%)	American (40.0%)	20.0%[2]
	Zaragoza	American & **Mediterranean** (30.0%)	American & **Mediterranean** (30.0%)	American (30.0%)	20.0%[3]	American (40.0%)	American (30.0%)	American (40.0%)	American (40.0%)
Town/cities 50,000-249,999 inhabitants	Lugo	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)	American & Turkish (33.3%)
	Cuenca	American (60.0%)	American & Turkish (50.0%)	American & Turkish (50.0%)	American & Turkish (50.0%)	American (60.0%)	American (60.0%)	American (60.0%)	American (60.0%)
Towns/cities ≤49,999 inhabitants	Plasencia	**Turkish (100.0%)**	Turkish (100.0%)	Turkish (100.0%)	Turkish (75.0%)	American & Turkish (50.0%)	American & Turkish (50.0%)	American & Turkish (50.0%)	American & Turkish (50.0%)
	Calatayud	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]

[1] Corresponds to American, Italian, Mexican and Turkish cuisine types..
[2] Corresponds with the American, Chinese, Italian and Mediterranean cuisine types.
3 Corresponds to Americana, Sandwiches, Japanese and Turkish cuisine types.
4 No data/No restaurants offering delivery.

Healthy menu results by aggregator, time slot, income and location

The "healthy", search criteria resulted in 599 logs: 203 from Aggregator A, 179 from Aggregator B, and 217 from Aggregator C (Annex III).

Only in the simulations of an aggregator, sponsored restaurants appeared, which represent 1 % of the restaurants that appeared for the healthy menu criterion for said aggregator.

Logs include 16 different types of food. The most common type of food overall was healthy (75 % of total logs), followed by baguettes/sandwiches (4.3 %) and vegan/vegetarian (3.8 %) (Annex IV). For the three aggregators, healthy food was the one that appeared most frequently, followed by vegan/vegetarian for Aggregator A, and Mediterranean for Aggregator B and Aggregator C.

In both lunch and dinner, healthy food was also the majority. In the lunch time slot, the second type of food that most frequently appears when looking for healthy food are baguettes/sandwiches followed by Mediterranean food, while in dinners it is Mediterranean food followed by vegan/vegetarian.

In all incomes, healthy food was also the majority. In income 1 the next type of food that most frequently appears when searching for healthy food is Mediterranean food, followed by vegan/vegetarian, in income 2 also appears vegan/vegetarian food along with baguettes/sandwiches, in income 3 baguettes/sandwiches and Mediterranean food and in income 4 baguettes/sandwiches and Mediterranean food.

In Plasencia and Calatayud, towns with fewer inhabitants, no logs were obtained when searching for healthy food. In the rest of the towns, healthy food was the majority, except in Lugo where only baguettes/ sandwiches appear.

The most frequent type of food in the logs obtained when applying the search criteria related to healthy food such as "healthy" is the food identified by the restaurant itself as healthy, regardless of the aggregator, the time slot, the income and the town/city. Other types of food that also appear, although a much smaller proportion are baguettes/sandwiches, Mediterranean food, and vegan/vegetarian food.

Summary table 5. Majority type of meal (%) of first healthy menus by locality, income and time slot.

Healthy Menus		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	Healthy (93.3%)	Healthy (80.0%)	Healthy (100.0%)	Healthy (73.3%)	Healthy (93.3%)	Healthy (80.0%)	Healthy (93.3%)	Healthy (80.0%)
	Barcelona	Healthy (46.7%)	Healthy (60.0%)	Healthy (73.3%)	Healthy (60.0%)	Healthy (66.7%)	Healthy (66.7%)	Healthy (60.0%)	Healthy (66.7%)
	Valencia	Healthy (53.3%)	Healthy (72.7%)	Healthy (73.3%)	Healthy (86.7%)	Healthy (80.0%)	Healthy (93.3%)	Healthy (93.3%)	Healthy (86.7%)
Town/cities 250,000-999,999 inhabitants	Seville	Healthy (87.5%)	Healthy (87.5%)	Healthy (100.0%)	Healthy (86.7%)	Healthy (93.3%)	Healthy (86.7%)	Healthy (93.3%)	Healthy (86.7%)
	Zaragoza	Healthy (75.0%)	Healthy (66.7%)	Healthy (58.3%)	Healthy (58.3%)	Healthy (75.0%)	Healthy (58.3%)	Healthy (63.6%)	Healthy (58.3%)
Town/cities 50,000-249,999 inhabitants	Lugo	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)	Baguettes/ Sandwiches (100.0%)
	Cuenca	Healthy (75.0%)	Healthy (75.0%)	Healthy (75.0%)	Healthy (75.0%)	Healthy (50.0%)	Healthy (75.0%)	Healthy (50.0%)	Healthy (75.0%)
Towns/cities ≤49,999 inhabitants	Plasencia	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]
	Calatayud	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]	-[1]

1 There is no data/there are no restaurants that offer delivery for that address in that time slot.

Results vegan menus or similar by aggregator, time slot, income and location

Searching for logs for vegan or similar menus using terms such as “vegan”, “veggie” or “vegan” resulted in 572 results: 205 for Aggregator A, 172 for Aggregator B and 195 for Aggregator C (Annex III).

The results of the simulations of an aggregator showed that 4 % of the restaurants were sponsored.

18 different cuisine types were obtained and a log that did not mention type of food. Overall, the cuisine type that appeared most frequently was vegan/vegetarian (52.6 %), followed by healthy (16.4 %) and American (8.2 %) (Annex IV). By aggregators, for Aggregator A and Aggregator B the main type of food was vegan/vegetarian in a high percentage (73.7 % and 82.6 % respectively), while for Aggregator C the type of food that appeared most frequently was healthy (42.1 %).

Vegan/vegetarian food was also the majority in both the lunch and dinner time slots, followed by healthy food in similar percentages.

For the four income brackets, vegan/vegetarian food is also the one that appears in the highest percentage when searching for vegan or similar foods, followed by healthy food.

Regarding the towns/cities, no logs were obtained in Calatayud or Cuenca. For the rest, the main food was vegan/vegetarian, except for Lugo and Plasencia, which was American food.

Overall, vegan/vegetarian cuisine type is the majority in the logs obtained when searching for the terms "vegan", "veggie" or "vegan", followed by healthy foods. For the Aggregator C, the type of food that seems most often is healthy. As for the towns/cities, vegan/vegetarian food is also the most frequent, except in Lugo and Plasencia, which is American.

Summary table 6. Majority type of meal (%) of first vegan/vegetarian menus by locality, income and time slot.

Vegetarian / vegan menus		Income 1 (0%-74.9% average income)		Income 2 (75%-124.9% average income)		Income 3 (125%-199.9% average income)		Income 4 (≥200% average income)	
		Lunch	Dinner	Lunch	Dinner	Lunch	Dinner	Lunch	Dinner
Towns/Cities ≥1,000,000 inhabitants	Madrid	Vegan/ Vegetarian (54.6%)	Vegan/ Vegetarian (50.0%)	Vegan/ Vegetarian (64.3%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (57.1%)	Vegan/ Vegetarian (60.0%)	Vegan/ Vegetarian (60.0%)	Vegan/ Vegetarian (60.0%)
	Barcelona	Vegan/ Vegetarian (53.3%)	Vegan/ Vegetarian & Indian (33.3%)	Vegan/ Vegetarian (53.3%)	Vegan/ Vegetarian (33.3%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (46.7%)	Vegan/ Vegetarian (60.0%)	Vegan/ Vegetarian (53.3%)
	Valencia	Vegan/ Vegetarian (73.3%)	Vegan/ Vegetarian & Healthy (30.8%)	Vegan/ Vegetarian (46.7%)	Vegan/ Vegetarian (46.7%)	Vegan/ Vegetarian (53.3%)	Vegan/ Vegetarian (41.7%)	Vegan/ Vegetarian (64.3%)	Vegan/ Vegetarian (53.3%)
Town/cities 250,000-999,999 inhabitants	Seville	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (75.0%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (90.0%)	Vegan/ Vegetarian (75.0%)	Vegan/ Vegetarian (81.8%)	Vegan/ Vegetarian (72.7%)
	Zaragoza	Vegan/ Vegetarian (50.0%)	Vegan/ Vegetarian (62.5%)	Vegan/ Vegetarian (54.6%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (83.3%)	Vegan/ Vegetarian (66.7%)	Vegan/ Vegetarian (58.3%)	Vegan/ Vegetarian (66.7%)
Town/cities 50,000-249,999 inhabitants	Lugo	American (42.9%)	25.0%[1]	25.0%[1]	Vegan/ Vegetarian (66.7%)	25.0%[2]	Vegan/ Vegetarian (100.0%)	25.0%[2]	25.0%[2]
	Cuenca	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]
Towns/cities ≤49,999 inhabitants	Plasencia	American (66.7%)	American (66.7%)	American (66.7%)	American (66.7%)	American (66.7%)	American (66.7%)	American (66.7%)	American (100.0%)
	Calatayud	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]	-[3]

[1] Corresponds to the American, Italian and Vegan/Vegetarian cuisine types.
[2] Corresponds to the American, Italian and Mediterranean cuisine types.
[3] No data/no restaurants offering vegan/vegetarian delivery for this income in this town.

CONCLUSIONS AND FUTURE STEPS

Conclusions and future steps in relation to the deployment and degree of penetration of the main food delivery service aggregator platforms present in the Spanish market

The results of the online survey are in line with the fact that food delivery aggregator platforms are based on **convenience consumption**, i.e. consumers seek to purchase the product without making much effort. With this approach, choices are directed towards fast food and cheaper food offerings that meet needs immediately.

