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The Influences of Food Delivery Apps on Taiwanese University Students' Eating Habits

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The Influences of Food Delivery Apps on Taiwanese University Students' Eating Habits

I. Introduction

Thesis statement: As college students are one of the groups that use food delivery apps the most often, their eating habits are partly influenced by this new trend of buying meals. Some of the students originally with poor eating habits acquired regular or even healthier eating habits, and others shifted to unhealthy diets with the consumption of more junk food.

II. Introduction to online food delivery

- A. The online food delivery service
 - 1. What businesses provide food delivery service.
 - 2. How customers order and what can they order.
 - 3. Ways of payment and delivery.
- B. The history and background of online food delivery

- The earliest online delivery service started around 1996-2001, which is the period of the Dot-com Boom (Internet boom). The forerunners include Pizza Hut, World Wide Waiter, and CyberSlice.
- From 2011 to 2015, the widespread of smartphone and the development of sharing economy makes online food delivery even more popular.
- There are significant growth in the food delivery market in China, the US, India, UK, Germany, and other places during 2018 to 2019.
- C. The growth and influence of food delivery businesses
 - Food delivery services becomes more efficient due to the development in technology.
 - 2. Food delivery businesses have a significant influence on the restaurant industry, using Foodpanda as an example.
- D. Food delivery platforms in Taiwan
 - Foodpanda: Founded in Germany in 2012. It currently operates in more than 40 countries and territories, and provides service in several cities in Taiwan.
 - UberEats: An offspring business started by Uber, a ride-hailing service company. It is based in California and launched in 2014, operating in 24 countries currently.

- Deliveroo: Originated from England in 2013 and operated in 14 countries previously, including Taiwan. It withdrew from Taiwan in 2020.
- Yowoo: Established by Yowoo Technology in 2016 and provides delivery service in Taiwan.
- III. Literature review and hypotheses on the changes in students' eating habits
 - A. College students would choose to have prepared food even when they can access fresh food.
 - The younger generation's top priority is convenience (Oyedele). They would prefer to buy prepared food rather than cook at home.
 - 2. The trend of buying prepared food among students may be widespread.
 - B. As the younger generation uses food delivery platforms quite frequently, the number of times in eating during night time may increase.
 - The younger generation use food delivery apps typically during dinner, lunch time, and after 10 pm (Zavala).
 - 2. The percentage of using delivery apps after 10 pm is even higher than that of lunch time (Zavala).
 - C. It is possible that the eating habits of college students are healthier and more balanced before they started using food delivery services.
 - 1. The majority of students have an unhealthy diet (Hung).

- 2. Food delivery platforms may be part of the causes for college students' bad eating habits.
- 3. The positive or negative changes in their diets depend on their food choice.
- IV. Research purposes and questions
 - A. What are college students' intentions to use food delivery apps?
 - B. What are college students' eating habits like before the trend of food delivery started?
 - C. What changes are there in college students' eating habits after the widespread use of food delivery apps?
 - D. What are college students' perceptions and attitudes toward food delivery apps?
- V. Methodology

Survey design, including questions that cover reasons for using the apps, time and frequency of using the apps, their original eating habits, whether their eating habits changed after using the apps, and their perception and ratings for the apps.

VI. Results and discussion

Description of the survey results, analysis of the data, and comparison between hypotheses and actual results that corresponds or differentiates with each other.

- A. A total of 65 questionnaires are collected. The results of the first section conforms to the hypothesis that students living outside may order food delivery more often.
- B. Students use food delivery apps quite frequently, and their main intention is convenience. UberEats and Foodpanda received high number of votes for app usage.
- C. Over half of the students keep a regular eating habit. Junk food received the highest votes in food choice. The result contradicts with the hypothesis that the eating habits of college students are healthier and more balanced before the use of food delivery apps.
- D. There is no significant changes in eating time and frequency, as well as the number of meals a day. However, meal consumption has increased on the whole. There is a slight increase in the consumption of midnight meals among students.