The growing use by the Spanish population of this type of service makes them an **objective to implement public health initiatives** in order to improve the nutritional quality of the food offered and consumed. These initiatives, together with other strategies focused on improving food environments, can contribute to the reduction of the risk of obesity and non-communicable diseases associated with diet in the Spanish population.

The survey results also highlight the **demand for more available options and more information** on menu ingredients. Therefore, the inclusion of key messages on recommendations for a healthy and sustainable diet, as well as the description of the nutritional quality of the menus offered can help make healthier choices.

Taking into account the importance for most respondents of the cost in choosing the type of food, **economic incentives and offers on healthier products** such as fruits and vegetables are also a measure to increase their consumption, which could be implemented in food delivery aggregators.

Although the results of the online survey are indicative and do not allow an extrapolation to the Spanish population, they can guide the design of future studies, as well as the implementation of initiatives to help those who use home delivery services in choosing healthier options.

Conclusions and future steps in relation to the food offer of the aggregator platforms present in the Spanish market based on the user's location, according to the criteria of population and income level

The 3 food delivery aggregator platforms operating in Spain (Glovo, Just Eat and Uber Eats) generally offer **service coverage nationwide**, although there are some differences between them. There are aggregators that do not operate in any city or in any location associated with a type of income. In addition, for some search criteria used, such as children's food, there are operators that do not show results. Regarding globally sponsored restaurants, the percentage is low, with an aggregator that does not mention sponsored restaurants in the data collected for this study. The highest number of sponsored restaurants was observed when using the "offers" search criterion in one of the aggregators (25 % of the restaurants that appeared under the offers criterion were sponsored). Taking into account the differences observed between the aggregators, for future studies it is important to maintain the collection of information from all the aggregators present in the national territory.

Regarding the classification of the type of food offered through the aggregators, the need to **standardise and define criteria for the classification of the different types of food offered** has been highlighted, especially in cases such as the "healthy" food category. In this study we have worked with the cuisine type that the restaurant identifies itself and when there were several, the one that corresponds to the largest number of menus offered by the restaurant has been selected. The reason why some restaurants self-identified several cuisine types could be to give greater coverage to the tastes of consumers.

Generally, **the aggregators' offer is linked to the one that exists on the street.** In those town/cities where there is less offer of catering establishments, there is also less variety in the aggregator. The towns with fewer inhabitants tend to have fewer offers and less variety in terms of the type of food offered. For example, in Calatayud in income 1 (lower income) in the lunch time slot there are only 4 restaurants that offer food delivery, all of them Turkish food. For this reason, in the towns with the lowest number of inhabitants and the smallest lowest offer, for all the search criteria a type of food predominates, which is usually American or Turkish.

The results of this study do not collect information on the actual consumption of food by users, but rather show the food offers that are available through the main food delivery aggregators in Spain, which are adapted to the demand made by consumers.

The differences in the frequency with which different types of food appear when applying one search criteria or another in the aggregator show the importance and influence that these filters can have on the selection of the type of food. If filters are not used, the top menus that appear in each aggregator could depend on factors such as restaurant sponsorship, and especially other positioning criteria established by the aggregator itself based on the knowledge allowed by **artificial intelligence** (AI) and machine learning. Aggregators can use proprietary machine learning-based algorithms to decide which restaurants or meals to display to the consumer, or which restaurants or meals to display at the top of a search result. In addition, they can generate a customer profile for each user by

combining factors such as order history, application use, location data and the type of device used (laptop, Android phone or iPhone, etc.). The future European Union regulations on AI may contribute to making more transparent the process whereby food delivery aggregator platforms give greater visibility to some establishments than to others.

In this study, differences are observed in the types of food that appear when the user uses different **search criteria**. For example, when using the criterion of most popular or favourite menus in towns/cities with a greater number of inhabitants, it is observed that Mediterranean and Japanese food appear in a greater proportion, while in towns with less than 250,000 inhabitants the most popular menus are American or Turkish food, probably due to the lack of other options in food delivery services. However, if the offers criterion is applied, American food is the one that appears in the majority in all the localities, although in those with a greater number of inhabitants, healthy food also appears.

On the other hand, the study has highlighted the **importance of small and medium-sized restaurants** and not only large restaurant chains in home delivery services. The location and food offer data of these establishments are also a target to promote healthy options.

The popularity of food delivery platforms has also led to the emergence of **dark kitchens** (also known as ghost kitchens, cloud kitchens or virtual kitchens), spaces in which food is prepared solely for delivery through these types of platforms. Although this study does not provide information on this type of kitchen, they are also an objective to be taken into account in the design of initiatives to improve the food offer available on this type of platform.

The digital environment constitutes a new objective on which to focus efforts to perform public health interventions that promote healthy and sustainable nutritional options, in which to issue nutritional policies such as providing nutritional information or improving the nutritional composition and the offer of menus (sponsorships, most relevant positions, etc.).

The main challenges identified are the lack of available data on the actual consumption of food purchased through this type of platform, the harmonisation of the classification of the type of food/establishment (currently under the restaurant's own criteria), the absence of specific regulation on these services and the limited number of scientific studies and initiatives implemented by other countries to improve the food environment in relation to the services provided by food delivery aggregator platforms.

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ANNEXES

ANNEX I QUESTIONNAIRE

The questionnaire includes 19 questions, organised into 3 blocks.

Answer options are predetermined, except for question 3 (Q3) postal code which includes a free field.

Multiple choice is allowed in some questions.

SOCIO-DEMOGRAPHIC DATA

Q1: Gender

- Female
- Male
- Non-binary

Q2: Age range

- Under 18 years old
- 19 to 30 years old
- 31 to 45 years old
- 46 to 65 years old
- Over 66 years old

Q3: Postal code

Free field

CONSUMPTION HABITS

Q4: Have you consumed food delivery in the last 6 months?

- Yes
- No

Q5: Frequency of use of the delivery service

- Less than once a month
- Once a week
- Once a month
- Several times a month
- Several times each week

Q6: Order, from highest frequency to lowest, the delivery companies you usually use

- Uber Eats
- Glovo
- Just Eat
- Others

Q7: Please, indicate why you choose most often the company you put first (multiple choice)

- It has a greater variety of restaurants in my area
- The offer is wider
- I receive higher discounts
- It has a better price
- I am guided by the quality of the service
- Because of its delivery costs
- Easier than other apps/websites
- Payment facilities
- Better quality food

Q8: What are the reasons you order delivery? (multiple choice)

- Convenience
- Gatherings with family or friends
- Try different food
- It's occasional/when I feel like it
- Meals at work

Q9: What is the average price you usually pay when ordering delivery?

- Between 10 and 20€
- Between 21 and 35€
- Over35€

Q10: Preferred hours for ordering food

- Dinner
- Lunch
- Breakfast
- Snack

Q11: Has COVID changed the frequency that you order food at home?

- No
- Yes
- Previously yes, but not now

Q12: What type of food do you prefer to order? (multiple choice)

- Chinense
- American
- Japanese
- Mediterranean
- Vegetarian / Vegan
- Fast food
- Set menu
- Children
- Healthy
- Indian
- Turkish
- Italian
- Baguettes/Sandwiches
- Mexican
- Latin American
- Other

Q13: When ordering, which option is the most attractive for you?

- Home delivery
- Order & collect

Q14: What do you base yourself on when choosing food? (multiple choice)

- Recommendations or best rated
- Pricing
- Photographs
- Ingredients and preparations
- Offers
- None/only what I feel like

PERCEPTION OF THE QUALITY OF THE AGGREGATOR PLATFORM'S OFFER

Q15: Do you consider ordering delivery as an UNHEALTHY option for food?

- Yes, I don't think it's a healthy option
- No, it may be a healthy option

Q16: Yes, why?

- Encourages you to change your diet to a less healthy one
- Prices are usually lower for unhealthy food
- You don't know the ingredients used in your order

Q17: No, why?

- You can choose the type of food you want
- Restaurants offer healthy alternatives
- I trust that the dishes have been prepared with the highest possible quality

Q18: Tell us what you miss in these chains (multiple choice)

- More food options available with special preparation (gluten-free, nut-free, dairy-free, etc.)
- Sustainable containers
- Direct contact with the restaurant
- Other menus
- Greater distribution in my area
- Other

Q19: What would make your food delivery consumption increase? (multiple choice)

- Reduce prices of dishes and menus
- Remove payment for delivery and service fees
- Having a wider variety of restaurants
- Encourage the next purchase with free dishes or drinks
- Reduce delivery times
- Improve working conditions in these companies
- Other

ANNEX II TABLES WITH SURVEY RESULTS

Tables obtained with STATA 16.1

SOCIO-DEMOGRAPHIC DATA

Q1: Género

Gender	No. of participants	Percentage (%)
Female	311	68.89
Male	132	29.66
Non-binary	2	0.45
Total	445	100.00

Q2: Age range

Age range	No. of participants	Percentage (%)
<18 years	1	0.22
19 to 30 years old	64	14.38
31 to 45 years old	268	60.22
46 to 66 years old	107	24.04
Over 66 years old	5	1.12
Total	445	100.00

Q3: Postal code

No. of participants who indicated the same postal code	No. of different postal codes indicated	Total participants
4	4	16
3	18	54
2	52	104
1	271	271
	328	445

CONSUMPTION HABITS

Q4: Have you consumed food delivery in the last 6 months?

Delivery within the last 6 months	No. of participants	Percentage (%)
Yes	387	86.97
No	58	13.03
Total	445	100.00

Delivery consumption in the last 6 months depending on gender

	Delivery within the last 6 months		
Gender	**No**	**Yes**	**Total**
Male	16 12.12%	116 87.88 %	132 100.00%
Female	42 13.50%	269 86.50%	311 100.00%
Non-binary	0 0.00%	2 100.00%	2 100.00%
Total	58 13.03%	387 86.97%	445 100.00%

Delivery consumption in the last 6 months depending on the age group

	Delivery within the last 6 months		
Age range	**No**	**Yes**	**Total**
<18 years	0 0.00%	1 100 %	1 100.00%
19 to 30 years old	5 7.81%	59 92.19%	64 100.00%
31 to 45 years old	29 10.82%	239 89.18%	268 100.00%
46 to 65 years old	21 19.63%	86 80.7%	107 100.00%
Over 66 years old	3 60.00%	2 40.00%	5 100.00%
Total	58 13.03%	387 86.97%	445 100.00%

Q5: Frequency of use of the delivery service

Frequency of use of delivery service	No. of participants	Percentage (%)
Less than once a month	131	29.44
Once a week	46	10.34
Once a month	101	22.70
Several times a month	149	33.48
Several times a week	18	4.04
Total	445	100.00

Frequency of use of the delivery service based on whether they have used it in the last 6 months

	Delivery within the last 6 months	
Delivery within the last 6 months	**No**	**Yes**
Less than once a month	52 89.66%	79 20.41%
Once a week	1 1.72%	45 11.63%
Once a month	1 1.72%	100 25.84%
Several times a month	4 6.90%	145 37.47%
Several times a week	0 0.00%	18 4.65%
Total	58 100.00%	387 100.00%

Frequency of use of the delivery service among participants who reported having used it in the last 6 months

Frequency of use of delivery service	No. of participants	Percentage (%)
Less than once a month	79	20.41
Once a week	45	11.63
Once a month	100	25.84
Several times a month	145	37.47
Several times a week	18	4.65
Total	387	100.00

Q6: Order, from highest frequency to lowest, the delivery companies you usually use

Preference of Uber Eats

Preference of Uber Eats	No. of participants	Percentage (%)
1	92	20.67
2	86	19.33
3	153	34.38
4	114	25.62
Total	445	100.00

Preference of Glovo

Preference of Glovo	No. of participants	Percentage (%)
-	1	0.22
1	132	29.66
2	144	32.36
3	100	22.47
4	68	15.28
Total	445	100.00

Preference of Just Eat

Preference of Just Eat	No. of participants	Percentage (%)
1	126	28.31
2	167	37.53
3	98	22.02
4	54	12.13
Total	445	100.00

Preference of others

Preference of others	No. of participants	Percentage (%)
-	1	0.22
1	95	21.35
2	48	10.79
3	93	20.90
4	208	46.74
Total	445	100.00

Q7: Please, indicate why you choose most often the company you put first (multiple choice)

Reason why you most often choose the company listed first	No. of participants select	% participants select	% response selected from total responses selected
It has a greater variety of restaurants in my area	289	64.94	17.97
It has higher discounts	204	45.84	12.68
The offer is wider	193	43.37	12.00
They have a better price	173	38.88	10.75
Easier than other apps/websites	165	37.08	10.26
Because of its delivery costs	158	35.51	9.82
I am guided by the quality of the service	149	33.48	9.26
Better quality food	139	31.24	8.64
Payment facilities	138	31.01	8.58
Total responses selected	1,608		

Q8: What are the reasons you order delivery? (multiple choice)

Reason for requesting delivery	No. participants select	% participants select	% answers selected from total answers selected
Convenience	301	67.64	41.9
It's occasional/when I feel like it	228	51.24	31.8
Gatherings with family or friends	105	23.60	14.6
Try different food	69	15.51	9.6
Meals at work	15	3.37	2.1
Total responses	718		100.0

Q9: What is the average price you usually pay when ordering delivery?

What is the average price you usually pay when ordering delivery?	No. participants	Percentage (%)
Between €10 and €20	168	37.75
Between €21 and €35	231	51.91
Over €35	46	10.34
Total	445	100.00

Q10: Preferred hours for ordering food

Preferred hours for ordering food	No. of participants	Percentage (%)
Dinner	362	81.35
Lunch	77	17.30
Snack	4	0.90
Breakfast	2	0.45
Total	445	100.00

Q11: Has COVID changed the frequency that you order food at home?

Has COVID changed the frequency that you order food at home?	No. of participants	Percentage (%)
No	232	52.13
Yes	152	34.16
Previously yes, but not now	61	13.71
Total	445	100.00

Q12: What type of food do you prefer to order? (multiple choice)

Preferred food type	No. participants select	% participants select	% response selected from total responses selected
Fast food	243	54.61	22.25
Chinese	213	47.98	19.5
American	198	44.49	18.1
Japanese	116	26.07	10.6
Mediterranean	100	22.47	9.2
Healthy	57	12.81	5.2
Indian	52	11.69	4.8
Vegetarian / Vegan	40	8.99	3.7
Set menu	28	6.29	2.6
Children	15	3.37	1.4
Italian	11	2.47	1.0
Turkish	10	2.25	0.9
Latin American	2	0.45	0.2
Mexican	2	0.45	0.2
Baguettes/Sandwiches	1	0.22	0.1
Other (Modern, Hawaiian, Lebanese, Chicken)	4	0.90	0.4
Total responses	1,092		100.0

Q13: When ordering, which option is the most attractive for you?

When ordering, which option is the most attractive for you?	No. of participants	Percentage (%)
Home delivery	410	92.13
Order & collect	35	7.87
Total	445	100.00

Q14: What do you base yourself on when choosing food? (multiple choice)

Reasons for food choice	No. participants select	% participants select	% response selected from total responses selected
Pricing	224	50.34	25.6
Offers	174	39.10	19.9
Recommendations or best rated	168	37.75	19.2
Ingredients and preparations	146	32.81	16.7
None/only what I feel like	97	21.80	11.1
Photographs	66	14.83	7.5
Total responses	875		100.0

PERCEPTION OF THE QUALITY OF THE AGGREGATOR'S OFFER

Q15: Do you consider ordering delivery as an UNHEALTHY option for food?

Do you consider ordering delivery as an UNHEALTHY option for food?	No. of participants	Percentage (%)
No, it may be a healthy option	254	57.08
Yes, I don't think it's a healthy option	191	42.92
Total	445	100.00

Consideration of ordering delivery as an UNHEALTHY option for food based on whether it has been ordered in the last 6 months

Do you consider ordering delivery as an UNHEALTHY option for food?	Delivery order within the last 6 months	
	NO	YES
No, it may be a healthy option	25 43.10%	229 59.17%
Yes, I don't think it's a healthy option	33 56.90%	158 40.83%
Total	58 100.00%	387 100.00%

Q16: Yes, why?

Reason for considering that ordering delivery is an unhealthy option	No. participants	%
Encourages you to change your diet to a less healthy one	84	44.0
Prices are usually lower for unhealthy food	67	35.1
You don't know the ingredients used in your order	40	20.9
Total	191	100.0

Q17: No, why?

Reason for considering that ordering delivery is not an unhealthy option	No. participants	Percentage (%)
You can choose the type of food you want	160	63.0
Restaurants offer healthy alternatives	71	28.0
I trust that the dishes have been prepared with the highest possible quality	23	9.1
Total	254	100.0

Q18: Tell us what you miss in these platforms (multiple choice)

Options you feel are lacking	No. participants select	% participants select	% response selected from total responses selected
Greater distribution in my area	186	41.80	25.3
More especially prepared food options available	158	35.51	21.5
Sustainable containers	144	32.36	19.6
Direct contact with restaurant	122	27.42	16.6
Other menus	101	22.7	13.7
Others	25	5.6	3.4
Total responses	736		100.0

Q19: What would make your food delivery consumption increase? (multiple choice)

Options that would increase delivery consumption	No. participants select	% participants selecting the option	% response selected from total responses selected
Reduce prices of dishes and menus	235	52.81	21.6
Remove payment for delivery and service fees	228	51.24	20.9
Having a wider variety of restaurants	185	41.57	17.0
Encourage the next purchase with free dishes or drinks	169	37.98	15.5
Improve working conditions in these companies	158	35.51	14.5
Reduce delivery times	98	22.02	9.0
Others	17	3.80	1.6
Total responses	1,090		100.0

ANNEX III DESCRIPTION OF SIMULATIONS AND LOGS COLLECTED BY AGGREGATOR, TOWN/CITY AND SEARCH CRITERIA

1. Selected town/cities and number of inhabitants

Town/City	Autonomous Community	Inhabitants	Average household income
Madrid	Madrid	3,305,408 (2021)	41,830€ (2020)
Barcelona	Catalonia	1,636,732 (2021)	38,226€ (2020)
Valencia	Valencian Community	789,744 (2021)	31,208€ (2020)
Seville	Andalusia	684,234 (2021)	28,912€ (2020)
Zaragoza	Aragon	675,301 (2021)	33,654€ (2020)
Cuenca	Community of Castilla-La Mancha	53,988 (2021)	26,719€ (2020)
Calatayud	Aragon	19,870 (2021)	33,654€ (2020)
Plasencia	Extremadura	39,558 (2021)	24,373€ (2020)
Lugo	Galicia	97,613 (2021)	28,176€ (2020)

Source: National Institute of Statistics https://www.ine.es/jaxiT3/Tabla.htm?t=53689&L=0