- E. Most students' diet flavors remain the same while some marked changes in food choices. The options of "more junk food" and "less junk food" got the highest votes.
- F. The ratings for the apps are mostly neutral or satisfied. UberEats and Foodpanda are relatively more popular than Deliveroo and Yowoo.
- G. Those who do not use delivery apps think there is not much need for food delivery apps since they have time to buy food themselves. Others want to see the actual food instead of pictures.
- VII. Conclusion: Food delivery apps have brought some influences to university students' eating habits, and how their diets are changed, either toward healthy or unhealthy diets, will depend on the types of food they order. Additionally, the respondents' suggestions for the apps can help food delivery companies adjust their mode of operation to improve their services and meet the customers' needs.

The Influences of Food Delivery Apps on Taiwanese University Students' Eating Habits **1. Introduction**

As lunch time is getting near, many food deliverers would be riding their scooters, roaming on the streets of the university campus and delivering freshly-made food to students. The food delivery platform is a new trend of food delivery that started not long ago. In the past, shop owners and employees have to deliver take-out orders themselves after receiving ordering phone calls. Now, food delivery platforms provide services that makes the shops' tasks much easier. After customers confirm their orders on the platform app, shop owners only have to wait for the deliverers to come and fetch the orders. In a short period of time, the food would be delivered directly to the customers' hands by the agile deliverers. With this convenient way of delivery invented, students no longer have to walk long distances to school cafeterias or restaurants outside just to buy meals, and the choices of food have greatly increased since there are no distance limits. Food delivery platforms are influencing students' eating habits through their convenient and speedy services, changing what they eat and when they eat. As college students are one of the groups that use food delivery apps the most often, their eating habits are partly influenced by this new trend of buying meals. Some of the students originally with poor eating habits acquired regular or even healthier eating habits, and others shifted to unhealthy diets with the consumption of more junk food.

2. Introduction to online food delivery

1.1 The online food delivery service

Online food delivery is a service provided by restaurants, stores, and food delivery platforms or companies. Customers can place their orders through websites or applications of the service providers and purchase either prepared food or groceries. Prepared foods are provided by restaurants or kitchens, and groceries like fresh produce and packaged food come from grocery stores, supermarkets, or farms. After submitting their orders, customers can pay the delivery fee either online or in person. The products are usually delivered by cars, scooters, or bikes. Food delivery platforms and companies are able to help restaurants without delivery services expand their market, and "[share] revenue with their restaurant partners and delivery personnel" (Quartly).

1.2 The history and background of online food delivery

The earliest online food delivery started around 1996 in the United States, when the rise of the Internet just began. In 1994, Pizza Hut set up an experimental online ordering site called PizzaNet and took orders only from residents in California (Smith). A prototype of today's food delivery platforms, World Wide Waiter, started providing restaurant delivery service in 1995, followed by another meal delivery website launched in 1996 named CyberSlice. The creation of CyberSlice was noted as "an innovative business concept" by Steve Jobs, the CEO of NeXT at the time (qtd. in Smith). From 2011 to 2015, the widespread of smartphone and the development of sharing economy makes online food delivery even

more popular. During 2015, "the balance between meal orders placed over the phone versus those placed online have nearly switched," which indicates that customers' preference in ordering online has significantly increased and may even surpass the number of phone orders (Shanker). Until September 2016, online food deliveries accounted for "3 percent of the 61 billion U.S. restaurant visits or transactions,"(Bomkamp) and grew to 35 billion globally in 2018 (Williams-Grut). By 2019, the demand for food delivery services have grown rapidly, with China in the lead, "followed by the United States, India, the United Kingdom and Germany" (Reeves).

2.4 The growth and influence of food delivery businesses

The convenience of online food delivery has caused its market demand to increase at a fast pace. The process of buying food becomes much simpler, and people no longer need to consider time or geographical limitations when buying food. Food delivery services today have become even more efficient due to technology development. With artificial intelligence like the GPS to improve the accuracy of delivery distance and time estimation, customers can make the best use of their time while waiting for meals. With the food delivery trend gaining popularity, Taiwan's food and restaurant industry has also been greatly influenced. Foodpanda is an online food delivery platform founded in Germany in 2012. It currently operates in more than 40 countries and provides services in several cities in Taiwan, including "Hsinchu, Kaohsiung, Taichung, New Taipei and Taipei city" ("Food Delivery"). According

to Foodpanda's marketing and PR manager, the company "has a 55% market share [and] works with more than 7,000 restaurants all over Taiwan [in 2019]" (Quartly). Foodpanda's app CEO also notes that their "partner restaurants are benefitting handsomely from the collaboration, with some citing increases of 25 percent in revenues" ("Food Delivery"). From the companies' market share and the restaurants' increase in revenue, it can be seen that Taiwan's food delivery businesses has potential for even greater development in the future. *2.5 Food delivery platforms in Taiwan*

Apart from Foodpanda, there are many other online food delivery companies operating in Taiwan. The four main platforms are Foodpanda, UberEats, Yowoo, and Deliveroo. UberEats is an offspring business started by Uber, a ride-hailing service company, based in California and launched in 2014. UberEats provides delivery service in 24 countries, including Taiwan and ranging from Taipei to Tainan. Deliveroo originated from England in 2013 and previously operated in 14 countries. It expanded its market to Taiwan starting from 2018, and withdrew from Taiwan in 2020. Yowoo is established by Yowoo Technology in 2016 and provides delivery service in Taiwan only. Foodpanda and UberEats are the most frequently used apps since they offer services from northern to southern Taiwan, whereas Deliveroo and Yowoo mainly operates in the Taipei area.

2. Literature Review and hypotheses on the changes in students' eating habits

Since buying meals through food delivery apps is a common phenomenon among

students, this study aims to investigate college students' use of food delivery platforms and its influence on college students' eating habits. Through literature review, hypotheses of the changes in college students' eating habits after using food delivery platforms will be given.

First of all, there is a big possibility that college students would choose to have prepared food even when they can access fresh food. The millennials' or the younger generation's top priority is convenience (Oyedele). Therefore, they would prefer to eat in restaurants and spend more money on prepared food rather than cook at home. Students who rent houses outside may not have places for them to cook, thus, they may be the ones who order food delivery the most often. Their value in convenience "is especially advantageous for those offering delivery and to-go" (qtd. in Oyedele). As food delivery apps develop and make ordering meals even more convenient, the phenomenon of buying prepared foods among the younger generation may be even more widespread than before.

As the younger generation uses food delivery platforms quite frequently, the number of times in eating during night time may increase. According to the study by Zavala, 52 percent of its 30 interviewees (ages from 20 to 27) use delivery platforms at dinner, 22 percent use it during lunch, and 26 percent after 10 pm (Zavala). The percentage of using delivery apps after 10 pm is even higher than that of lunch time, even though it is not the typical time to eat. Thus, it can be inferred that there may be an increase in the consumption of midnight meals among students after they use food delivery apps.

It is possible that the eating habits of college students are healthier and more balanced before they started using food delivery services. Most students think breakfast is important but do not have the habit of eating it, and they often have junk food like fast food and local snacks, drinks, and late night meals (Hung). Moreover, very few consume enough vegetables, fruits, and water every day (Hung). The use of food delivery platforms may be part of the causes for college students' bad eating habits. Since they are able to buy whatever food they like, their diets after using food delivery apps might not be as balanced and healthy as their diet before. Although not all prepared foods are unhealthy, a big portion of them still falls into the junk food category. Whether the change in students' diets drives towards the healthy or unhealthy way would depend largely on the types of food they order.

3. Research Questions

This study investigates four main research questions, focusing on how Taiwanese college students' eating habits have changed after using online food delivery services, and their intentions to use food delivery platforms and perceptions toward them.

- A. What are college students' intentions to use food delivery apps?
- B. What are college students' eating habits like before the trend of food delivery started?
- C. What changes are there in college students' eating habits after the widespread use of food delivery apps?
- D. What are college students' perceptions and attitudes toward food delivery apps?