2. Addresses and census sections by income bracket for each location

	Census section of income bracket 1: between 0 and 74.9% of the average household income	Census section of income bracket 2: between 75% and 124.9% of the average household income	Census section of income bracket 3: between 125% and 199.9% of the average household income	Census section of income bracket 4: that greater than or equal to 200% of the average income of the average household income
MADRID	C. de Felisa Méndez 6	Calle de la Espada 4	Calle de Sangarcía 11	Calle Velázquez 16
	22,431.53 €	33,449.04 €	55,102.36 €	89,731.00 €
	Madrid sección 13040	Madrid sección 01028	Madrid sección 02009	Madrid sección 04012
	2807913040	2807901028	2807902090	2807904012
BARCELONA	Carrer de Sant Pacia 6	Carrer de Sant Honorat 10	Calle de Atenas 38	Carrer d'Iradier 30
	21,900.09 €	28,715.01 €	69,107.33 €	89,731.00 €
	Barcelona sección 01008	Barcelona sección 01025	Barcelona sección 05077	Barcelona sección 05032
	801901008	801901025	801905077	801905004
VALENCIA	Calle Antella 1	Calle Ontinyent 1	Carrer Doctor Ferran 1	Calle Cirilo Amorós 50
	15,962.64 €	36,755.37 €	49,400.39 €	89,731.00 €
	València sección 07027	València sección 03052	València sección 06014	València sección 02035
	4625007027	4625003052	4625006014	4625002035

	Census section of income bracket 1: between 0 and 74.9% of the average household income	Census section of income bracket 2: between 75% and 124.9% of the average household income	Census section of income bracket 3: between 125% and 199.9% of the average household income	Census section of income bracket 4: that greater than or equal to 200% of the average income of the average household income
SEVILLE	Calle Perdiz 1	Calle Peris Mencheta 5	Avenida de la Buhaira	Calle Luis Rosales 10
	13,645.57 €	30,178.69 €	43,539.72 €	75,620.48 €
	Sevilla sección 04004	Sevilla sección 01022	Sevilla sección 08007	Sevilla sección 05048
	4109104004	4109101022	4109108007	4109105048
ZARAGOZA	Calle San Agustín 6	C. del Temple, 1	Francisco íñiguez almech 7	C. Juan bruil 4
	22,933.40 €	29,018.51 €	46,042.81 €	74,524.32 €
	Zaragoza sección 01008	Zaragoza sección 01036	Zaragoza sección 07008	Zaragoza sección 02026
	5029701008	5029701036	5029707008	5029702026
CUENCA	C. de Albacete 1	C. de Santa Inés 5	C. Lorenzo Goñi 7	C de Sto Tomás 45
	20,934.81 €	26,826.33 €	41,501.04 €	46,145.17 €
	Cuenca sección 04014	Cuenca sección 04016	Cuenca sección 04018	Cuenca sección 03005
	1607804014	1607804016	1607804018	1607803005
CALATAYUD	Camino a ribota	Calle Valencia	C. Río Aranda, 19	Barrio Marivella
	20,524.34 €	25,950.86 €	47,092.99€	47,092.99 €*
	Calatayud sección 03002	Calatayud sección 04001	Calatayud sección 02003	Calatayud sección 02003
	5006703002	5006704001	5006702003	5006702003
*There are no addresses within income bracket 4.				
PLASENCIA	Calle Doctor Izarra 1	Calle Luis Chamizo 2	Avenida del Valle 5	Avenida Mazuela 1
	18,946.32 €	36,399.89 €	37,071.44 €	37,820.57 €
	Plasencia sección 03003	Plasencia sección 03002	Plasencia sección 02001	Plasencia sección 01011
	1014803003	1014803002	1014802001	1014801011
LUGO	Urbanización as Regas	Rua xardin 1	Rua concepción arenal 5	Rúa Soto Freire 1
	21,763.00	23,478.60	39,463.56	45,892.28
	Lugo sección 03001	Lugo sección 03006	Lugo sección 04001	Lugo sección 02010
	2702803001	2702803006	2702804001	2702802010

3. Logs collected and analysed by aggregator, location, time slot and search criteria

For each aggregator, 432 simulations have been performed (6 criteria, 2 time slots and 4 income brackets).

6,277 logs have been collected through the 3 main aggregator platforms for food delivery.

In some simulations, no logs have been collected, since there was no menu and restaurant offer associated with the criteria specified in the table.

In other cases, more logs than planned in each simulation have been analysed since they had already been collected for a certain time slot.

Aggregator A	30 top positions	10 most popular menus	10 menus with offers	10 children's menus	10 healthy menus	10 vegan menus	TOTAL
Madrid	120 (CM 60/CN 60)	58 (CM 38/ CN 20)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	39 (CM 19/CN 20)	36 (CM 18/CN 18)	333
Barcelona	120 (CM 60/CN 60)	52 (CM 32/CN 20)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	332
Valencia	120 (CM 60/CN 60)	54 (CM 36 / CN 18)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	36 (CM 20/CN 16)	34 (CM 19/CN 15)	324
Seville	120 (CM 60/CN 60)	54 (CM 25 / CN 29)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	32 (CM 14/CN 18)	326
Zaragoza	115 (CM 55/CN 60)	58 (CM 32/CN 26)	45 (CM 25/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	26(CM 14/CN 12)	324
Cuenca	120 (CM 60/CN 60)	37 (CM 19/CN 18)	40 (CM 20/CN 20)	29 (CM 15/ CN 14)	8 (CM 4/CN 4)	0	234
Calatayud	27 (CM 13/ CN 14)	28 (CM 14/ CN 14)	0	0	0	0	55
Plasencia	44 (CM 14/ CN 30)	42 (CM 12/ CN 30)	34 (CM 18/CN 16)	17 (CM6/ CN 11)	0	24 (CM12/ CN12)	161
Lugo	120 (CM 60/CN 60)	53 (CM 31/ CN 22)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	0	13 (CM7/ CN 6)	266
TOTAL	906	436	319	286	203	205	2,355

CM: Lunch time slot
CN: Dinner time slot

Aggregator B	30 top positions	10 most popular menus	10 menus with offers	10 children's menus	10 healthy menus	10 vegan menus	TOTAL
Madrid	119 (CM 60/CN 59)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	40 (CM 20/CN 20)	35(CM 17/CN 18)	274
Barcelona	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	40 (CM 20/CN 20)	40 (CM 20/CN 20)	280
Valencia	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	40 (CM 20/CN 20)	40 (CM 20/CN 20)	280
Seville	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	36 (CM 18/CN 18)	27 (CM 14/CN 13)	263
Zaragoza	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	15 (CM 7/CN 8)	22 (CM 11/CN 11)	237
Cuenca	102 (CM 50/CN 52)	36 (CM 18/CN 18)	20 (CM 10/CN 10)	0	8 (CM 4/ CN 4)	0	166
Calatayud	27 (CM 12/ CN 15)	18 (CM 5/ CN 13)	20 (CM 5/ CN 15)	0	0	0	65
Plasencia	55 (CM 28/ CN 27)	28 (CM 13/CN 15)	16 (CM 8/ CN 8)	0	0	0	99
Lugo	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	0	0	8 (CM 4/CN 4)	208
TOTAL	903	322	296	0	179	172	1,872

CM: Lunch time slot
CN: Dinner time slot

Aggregator C	30 top positions	10 most popular menus	10 menus with offers	10 children's menus	10 healthy menus	10 vegan menus	TOTAL
Madrid	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	320
Barcelona	119 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	319
Valencia	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	35 (CM 20/ CN 15)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	315
Seville**	90 (CM 45/ CN 45)	30 (CM 15/CN 15)	30 (CM 15/CN 15)	30 (CM 15/ CN 15)	30 (CM 15/CN 15)	13 (CM 5/CN 8)	223
Zaragoza	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	40 (CM 20/ CN 20)	40 (CM 20/CN 20)	32 (CM 12 /CN 20)	312
Cuenca	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	8 (CM 4/ CN 4)	16 (CM 8/CN 8)	0	224
Calatayud	0	0	0	0	0	0	0
Plasencia	34 (CM 14/ CN 20)	34 (CM 14/CN 20)	20 (CM 8/ CN 12)	0	0	0	88
Lugo	120 (CM 60/CN 60)	40 (CM 20/CN 20)	40 (CM 20/CN 20)	8 (CM 4/ CN 4)	11(CM 7/CN 4)	30 (CM 15/CN 15)	249
TOTAL	843	304	290	201	217	195	2,050

CM: Lunch time slot
CN: Dinner time slot

** Aggregator C does not deliver food to the address indicated in the income 1 location in Seville

ANNEX IV SIMULATION RESULTS

TOP MENUS WITHOUT APPLYING ANY SEARCH CRITERIA

% Type of food of the top menus (lunch+dinner) that appear in each aggregator

	Platform			
Cuisine type (Top Menu)	**Aggregator A**	**Aggregator B**	**Aggregator C**	**Total (%)**
American	**31.13**	**24.03**	**45.08**	**33.14**
Argentinian	1.77	1	0.59	1.13
Baguettes/Sandwiches	1.1	11.74	7	6.6
Grill	0	0.66	0.47	0.38
Brazilian	0	0	0.12	0.04
Home cooking	0	2.66	1.42	1.36
Chinese	2.76	5.43	2.25	3.51
Colombian	0.11	0	0	0.04
Breakfast	0	0	0.24	0.08
Galician	0	0.55	0.36	0.3
Greek	0	0.55	1.54	0.68
Hawaiian	0	0.33	0.12	0.15
Ice-cream shops	0	0.11	0	0.04
Indian	0.99	0.78	0.12	0.64
English	0.66	0	0	0.23
Italian	7.73	6.09	7.12	6.98
Japanese	1.99	6.31	4.74	4.34
Latin American	1.77	4.32	1.42	2.53
Lebanese	0.11	0	0	0.04
Moroccan	0	0.44	0	0.15
Mediterranean	**24.5**	6.76	**8.07**	**13.24**
Mexican	2.1	1.99	6.64	3.51
Nepalese	0.22	0	0	0.08
Bakery	0	0	0.12	0.04
Pastry/Confectionery	1.21	0.11	1.78	1.02
Peruvian	0.44	0	0.12	0.19
Portuguese	0	0.11	0	0.04
Healthy	8.5	5.76	4.03	6.15
South African	0.11	0	0.24	0.11
Thai	0.22	1.44	0.71	0.79
Tapas	0.11	0.55	0	0.23
Turkish	11.37	**18.16**	5.22	**11.73**
Vegan/Vegetarian	0.88	0.11	0.47	0.49
Venezuelan	0.22	0	0	0.08
Total	100.00%	100.00%	100.00%	100.00%