4. Methodology

A survey is distributed to Taiwanese college students for data collection. The questionnaire contains six sections (See Appendix A). In the first section, students are asked to provide basic information and whether they use food delivery apps. If students do use food delivery apps, they would continue to the next section. If not, they would be directed to the last section, asking about why they would not use food delivery apps. The second part would ask students about their reasons and intentions for using food delivery apps (convenience, speed, food quality, etc.), how long and how often they use the apps, and what apps they use and why (price, meal variety, app design, etc.). For the third part, students would answer questions about their regular eating habits before using food delivery apps. The questions cover at what time they eat, how many times a day they eat, and what types of food they eat. Students are also asked to explain how their eating habits are formed, such as their daily routine and the amount of food expenses. The fourth part would investigate the noticeable changes in students' eating habits after using the apps, which includes changes in the time and frequency of eating, the types of food, and causes for the changes in their eating habits. The fifth part would ask the students to rate the apps they have used before regarding the delivery services' overall quality (food quality and taste, speed, price, etc.). In this section, students would also answer questions about their willingness to reuse the food delivery apps and provide suggestions they think would make the apps better. For the last section, students

who do not use food delivery apps would select the reasons for not using food delivery services.

5. Results and Discussion

A total of 65 questionnaires are collected, with 34 sophomores, 20 juniors, 6 freshmen, and 5 seniors or fifth-year students. Thirty-two of them use food delivery apps while thirtythree of them do not. Among those who use food delivery apps, 9 live at home, 8 at school, and 15 rent their own place. The students who rent their own place show a higher rate of app usage, and there is a lower percentage of app usage in those who live at home or at school (See Appendix B, Section 1). This outcome conforms to the hypothesis that students living outside may order food delivery more often since they do not have places to cook for themselves. Furthermore, the accessibility of food results in this difference. Students who live outside sometimes have to travel longer distances to buy food, depending on the location of their place, making them potential users of the apps. Students who live at home mostly do not need to worry about buying meals, as there is a bigger possibility that their family or themselves would prepare food. Nevertheless, some students who live at home still choose to have prepared food when they can access fresh food, as they "would prefer to eat in restaurants and spend more money on prepared food" (Oyedele). For students living at school, they may have greater access to food compared with students living outside because there are usually restaurants opened in or beside schools.

The second section of the survey investigates the time and frequency of app usage. The majority of respondents have used food delivery apps for less than a year, and only 15% have used them for more than one year. 34% of them use the apps often, 41% sometimes use them, and 25% rarely use them. It is shown that students use food delivery apps quite frequently. In addition, they are asked about their intentions for using food delivery apps. The main reason is convenience (97%), followed by time concern, discounts, and more meal choices (See Appendix B, Section 2). This outcome matches with the fact that the younger generation's top priority is convenience (Oyedele). Time concern received the second highest votes, and this may be due to the limited time of lunch break at school. Students would want to save more time for resting or studying instead of wasting too much time to buy food. The respondents are also asked to mark the apps they have used before, the ones they favor the most and why. Unsurprisingly, the two major food delivery apps running in Taiwan, UberEats and Foodpanda, received votes of 75% and 91% respectively for app usage. Foodpanda is favored more by users (69%) than UberEats (44%). The main factors of good delivery services include more discounts, more meal choices or handy app design, and faster delivery (See Appendix B, Section 2). In this case, it is possible that Foodpanda has met the customer's needs in some or all of the aspects above, making it more popular than UberEats.

In the third section, the respondents answer questions about their eating habits before using food delivery apps. 50% of them eat on time while 34% of them have an unstable meal

times, and 16% eat within an hour before or after suggested meal time. Most of the respondents eat for 3 times a day and fewer eat for less than 3 times. About 70% have their last meal or snack before 9 pm, and 30% would eat after 9 pm (See Appendix B, Section 3). It can be seen that over half of the students keep a regular eating habit, having 3 meals on time and consume food before 9 pm in a day. In terms of their diets, about half of the students (53%) regard their diets as general, meaning neither light nor strong flavored. 25% of them have light flavored diets while 22% have strong flavored diets.