% Type of food of the top menus that appear in the 3 aggregators in each time slot

	Slot		
Cuisine type (Top Menu)	**Dinner**	**Lunch**	**Total**
American	**37.36**	**28.83**	**33.14**
Argentinian	0.89	1.37	1.13
Baguettes/Sandwiches	3.43	**9.84**	6.60
Grill	0.52	0.23	0.38
Brazilian	0.00	0.08	0.0
Home cooking	1.19	1.53	1.36
Chinese	4.25	2.75	3.51
Colombian	0.07	0.00	0.04
Breakfast	0.00	0.15	0.08
Galician	0.15	0.46	0.30
Greek	0.6	0.69	0.68
Hawaiian	0.30	0.00	0.15
Ice-cream shops	0.00	0.08	0.04
Indian	0.97	0.31	0.64
English	0.22	0.23	0.23
Italian	7.38	6.56	6.98
Japanese	5.82	2.82	4.3
Latin American	1.57	3.51	2.53
Lebanese	0.07	0.00	0.04
Moroccan	0.30	0.00	0.15
Mediterranean	**10.51**	**16.02**	**13.24**
Mexican	3.58	3.43	3.51
Nepalese	0.07	0.08	0.08
Bakery	0.00	0.08	0.04
Pastry/Confectionery	0.30	1.75	1.02
Peruvian	0.00	0.38	0.19
Portuguese	0.07	0.00	0.04
Healthy	5.97	6.33	6.15
South African	0.15	0.08	0.11
Thai	0.89	0.69	0.79
Tapas	0.15	0.31	0.23
Turkish	**12.68**	**10.76**	**11.73**
Vegan/Vegetarian	0.37	0.61	0.49
Venezuelan	0.07	0.08	0.08
Total	**100.00%**	**100.00%**	**100.00%**

% Type of food of the top menus (lunch+dinner) that appear in the 3 aggregators by income

Cuisine type (Top Menu)	Income 1	Income 2	Income 3	Income 4	Total
American	**31.29**	**33.33**	**33.33**	**34.55**	**33.14**
Argentinian	1.26	1.03	1.18	1.06	1.13
Baguettes/Sandwiches	5.19	6.64	6.34	8.18	6.6
Grill	0.47	0.74	0.15	0.15	0.38
Brazilian	0	0	0.15	0	0.04
Home cooking	1.42	1.33	1.18	1.52	1.36
Chinese	5.03	3.24	3.39	2.42	3.51
Colombian	0	0	0.15	0	0.04
Breakfast	0.16	0.15	0	0	0.08
Galician	0.31	0.15	0.59	0.15	0.3
Greek	0.94	0.74	0.44	0.61	0.68
Hawaiian	0	0.15	0.29	0.15	0.15
Ice-cream shops	0	0	0.15	0	0.04
Indian	0.79	0.88	0.74	0.15	0.64
English	0.16	0.29	0.29	0.15	0.23
Italian	6.45	7.08	6.64	7.73	6.98
Japanese	3.93	4.57	3.39	5.45	4.34
Latin American	3.14	2.95	2.06	1.97	2.53
Lebanese	0.16	0	0	0	0.04
Moroccan	0.16	0.29	0.15	0	0.15
Mediterranean	**15.25**	**13.57**	**12.24**	**11.97**	**13.24**
Mexican	3.14	3.54	4.13	3.18	3.51
Nepalese	0.16	0.15	0	0	0.08
Bakery	0	0.15	0	0	0.04
Pastry/Confectionery	0.47	1.62	1.03	0.91	1.02
Peruvian	0.31	0.15	0	0.3	0.19
Portuguese	0	0	0	0.15	0.04
Healthy	4.25	4.87	7.67	7.73	6.15
South African	0.16	0	0.15	0.15	0.11
Thai	0.79	0.88	0.88	0.61	0.79
Tapas	0.47	0.15	0.15	0.15	0.23
Turkish	13.84	11.06	11.95	10.15	**11.73**
Vegan/Vegetarian	0.16	0.29	1.03	0.45	0.49
Venezuelan	0.16	0	0.15	0	0.08
Total	100.00%	100.00%	100.00%	100.00%	100.00%

% Type of food of the top menus (lunch+dinner) that appear in the 3 aggregators by location

	Town/city									
Cuisine type (Top Menu)	**Barcelona**	**Calatayud**	**Cuenca**	**Lugo**	**Madrid**	**Plasencia**	**Seville**	**Valencia**	**Zaragoza**	**Total**
American	**33.7**	20.37	**34.5**	**31.94**	**32.87**	**60.9**	**32.73**	**30.56**	**27.32**	**33.14**
Argentinian	0.56	0	0	0	3.34	0	0.91	2.78	0.85	1.13
Baguettes/ Sandwiches	12.53	0	4.09	4.44	9.75	0	9.09	3.61	6.2	6.6
Grill	0	0	0	1.11	0.56	0	0	0	1.13	0.38
Brazilian	0.28	0	0	0	0	0	0	0	0	0.04
Home cooking	0.84	0	0	2.5	1.11	0	1.21	3.06	1.41	1.36
Chinese	2.79	0	4.97	3.06	5.29	0	4.24	1.39	4.79	3.51
Colombian	0	0	0	0	0.28	0	0	0	0	0.04
Breakfast	0	0	0	0	0	0	0	0	0.56	0.08
Galician	0.56	0	0	1.67	0	0	0	0	0	0.3
Greek	1.39	0	0	0	0.56	0	0	1.39	1.69	0.68
Hawaiian	0.28	0	0	0	0	0	0.91	0	0	0.15
Ice-cream shops	0	0	0	0	0.28	0	0	0	0	0.04
Indian	2.51	0	0.29	0	0.56	0	0.61	0.56	0.28	0.64
English	1.67	0	0	0	0	0	0	0	0	0.23
Italian	9.19	0	11.4	6.94	2.23	9.77	5.76	8.89	4.51	6.98
Japanese	8.64	0	1.17	2.5	4.74	0	2.73	4.17	8.45	4.34
Latin American	0.84	0	0	3.06	3.06	0	3.64	4.17	4.23	2.53
Lebanese	0	0	0	0	0	0	0	0	0.28	0.04
Moroccan	0	0	0	0	0.28	0	0.3	0	0.56	0.15
Mediterranean	6.41	0	15.2	14.17	12.81	3.01	18.18	15.28	16.9	**13.24**
Mexican	2.79	0	0.58	4.17	7.24	0	3.94	3.89	3.66	3.51
Nepalese	0	0	0	0	0	0	0	0	0.56	0.08
Bakery	0	0	0	0.28	0	0	0	0	0	0.04
Pastry/ Confectionery	1.39	0	1.46	1.11	0.56	0	0.3	1.11	1.69	1.02
Peruvian	0	0	0	0	1.11	0	0	0.28	0	0.19
Portuguese	0	0	0	0	0.28	0	0	0	0	0.04
Healthy	8.91	0	6.43	2.22	11.42	0	6.36	8.06	2.82	6.15
South African	0.84	0	0	0	0	0	0	0	0	0.11
Thai	1.11	0	0	0	0	0	0.91	3.33	0.56	0.79
Tapas	0.28	0	0	0.28	0.28	0	0	0.28	0.56	0.23
Turkish	2.23	**79.63**	19.88	19.44	1.11	26.32	7.58	6.39	9.86	**11.73**
Vegan/ Vegetarian	0.28	0	0	1.11	0	0	0.61	0.56	1.13	0.49
Venezuelan	0	0	0	0	0.28	0	0	0.28	0	0.08
Total	100	100	100	100	100	100	100	100	100	100

TOP MOST POPULAR MENUS

% Type of food from favourite or most popular menus that appear in each aggregator

	Platform			
Cuisine type (Popular Menus)	Aggregator A	Aggregator B	Aggregator C	Total
German	0.46	0	0	0.19
American	**25.23**	11.8	**29.61**	**22.41**
Argentinian	0.69	0.62	0.33	0.56
Baguettes/Sandwiches	1.61	5.59	5.26	3.86
Grill	0	0.31	0	0.09
Brazilian	0	0	0.33	0.09
Home cooking	0	2.48	0	0.75
Chinese	3.21	4.35	3.62	3.67
Breakfast	0.23	0.31	0	0.19
Galician	0	0.62	0	0.19
Greek	0.23	0.62	2.3	0.94
Hawaiian	0	0.93	0.66	0.47
Ice-cream shops	0.46	0	1.32	0.56
Indian	1.83	0.93	0.33	1.13
Italian	7.11	9.32	9.87	8.57
Japanese	8.72	9.32	19.41	11.96
Latin American	3.67	5.9	0.66	3.48
Lebanese	0	0	0.99	0.28
Moroccan	0	0.62	0	0.19
Mediterranean	**23.85**	7.45	5.92	**13.75**
Mexican	1.61	0	5.59	2.26
Bakery	0.92	0	0	0.38
Pastry/Confectionery	0.69	1.24	0	0.66
Healthy	3.21	10.56	5.92	6.21
South African	0	0	0.99	0.28
Thai	0.46	3.11	0	1.13
Tapas	0	0.31	0	0.09
Turkish	14.45	**23.6**	6.58	**14.97**
Vegan/Vegetarian	1.38	0	0.33	0.66
Total	100	100	100	100

% Type of food from the favourite or most popular menus that appear in the 3 aggregators in each time slot