Next, the respondents mark the types of food they usually eat before using food delivery apps. Junk food has the highest votes among all the other food categories (66%). The other types of food that received considerate amount of votes are whole grains and meat and protein, each with 53%. There is a 41% vote for vegetables and 34% for milk and dairy products (See Appendix B, Section 3). In line with the results of Hung's study, students consume junk food often, and there are fewer consumption of vegetables and fruits in contrast. Their diets are composed of mainly junk food, staple food like rice or noodles, and proteins. As can be seen, the students' diets are not well-balanced and might have been unhealthy even before their use of delivery services. This result contradicts with the hypothesis that the eating habits of college students are healthier and more balanced before they started using food delivery apps. Some factors for forming their eating habits include food accessibility, convenience, and personal preference or habit. One respondent mentioned

that before the trend of food delivery apps, only fast food restaurants like McDonalds and Pizza Hut offer delivery services. Thus, they did not have much meal choices before when ordering online. Others consume food based on their preferences or eating habits and eat whatever they want.

After understanding the respondents' original eating habits, the fourth section looks into the eating habits after using food delivery apps. First, 72% of the respondents think their eating time and frequency remains the same while 28% think it changed. Among those who indicate changes, their meal time became either "on time" or "unstable" (36% each), and 28% eat within an hour before or after suggested meal time. Although food delivery services may not affect meal time significantly, it helped some students acquire regular meal times and improved their eating habits. At the same time, an equal number of students have shifted from eating on time to eating at unstable meal times. One respondent says she no longer have to search for opened restaurants during lunch break, and therefore can eat on time. Some others say the inaccurate delivery time caused their meal time to become unstable. If the ordering time and delivery time is not arranged appropriately, it can possibly affect meal times.

Additionally, 88% of the students have the same number of meals a day, and 12% noted changes in their eating frequency. Those who eat for less than 3 times have gained regular eating frequency after using the apps. This may be due to the increase in food accessibility. Students who previously skip meals because of insufficient time or laziness are able to have

regular meals with the help of food delivery. Also, meal consumption has increased on the whole, particularly main meals. Approximately 38% eat more main and snack meals, 25% eat more main meals, and 13% eat more snack meals (See Appendix B, Section 4). Only 6% of the respondents think there are changes in the time they have their last meal or snack of the day. Some students developed habits of eating before 9 pm. There is a 44% vote for "before 9 pm," 33% for "9 to 11 pm," and 22% for "11 to 1 pm." According to Zavala's study, young people have the tendency of using delivery apps after 10 pm. Although most students of this study eat before 9 pm, there is a slight increase in the number of students who eat after 9 pm. Thus, it is proven that food delivery apps do increase students' consumption of late night meals. Perhaps this change is altered by food delivery's convenience. Many university students have part-time jobs, and sometimes they cannot eat at regular times. The apps provide opportunities for food access when most stores or restaurants are already closed after students get home from work.

About 94% of the students mark no changes in their diets' flavors. Of the remaining 6%, most of their diets became general in flavor (57%), while a few became more light flavored or strong flavored (See Appendix B, Section 4). It can be inferred that those who have light or strong flavored meals in the past are provided more meal choices after they use food delivery apps. Therefore, their meal flavors are affected by their choice of food that is more general-flavored at present. In terms of food consumption, 78% said there were no changes whereas

22% indicate differences. The options of "more junk food" and "less junk food" each received a 42% vote. Since food delivery services have made food access much easier, it is possible that the students who consume more junk food order frequently from fast food restaurants that cooperated with food delivery platforms. On the other hand, those who consume more nutritious foods made better use of food delivery apps for improving their diets. In addition to the high number of less junk food consumption, there is a 33% vote for "more vegetables" and 25% each for "more fruits" and "more proteins." Thus, some of the students' diets tend to become more balanced and even healthier. The respondents note that food delivery services have provided them convenience and much more food options, and therefore they can decide freely on what they want to eat instead of being limited to only a few choices. That is, food delivery apps have given people the opportunity to decide how they want to construct their diets.