	Slot		
Cuisine type (Popular Menus)	Dinner	Lunch	Total
German	0.19	0.18	0.19
American	**22.78**	**22.06**	**22.41**
Argentinian	0.39	0.74	0.56
Baguettes/Sandwiches	2.32	5.33	3.86
Grill	0	0.18	0.09
Brazilian	0.19	0	0.09
Home cooking	0.39	1.1	0.75
Chinese	5.21	2.21	3.67
Breakfast	0.19	0.18	0.19
Galician	0.19	0.18	0.19
Greek	0.77	1.1	0.94
Hawaiian	0.58	0.37	0.47
Ice-cream shops	0.19	0.92	0.56
Indian	0.97	1.29	1.13
Italian	8.69	8.46	8.57
Japanese	**15.44**	8.64	11.96
Latin American	1.54	5.33	3.48
Lebanese	0	0.55	0.28
Moroccan	0.39	0	0.19
Mediterranean	10.04	**17.28**	**13.75**
Mexican	1.93	2.57	2.26
Bakery	0.58	0.18	0.38
Pastry/Confectionery	0	1.29	0.66
Healthy	6.37	6.07	6.21
South African	0.19	0.37	0.28
Thai	1.35	0.92	1.13
Tapas	0	0.18	0.09
Turkish	**18.92**	11.21	**14.97**
Vegan/Vegetarian	0.19	1.1	0.66
Total	100.00%	100.00%	100.00%

% Type of food from the most popular menus (lunch+dinner) that appear in the 3 aggregators by income

Cuisine type (Popular Menus)	Income 1	Income 2	Income 3	Income 4	Total
German	0	0	0	0.8	0.19
American	19.08	**23.21**	**24.54**	**22.71**	**22.41**
Argentinian	0	0.36	1.12	0.8	0.56
Baguettes/Sandwiches	3.05	2.5	5.58	4.38	3.86
Grill	0	0	0	0.4	0.09
Brazilian	0	0.36	0	0	0.09
Home cooking	1.53	0	0.74	0.8	0.75
Chinese	3.82	4.29	3.72	2.79	3.67
Breakfast	0.38	0.36	0	0	0.19
Galician	0	0.36	0.37	0	0.19
Greek	1.15	1.07	1.12	0.4	0.94
Hawaiian	0	0.36	1.12	0.4	0.47
Ice-cream shops	0.76	0.36	0.37	0.8	0.56
Indian	1.15	2.5	0.74	0	1.13
Italian	7.63	7.5	7.43	11.95	8.57
Japanese	9.54	11.43	11.52	15.54	11.96
Latin American	5.73	3.21	2.6	2.39	3.48
Lebanese	0	0.36	0.37	0.4	0.28
Moroccan	0	0.36	0.37	0	0.19
Mediterranean	**21.37**	13.21	9.67	10.76	**13.75**
Mexican	1.91	3.57	1.49	1.99	2.26
Bakery	0.38	0.36	0.74	0	0.38
Pastry/Confectionery	0.38	1.79	0.37	0	0.66
Healthy	4.58	5.71	5.95	8.76	6.21
South African	0.76	0.36	0	0	0.28
Thai	1.15	1.07	1.49	0.8	1.13
Tapas	0	0	0.37	0	0.09
Turkish	15.65	14.64	16.36	13.15	**14.97**
Vegan/Vegetarian	0	0.71	1.86	0	0.66
Total	100	100	100	100	100

% Type of food from the most popular menus (lunch+dinner) that appear in the 3 aggregators by location

	Town/city									
Cuisine type (Popular Menus)	Barcelona	Calatayud	Cuenca	Lugo	Madrid	Plasencia	Seville	Valencia	Zaragoza	Total
German	1.52	0	0	0	0	0	0	0	0	0.19
American	11.36	19.57	**28.32**	**33.08**	7.97	**58.65**	16.94	16.42	16.67	**22.41**
Argentinian	1.52	0	0	0	0	0	0	1.49	1.45	0.56
Baguettes/ Sandwiches	6.82	0	1.77	3.01	13.77	0	0	0.75	4.35	3.86
Grill	0	0	0	0	0.72	0	0	0	0	0.09
Brazilian	0.76	0	0	0	0	0	0	0	0	0.09
Home cooking	0	0	0	0	2.17	0	2.42	0	1.45	0.75
Chinese	1.52	0	7.08	0	7.97	0	8.06	1.49	4.35	3.67
Breakfast	0.76	0	0	0	0	0	0	0	0.72	0.19
Galician	0	0	0	1.5	0	0	0	0	0	0.19
Greek	5.3	0	0	0	0.72	0	0.81	0	0.72	0.94
Hawaiian	0.76	0	0	0	0.72	0	2.42	0	0	0.47
Ice-cream shops	0	0	0	0	1.45	0	0.81	2.24	0	0.56
Indian	3.03	0	0	0	2.17	0	1.61	1.49	0.72	1.13
Italian	9.85	0	8.85	7.52	2.9	16.35	8.87	6.72	12.32	8.57
Japanese	**20.45**	0	5.31	4.51	**19.57**	0	10.48	**18.66**	16.67	11.96
Latin American	2.27	0	0	0	3.62	0	5.65	5.97	10.14	3.48
Lebanese	0	0	0	0	0	0	2.42	0	0	0.28
Moroccan	0	0	0	0	0	0	0	0	1.45	0.19
Mediterranean	10.61	0	19.47	15.04	13.77	3.85	**18.55**	14.18	**18.12**	**13.75**
Mexican	4.55	0	0	3.76	5.07	0	4.03	0.75	0	2.26
Bakery	3.03	0	0	0	0	0	0	0	0	0.38
Pastry/ Confectionery	1.52	0	0	0.75	0.72	0	0.81	1.49	0	0.66
Healthy	4.55	0	14.16	0	12.32	0	8.06	11.19	1.45	6.21
South African	2.27	0	0	0	0	0	0	0	0	0.28
Thai	0.76	0	0	0	0	0	0.81	7.46	0	1.13
Tapas	0.76	0	0	0	0	0	0	0	0	0.09
Turkish	4.55	**80.43**	15.04	30.83	2.17	21.15	7.26	9.7	7.97	14.97
Vegan/ Vegetarian	1.52	0	0	0	2.17	0	0	0	1.45	0.66
Total	100	100	100	100	100	100	100	100	100	100
Tapas	0.28	0	0	0.28	0.28	0	0	0.28	0.56	0.23
Turca	2.23	79.63	19.88	19.44	1.11	26.32	7.58	6.39	9.86	11.73
Vegana/ Vegetariana	0.28	0	0	1.11	0	0	0.61	0.56	1.13	0.49
Venezolana	0	0	0	0	0.28	0	0	0.28	0	0.08
Total	100	100	100	100	100	100	100	100	100	100

TOP MENUS WITH OFFERS

% Food type of the top menus with offers for each aggregator

	Platform			
Cuisine type (Menu with offers)	**Aggregator A**	**Aggregator B**	**Aggregator C**	**Total**
American	**46.71**	**27.36**	**46.9**	**40.44**
Argentinian	1.57	1.69	1.03	1.44
Baguettes/Sandwiches	0	9.8	3.79	4.42
Home cooking	0	4.05	1.03	1.66
Chinese	0	1.01	3.1	1.33
Korean	0.31	0	0	0.11
Breakfast	0	1.35	0.69	0.66
French	0.31	0	0	0.11
Galician	0	1.01	0	0.33
Greek	0.63	0.34	1.72	0.88
Hawaiian	0	0.34	0	0.11
Ice-cream shops	0	0	1.38	0.44
Indian	0.31	1.69	0.34	0.77
Italian	9.09	3.04	5.17	5.86
Japanese	1.88	5.74	8.28	5.19
Latin American	2.51	3.04	0.34	1.99
Moroccan	0	0.68	0	0.22
Mediterranean	9.4	8.11	7.24	8.29
Mexican	6.58	3.04	5.17	4.97
No cuisine type	0	1.01	0	0.33
Bakery	0.63	0	1.38	0.66
Pastry/Confectionery	0.63	0.68	1.72	0.99
Peruvian	0.31	0	0	0.11
Healthy	14.73	7.09	5.17	**9.17**
Thai	0	1.01	0	0.33
Turkish	4.08	17.57	5.17	8.84
Vegan/Vegetarian	0	0.34	0.34	0.22
Venezuelan	0.31	0	0	0.11
Total	100	100	100	100

% Type of food of the top menus with offers that appear in the 3 aggregators in each time slot

	Slot		
Cuisine type (Menu with offers)	**Dinner**	**Lunch**	**Total**
American	**43.33**	**37.5**	**40.44**
Argentinian	1.09	1.79	1.44
Baguettes/Sandwiches	0.88	8.04	4.42
Home cooking	1.75	1.56	1.66
Chinese	1.97	0.67	1.33
Korean	0.22	0	0.11
Breakfast	0.44	0.89	0.66
French	0.22	0	0.11
Galician	0.44	0.22	0.33
Greek	0.88	0.89	0.88
Hawaiian	0.22	0	0.11
Ice-cream shops	0	0.89	0.44
Indian	1.09	0.45	0.77
Italian	6.78	4.91	5.86
Japanese	7.88	2.46	5.19
Latin American	0.66	3.35	1.99
Moroccan	0.44	0	0.22
Mediterranean	7.66	8.93	8.29
Mexican	4.6	5.36	4.97
No cuisine type	0.22	0.45	0.33
Bakery	0	1.34	0.66
Pastry/Confectionery	0	2.01	0.99
Peruvian	0	0.22	0.11
Healthy	**10.5**	7.81	**9.17**
Thai	0.66	0	0.33
Turkish	7.88	**9.82**	8.84
Vegan/Vegetarian	0.22	0.22	0.22
Venezuelan	0	0.22	0.11
Total	100	100	100

% Type of food of the menus with offers (lunch+dinner) that appear in the 3 aggregators by income