Lastly, students are asked to rate the services and express their perceptions toward the food delivery apps. For the delivery services' overall quality, 56% are satisfied, 34% regard it neutral, and 13% are very satisfied. The ratings for UberEats are mostly neutral (41%) or satisfied (31%). 15% do not use UberEats, and 68% of them are willing to use UberEats again. UberEats' handy app design and fast delivery speed are the main reasons for their willingness to reuse its service (See Appendix B, Section 5). For Foodpanda, the majority of ratings are also neutral (44%) or satisfied (38%). 6% do not use Foodpanda, and 67% are

willing to use Foodpanda again. The frequent offering of discounts and handy app design makes the respondents willing to use it again. Foodpanda has a higher satisfaction rate than UberEats, not only because of its discounts, but also because of its maintenance in good food quality and cheap price compared to UberEats (See Appendix B, Section 5). Regarding Deliveroo, 97% of the students have not used it before, and 78% say they might consider using it. As for Yowoo, 97% have not used it before, and 80% think they might want to use it. Deliveroo and Yowoo are not frequently used in Taiwan, and some respondents do not have the intention to use them, possibly due to their expensive prices and limited service areas. As Deliveroo is not based in Taiwan and unable to compete against the other dominant platforms, it eventually withdrew from Taiwan. Some suggestions from the respondents for service improvement include "more discounts," "more restaurant choices," "simpler app interface," and a "more accurate delivery time." Additionally, they suggested that deliverers can "handle the food more carefully," "check the order after receiving it," and "have better attitudes."

The respondents who have not used food delivery apps before would mark their reasons for not using them in the sixth section. Most of them (81%) say they have time to buy food themselves and there is not much need for food delivery apps. Others want to see the actual food instead of pictures (15%), and still others say they do not need the apps and are too lazy to download them (15%).

From the results of this study, it is seen that the majority of the students think there are no significant changes in their diets. However, for those who indicate changes, many of them tend to acquire better eating habits and diets after using food delivery apps. In addition, a few number have shown negative effects on their eating habits and consumed more unhealthy foods. Although food delivery allows students to buy whatever food they want, there is no definite answer as to whether food delivery is advantageous or disadvantageous for maintaining healthy diets. Food delivery services have the potential to help people get better eating habits, and it all depends on how the services are utilized. Furthermore, the respondents' ratings for the apps are mostly neutral, indicating that food delivery services can still be improved in order to meet customers' needs and expectations. Food delivery companies can consider altering their app interface or collaborating with more restaurants, as well as providing decent training for their employees to make their services more satisfactory. All in all, food delivery services have impacted restaurant industries around the world, and its popularity nowadays, especially among the younger generation, brought some influences to people's eating habits. Additionally, it is necessary to note the effects of the COVID-19 pandemic on people's use of food delivery apps. Since the beginning of the pandemic, many people refrained from dining outside and changed to using delivery apps instead. Thus, the increased consumption of prepared food may be a result of the disease's impact. Despite food delivery's convenience, people using delivery apps should be more aware of the food they

consume so as to keep a balance between enjoying delicious food and maintaining lifelong

health.

Word count: 4019

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美食外送平台對於台灣大學生飲食習慣的 影響之探討 The Influences of Food Delivery Apps on Taiwan's University Students' Eating Habits

各位研究參與者您好,

我是來自輔仁大學英文系的學生,目前正在進行「美食外送平台對於台灣大學生飲食習慣的影響」之實證研究,想邀請您一同參與此研究。在這份問卷中,您將回答關於美食外送平台的使用 經驗,使用外送平台後飲食習慣的改變,以及對於外送平台滿意度與重複使用意顧之相關問題。 此問卷為匿名調查,您所提供之資料會完全保密,請放心填寫。這項實證研究結果將於所屬課程 發表。如果您對此項研究有任何問題,歡迎以此電子郵件與我聯繫: 406110164@gapp.fju.edu.tw

截擊邀請您參與此研究。

研究學生 江宜芳 敬上

Dear respondent,

I am a student from the English Department of Fu Jen Catholic University. I am currently doing a research on "The Influences of Food Delivery Apps on Taiwan's University Students' Eating Habits," and I would like to invite you to join this study. In this survey, you will answer questions about experiences in using food delivery apps, changes in your eating habits after using food delivery apps, and your ratings and willingness to reuse the apps. This survey is anonymous, and the data collected will be kept confidential. The results will be submitted as the coursework. If you have any questions about this study, please feel free to contact me through email: <u>406110164@gapp.fju.edu.tw</u>

Thank you for your time, and I would be grateful if you would participate in this survey.

Sincerely, Catherine Chiang * Required

第一部分:個人背景 Part 1: Personal background

1. 性別 Gender *

Mark only one oval.

〇 男性 Male

2.	年級 Grade *
	Mark only one oval.
	 大一 Freshman 大二 Sophomore 大三 Junior 大四 Senior Other:
3.	您目前住在? Where do you live currently? * Mark only one oval.
	 ◎ 家裡 At home ◎ 學校(宿舍) At school (in the dormitory) ○ 在外租屋 I rent my own place ○ Other:
4.	您有在使用美食外送平台嗎? Do you use food delivery apps? * Mark only one oval. 有(請繼續填答) Yes (continue to next question) 沒有(請跳至第六部分) No (skip to section 6)
Ŷ	三部分:美食外送平台使用經驗 Part 2: Experiences in using food delivery apps

5.	您使用美食外送平台多久了? How long have you been using food delivery apps? *
	Mark only one oval.
	 未滿三個月 Less than 3 months 三到六個月 3 to 6 months 七到十二個月 7 to 12 months 一年以上 More than 1 year
6.	您經常使用美食外送平台嗎? How often do you use food delivery apps? * Mark only one oval.
	 每天(或幾乎每天) Daily (or almost daily) 經常(每周至少一次) Often (at least once a week) 有時候(每月至少一次) Sometimes (at least once a month) 甚少(一年幾次甚至更少) Rarely (few times a year or less)
7.	為什麼開始使用美食外送平台?(可複選) Why do you start to use food delivery apps? (can have multiple answers) * <i>Check all that apply.</i>
	 □ 方便性 Convenience □ 節省時間 Time concern □ 價格較便宜 Cheaper price □ 有折扣 For discounts □ 食物品質較好 Better food quality □ 食物種類選擇較多 More meal choices Other: □

8.	您使用哪個/ 哪些美食外送平台?(可複選)Which food delivery app(s) do you use? (can have multiple answers) *
	Check all that apply.
	 □ 優食 UberEats □ 空腹熊貓 Foodpanda □ 戶戶送 Deliveroo □ 有無快送 YoWoo Other: □
9.	您最常使用(或最滿意)哪個美食外送平台? Which food delivery app do you use (or favor) the most? *
	Check all that apply.
	☐ 優食 UberEats
	空腹熊貓 Foodpanda
	□ 戶戶送 Deliveroo □ 有無快送 YoWoo
	Other:
10.	 (承上題)為什麼最常使用(或最滿意)這個美食外送平台?(可複選)(Cont'd) Why do you use (or favor) this food delivery app the most? (can have multiple answers) * Check all that apply. □ 送餐速度較快 Faster delivery □ 價格較便宜 Cheaper price
	☐ 折扣較多 More discounts
	▲ 食物品質較好 Better food quality
	☐ 食物種類選擇較多 More meal choices
	□ 平台(app)設計較容易操作 Handy app design Other: □
	三部分:使用美食外送平台前之飲食習慣 Section 3: Eating habits before using ood delivery apps

11.	在使用美食外送平台前,您大約幾點吃正餐? When do you usually eat before using food delivery apps? *早餐 Breakfast 7:00-8:30 午餐 Lunch 12:00-13:30 晚餐 Dinner 6:00-7:30 *
	Mark only one oval.
	① 我會按時吃飯 I eat on time
	── 我會在用餐時間前半小時以內吃飯 I eat within half an hour before suggested meal time
	──我會在用餐時間前一小時以內吃飯 I eat within an hour before suggested meal time
	── 我會在用餐時間後半小時以內吃飯 I eat within half an hour after suggested meal time
	──我會在用餐時間後一小時以內吃飯 I eat within an hour after suggested meal time
	① 我的用餐時間不固定 My meal time is unstable
12.	在使用美食外送平台前,您一天中的用餐次數大約是? Before using food delivery
12.	在使用美良外医牛口前, 愿一人中的用食人致入约定, Before using food derivery apps, about how many times a day do you eat? *
	Mark only one oval.
	一 夾 1 time
	() 兩次 2 times
	三次 3 times
	四次 4 times
	五次以上 5 times or more
13.	您一天中最後吃東西的時間通常是? At what time do you usually have your last meal or snack of the day? *
	Mark only one oval.
	—— 晚上9點以前 Before 9 pm
	── 晚上9點至11點 From 9 pm to 11 pm
	── 晚上11點至凌晨1點 From 11 pm to 1 am
	── 凌晨1點以後 After 1 am