Cuisine type (Menu with offers)	Income 1	Income 2	Income 3	Income 4	Total
American	**40.99**	**41.41**	**37.89**	**41.48**	**40.44**
Argentinian	1.35	1.76	0.88	1.75	1.44
Baguettes/Sandwiches	4.5	4.85	6.17	2.18	4.42
Home cooking	2.25	1.32	1.76	1.31	1.66
Chinese	1.35	2.2	1.32	0.44	1.33
Korean	0	0	0.44	0	0.11
Breakfast	0.45	1.32	0.88	0	0.66
French	0	0.44	0	0	0.11
Galician	0	0	0.88	0.44	0.33
Greek	0.9	1.32	0.44	0.87	0.88
Hawaiian	0	0	0.44	0	0.11
Ice-cream shops	0.9	0.44	0.44	0	0.44
Indian	0.45	0.44	2.2	0	0.77
Italian	6.31	4.85	7.05	5.24	5.86
Japanese	5.41	4.41	3.52	7.42	5.19
Latin American	3.6	2.64	1.32	0.44	1.99
Moroccan	0	0.44	0.44	0	0.22
Mediterranean	8.56	**9.25**	7.05	8.3	8.29
Mexican	2.7	4.85	4.41	7.86	4.97
No cuisine type	0.45	0	0	0.87	0.33
Bakery	1.8	0	0	0.87	0.66
Pastry/Confectionery	0.9	2.2	0.44	0.44	0.99
Peruvian	0	0	0	0.44	0.11
Healthy	4.95	7.49	**12.78**	**11.35**	**9.17**
Thai	0.45	0.44	0.44	0	0.33
Turkish	**11.26**	7.49	8.37	8.3	8.84
Vegan/Vegetarian	0	0.44	0.44	0	0.22
Venezuelan	0.45	0	0	0	0.11
Total	100	100	100	100	100

% Type of food of the menus with offers (lunch+dinner) that appear in the 3 aggregators by location

	Town/city									
Cuisine type (Menu with offers)	**Barcelona**	**Calatayud**	**Cuenca**	**Lugo**	**Madrid**	**Plasencia**	**Seville**	**Valencia**	**Zaragoza**	**Total**
American	**40.83**	15	**60**	**29.17**	**40**	**77.14**	**39.09**	**32.5**	**28**	**40.44**
Argentinian	0.83	0	0	0	3.33	0	1.82	4.17	0.8	1.44
Baguettes/ Sandwiches	11.67	0	1	4.17	5.83	0	3.64	1.67	5.6	4.42
Home cooking	2.5	0	0	5	1.67	0	0	0	3.2	1.66
Chinese	4.17	0	0	3.33	0.83	0	0	0	1.6	1.33
Korean	0.83	0	0	0	0	0	0	0	0	0.11
Breakfast	1.67	0	0	0	1.67	0	0.91	0	0.8	0.66
French	0	0	0	0	0.83	0	0	0	0	0.11
Galician	0	0	0	2.5	0	0	0	0	0	0.33
Greek	0	0	0	0	0.83	0	1.82	3.33	0.8	0.88
Hawaiian	0	0	0	0	0	0	0.91	0	0	0.11
Ice-cream shops	0	0	0	2.5	0.83	0	0	0	0	0.44
Indian	3.33	0	0	0	0.83	0	0.91	0	0.8	0.77
Italian	2.5	0	10	10.83	0.83	11.43	3.64	10.83	0.8	5.86
Japanese	7.5	0	5	1.67	8.33	0	5.45	0.83	11.2	5.19
Latin American	0	0	0	0	4.17	0	3.64	4.17	3.2	1.99
Moroccan	0	0	0	0	0	0	0	0	1.6	0.22
Mediterranean	2.5	0	7	15	9.17	0	7.27	8.33	14.4	8.29
Mexican	4.17	0	1	0	5.83	0	11.82	5.83	9.6	4.97
No cuisine type	0	0	0	0	0	0	2.73	0	0	0.33
Bakery	1.67	0	0	3.33	0	0	0	0	0	0.66
Pastry/ Confectionery	1.67	0	0	0	0	0	0	1.67	4	0.99
Peruvian	0	0	0	0	0.83	0	0	0	0	0.11
Healthy	10.83	0	3	4.17	10.83	0	10.91	20	10.4	9.17
Thai	0	0	0	0	0	0	0	2.5	0	0.33
Turkish	1.67	**85**	13	18.33	3.33	11.43	5.45	4.17	2.4	8.84
Vegan/ Vegetarian	0.83	0	0	0	0	0	0	0	0.8	0.22
Venezuelan	0.83	0	0	0	0	0	0	0	0	0.11
Total	100	100	100	100	100	100	100	100	100	100

TOP CHILDREN'S MENUS

% Type of food of the top children's menus by aggregator

	Platform		
Cuisine type (Menu for Children)	Aggregator A	Aggregator C	Total
American	**28.67**	**40.8**	**33.68**
Argentinian	0	0.5	0.21
Baguettes/Sandwiches	2.8	**11.44**	6.37
Chinese	1.75	1.99	1.85
Colombian	2.1	0	1.23
Greek	0.35	1	0.62
Indian	0	6.47	2.67
Italian	6.29	8.46	7.19
Japanese	2.45	5.97	3.9
Latin American	3.85	3.98	3.9
Mediterranean	22.03	5.97	**15.4**
Mexican	1.05	3.48	2.05
Pastry/Confectionery	0	4.48	1.85
Peruvian	0.35	0	0.21
Healthy	1.05	0	0.62
Turkish	**27.27**	5.47	**18.28**
Total	100	100	100

% Type of food of the top children's menus that appear in the 3 aggregators in each time slot

	Slot time		
Cuisine type (Menu for children)	**Dinner**	**Lunch**	**Total**
American	**32.1**	**35.25**	**33.68**
Argentinian	0.41	0	0.21
Baguettes/Sandwiches	6.58	6.15	6.37
Chinese	2.88	0.82	1.85
Colombian	1.23	1.23	1.23
Greek	0.41	0.82	0.62
Indian	2.47	2.87	2.67
Italian	8.64	5.74	7.19
Japanese	4.12	3.69	3.9
Latin American	3.7	4.1	3.9
Mediterranean	16.05	14.75	**15.4**
Mexican	1.65	2.46	2.05
Pastry/Confectionery	0.41	3.28	1.85
Peruvian	0	0.41	0.21
Healthy	0.82	0.41	0.62
Turkish	18.52	18.03	**18.28**
Total	100	100	100

% Type of meal from the menus with offers (lunch+dinner) that appear in the 3 aggregators by income

Cuisine type (Menu for children)	Income 1	Income 2	Income 3	Income 4	Total
American	**32.73**	**30.4**	**33.33**	**38.1**	**33.68**
Argentinian	0	0.8	0	0	0.21
Baguettes/Sandwiches	8.18	5.6	4.76	7.14	6.37
Chinese	0.91	0.8	2.38	3.17	1.85
Colombian	1.82	1.6	1.59	0	1.23
Greek	0.91	1.6	0	0	0.62
Indian	0.91	3.2	4.76	1.59	2.67
Italian	4.55	4.8	6.35	**12.7**	7.19
Japanese	2.73	4.8	4.76	3.17	3.9
Latin American	4.55	4.8	3.17	3.17	3.9
Mediterranean	**17.27**	**16**	**15.08**	**13.49**	**15.4**
Mexican	1.82	2.4	2.38	1.59	2.05
Pastry/Confectionery	2.73	1.6	1.59	1.59	1.85
Peruvian	0	0.8	0	0	0.21
Healthy	0.91	1.6	0	0	0.62
Turkish	**20**	**19.2**	**19.84**	**14.29**	**18.28**
Total	100	100	100	100	100

% Type of food of the children's menus (lunch+dinner) that appear in the 3 aggregators by location

	Town/city								
Cuisine type (Menu for children)	Barcelona	Cuenca	Lugo	Madrid	Plasencia	Seville	Valencia	Zaragoza	Total
American	**36.25**	**56.76**	**33.33**	**26.25**	**29.41**	**25.71**	**37.33**	**32.5**	**33.68**
Argentinian	0	0	0	1.25	0	0	0	0	0.21
Baguettes/ Sandwiches	0	0	0	20	0	2.86	1.33	15	6.37
Chinese	5	0	0	0	0	7.14	0	0	1.85
Colombian	0	0	0	7.5	0	0	0	0	1.23
Greek	3.75	0	0	0	0	0	0	0	0.62
Indian	0	0	0	0	0	0	17.33	0	2.67
Italian	3.75	0	0	8.75	0	**24.29**	10.67	0	7.19
Japanese	0	0	0	0	0	5.71	0	18.75	3.9
Latin American	10	0	16.67	0	0	0	2.67	1.25	3.9
Mediterranean	35	0	16.67	0	0	12.86	17.33	21.25	**15.4**
Mexican	1.25	0	0	1.25	0	11.43	0	0	2.05
Pastry/ Confectionery	0	0	0	11.25	0	0	0	0	1.85
Peruvian	1.25	0	0	0	0	0	0	0	0.21
Healthy	3.75	0	0	0	0	0	0	0	0.62
Turkish	0	**43.24**	**33.33**	**23.75**	**70.59**	10	13.33	11.25	**18.28**
Total	100	100	100	100	100	100	100	100	100

TOP HEALTHY MENUS

% Food type of the top healthy menus for each aggregator

	Platform			
Cuisine type (Healthy food)	**Aggregator A**	**Aggregator B**	**Aggregator C**	**Total**
American	0	0.56	2.3	1
Baguettes/Sandwiches	0	1.68	**10.6**	4.34
Breakfast	0	3.35	1.38	1.5
Greek	0	0	1.38	0.5
Hawaiian	0	1.12	1.38	0.83
Indian	0.49	0	0	0.17
Italian	0	1.12	3.69	1.67
Japanese	0.99	0	6.91	2.84
Lebanese	0	0.56	0	0.17
Mediterranean	0.49	**5.03**	9.22	**5.01**
Mexican	1.97	1.68	0	1.17
Peruvian	0.49	0	0	0.17
Healthy	**87.68**	**81.01**	**58.06**	**74.96**
Thai	0	0	3.23	1.17
Turkish	0	0	1.84	0.67
Vegan/Vegetarian	7.88	3.91	0	3.84
Total	100	100	100	100

% Type of food of the top healthy menus that appear in the 3 aggregators in each time slot

	Slot		
Cuisine type (Healthy food)	**Dinner**	**Lunch**	**Total**
American	0.67	1.32	1
Baguettes/Sandwiches	3.03	**5.63**	4.34
Breakfast	1.01	1.99	1.5
Greek	0	0.99	0.5
Hawaiian	1.01	0.66	0.83
Indian	0.34	0	0.17
Italian	2.02	1.32	1.67
Japanese	3.7	1.99	2.84
Lebanese	0.34	0	0.17
Mediterranean	4.71	5.3	**5.01**
Mexican	1.35	0.99	1.17
Peruvian	0	0.33	0.17
Healthy	**74.07**	**75.83**	**74.96**
Thai	2.36	0	1.17
Turkish	1.01	0.33	0.67
Vegan/Vegetarian	4.38	3.31	3.84
Total	100	100	100

% Type of food of the menus (lunch+dinner) that appear in the 3 aggregators, according to the income, when searching for healthy options

Cuisine type (Healthy food)	Income 1	Income 2	Income 3	Income 4	Total
American	1.47	0.65	1.94	0	1
Baguettes/Sandwiches	2.21	**4.55**	**3.87**	**6.49**	4.34
Breakfast	0.74	1.95	1.94	1.3	1.5
Greek	0.74	0.65	0	0.65	0.5
Hawaiian	0.74	1.3	1.29	0	0.83
Indian	0.74	0	0	0	0.17
Italian	2.21	1.3	1.29	1.95	1.67
Japanese	5.15	3.25	1.94	1.3	2.84
Lebanese	0	0	0	0.65	0.17
Mediterranean	7.35	3.9	3.87	5.19	**5.01**
Mexican	1.47	0.65	2.58	0	1.17
Peruvian	0	0	0	0.65	0.17
Healthy	**69.85**	**75.97**	**76.77**	**76.62**	**74.96**
Thai	0.74	1.3	1.29	1.3	1.17
Turkish	0.74	0	1.29	0.65	0.67
Vegan/Vegetarian	5.88	**4.55**	1.94	3.25	3.84
Total	100	100	100	100	100

% Type of food of the children's menus (lunch+dinner) that appear in the 3 aggregators by location

	Town/city							
Cuisine type (Healthy food)	**Barcelona**	**Cuenca**	**Lugo**	**Madrid**	**Seville**	**Valencia**	**Zaragoza**	**Total**
American	3.33	0	0	0.84	0	0.86	0	1
Baguettes/ Sandwiches	10.83	0	**100**	0.84	0.94	0	0	4.34
Breakfast	0	0	0	0	0	2.59	6.32	1.5
Greek	0	0	0	0	0	0	3.16	0.5
Hawaiian	0	0	0	1.68	0	2.59	0	0.83
Indian	0.83	0	0	0	0	0	0	0.17
Italian	0	25	0	1.68	0	0	0	1.67
Japanese	5	0	0	0	1.89	0	9.47	2.84
Lebanese	0	0	0	0.84	0	0	0	0.17
Mediterranean	8.33	6.25	0	1.68	0.94	6.9	7.37	**5.01**
Mexican	3.33	0	0	2.52	0	0	0	1.17
Peruvian	0	0	0	0.84	0	0	0	0.17
Healthy	**61.67**	**68.75**	0	**86.55**	**90.57**	**80.17**	**64.21**	**74.96**
Thai	0	0	0	0	2.83	0	4.21	1.17
Turkish	3.33	0	0	0	0	0	0	0.67
Vegan/ Vegetarian	3.33	0	0	2.52	2.83	6.9	5.26	3.84
Total	100	100	100	100	100	100	100	100

TOP VEGAN OR SIMILAR MENUS

% Type of food for top vegan or similar menus

	Platform			
Cuisine type (Vegan/vegetarian food)	Aggregator A	Aggregator B	Aggregator C	Total
American	**9.27**	0.00	**14.36**	**8.22**
Argentinian	1.95	3.49	7.18	4.20
Baguettes/Sandwiches	0.00	0.00	0.51	0.17
Grill	3.90	0.00	0.00	1.40
Chinese	0.00	0.00	2.56	0.87
Greek	0.00	0.00	2.56	0.87
Hawaiian	0.00	0.00	0.51	0.17
Indian	0.49	**8.72**	3.59	4.02
Italian	0.49	0.58	9.74	3.67
Japanese	0.49	0.58	6.15	2.45
Latin American	0.00	0.00	0.51	0.17
Mediterranean	4.88	0.00	2.05	2.45
Mexican	1.95	0.00	1.03	1.05
No cuisine type	0.49	0.00	0.00	0.17
Bakery	0.00	0.00	0.51	0.17
Healthy	2.44	4.07	**42.05**	**16.43**
Turkish	0.00	0.00	2.05	0.70
Vegan/Vegetarian	**73.66**	**82.56**	4.10	**52.62**
Vietnamese	0.00	0.00	0.51	0.17
Total	100.00	100.00	100.00	100.00

% Type of food of the top vegan menus or similar that appear in the 3 aggregators in each time slot

Cuisine type (Vegan/vegetarian food)	Dinner	Lunch	Total
American	5.78	10.54	**8.23**
Argentinian	5.42	3.06	4.20
Baguettes/Sandwiches	0.00	0.34	0.18
Grill	1.08	1.36	1.23
Chinese	1.08	0.68	0.88
Greek	1.44	0.34	0.88
Hawaiian	0.00	0.34	0.18
Indian	5.42	2.72	4.03
Italian	2.53	4.76	3.68
Japanese	4.33	0.68	2.45
Latin American	0.00	0.34	0.18
Mediterranean	2.17	2.72	2.45
Mexican	1.44	0.68	1.05
No cuisine type	0.36	0.00	0.18
Bakery	0.00	0.34	0.18
Healthy	**16.61**	**16.33**	**16.46**
Turkish	1.44	0.00	0.70
Vegan/Vegetarian	**50.54**	**54.76**	**52.71**
Vietnamese	0.36	0.00	0.18
Total	100.00	100.00	100.00

% Type of food from the menus (lunch+dinner) that appear in the 3 aggregators, depending on the income, when searching for vegan options or similar

Cuisine type (Vegan/ vegetarian food)	Income 1	Income 2	Income 3	Income 4	Total
American	11.02	7.48	6.94	7.79	**8.22**
Argentinian	3.15	2.72	5.56	5.19	4.20
Baguettes/Sandwiches	0.00	0.68	0.00	0.00	0.17
Grill	1.57	1.36	1.39	1.30	1.40
Chinese	0.79	1.36	1.39	0.00	0.87
Greek	0.79	0.68	1.39	0.65	0.87
Hawaiian	0.00	0.00	0.00	0.65	0.17
Indian	5.51	5.44	2.78	2.60	4.02
Italian	7.09	2.04	2.78	3.25	3.67
Japanese	3.15	3.40	1.39	1.95	2.45
Latin American	0.79	0.00	0.00	0.00	0.17
Mediterranean	2.36	2.04	1.39	3.90	2.45
Mexican	1.57	1.36	1.39	0.00	1.05
No cuisine type	0.00	0.68	0.00	0.00	0.17
Bakery	0.79	0.00	0.00	0.00	0.17
Healthy	**14.96**	**18.37**	**14.58**	**17.53**	**16.43**
Turkish	0.79	0.68	0.69	0.65	0.70
Vegan/Vegetarian	**45.67**	**51.70**	**57.64**	**54.55**	**52.62**
Vietnamese	0.00	0.00	0.69	0.00	0.17
Total	100.00	100.00	100.00	100.00	100.00

% Type of food from vegan or similar menus that appear in the 3 aggregators by location

Cuisine type (Vegan/vegetarian food)	Barcelona	Lugo	Madrid	Plasencia	Seville	Valencia	Zaragoza	Total
American	6.67	**25.49**	3.60	**66.67**	0.00	0.00	7.50	**8.22**
Argentinian	3.33	0.00	12.61	0.00	0.00	5.26	0.00	4.20
Baguettes/ Sandwiches	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Grill	0.00	0.00	0.00	33.33	0.00	0.00	0.00	1.40
Chinese	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.87
Greek	3.33	0.00	0.00	0.00	0.00	0.00	1.25	0.87
Hawaiian	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.17
Indian	12.50	0.00	1.80	0.00	0.00	4.39	1.25	4.02
Italian	2.50	23.53	0.90	0.00	0.00	4.39	0.00	3.67
Japanese	2.50	0.00	0.00	0.00	4.17	7.02	0.00	2.45
Latin American	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.17
Mediterranean	0.83	17.65	0.00	0.00	0.00	0.88	3.75	2.45
Mexican	3.33	0.00	0.00	0.00	2.78	0.00	0.00	1.05
No cuisine type	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.17
Bakery	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Healthy	12.50	11.76	16.22	0.00	18.06	24.56	17.50	**16.43**
Turkish	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.70
Vegan/Vegetarian	**50.00**	21.57	**59.46**	0.00	**75.00**	**51.75**	**63.75**	**52.62**
Vietnamese	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.17
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

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