14.	您平時的飲食口味選擇偏向? How would you describe the flavor of the food you usually eat? *
	Mark only one oval. 清淡 Light flavored 偏清淡 Somewhat light flavored 普通(□味均衡) General (neither light nor strong flavored) 偏重□味 Somewhat strong flavored 重□味 Strong flavored Other:
15.	 您在使用美食外送平台前的飲食選擇是?(可複選)What types of food do you usually eat before using food delivery apps?*食物分類可參考此連結 Link for food classification reference: <u>https://nutri.jtf.org.tw/index.php?</u> idd=1&aid=3&bid=203&cid=21* Check all that apply. 水果(柳丁、葡萄、奇異果等)Fruits (e.g. orange, grape, kiwi) 蔬菜(青椒、蘿蔔、海帶等)Vegetables (e.g. pepper, carrot, seaweed) 全穀难糧類(飯、麵、麵包等)Whole grains (e.g. rice, noodles, bread)
	 □ 豆魚蛋肉類(蛋、豆腐、雞肉等) Meat and protein (e.g. eggs, tofu, chicken) □ 乳品類(鮮奶、起司、優格等) Milk and dairy products (e.g. milk, cheese, yogurt) □ 油脂與堅果種子類(橄欖油、花生、核桃等) Fats and nuts (e.g. olive oil, peanut, walnut) □ 垃圾食物(碳酸飲料、薯條、洋芋片等) Junk food (e.g. Soft drinks, french fries, potato chips)
	Other:

16.	(承上題)什麼原因使您養成使用美食外送平台之前的飲食習慣?(飲食預算、像 康顧慮、食物取得的方便性、個人偏好等)請說明 What factors help form your eating habits before using food delivery app(s)? (food expenses, health concern, food accessibility, personal preference etc.) Please explain. *
	四部分:使用美食外送平台後之飲食習慣 Section 4: Eating habits after using od delivery apps
17.	在使用美食外送平台後,您的用餐時間有改變嗎? Are there any changes in your meal time after using food delivery apps? *
	Mark only one oval.
	有(請繼續填答) Yes (continue to next question)
	── 沒有(請跳至第20題) No (skip to question 20)
18.	在使用美食外送平台後,您的用餐時間有何改變? What changes are there in your meal time after using food delivery apps? *早餐 Breakfast 7:00-8:30 午餐 Lunch 12:00-13:30 晚餐 Dinner 6:00-7:30
	Mark only one oval.
	我會按時吃飯 I eat on time
	── 我會在用餐時間前半小時以內吃飯 I eat within half an hour before suggested meal time
	我會在用餐時間前一小時以內吃飯 I eat within an hour before suggested meal time
	── 我會在用餐時間後半小時以內吃飯 I eat within half an hour after suggested meal time
	① 我會在用餐時間後一小時以內吃飯 I eat within an hour after suggested meal time
	─ 我的用餐時間變得不固定 My meal time becomes unstable
	Other:

	change in your meal time? Please explain.
20.	在使用美食外送平台後,您一天中的用餐次數有改變嗎? Are there any changes in the number of times a day you eat after using food delivery apps? *
	Mark only one oval. 有 (請繼續填答) Yes (continue to next question) ② 沒有 (請跳至第23題) No (skip to question 23)
21.	在使用美食外送平台後,您一天中的用餐次數增加或減少? After using food delivery apps, do you eat more frequently or less frequently?
	Mark only one oval.
	── 吃正餐的次數增加 I eat more main meals
	 吃小餐/點心的次數增加 I eat more snack meals 吃正餐和小餐/點心的次數增加 I eat more main and snack meals
	 吃正餐和小麦/an/var/xgy/an/real finite main and shack means 吃正餐的次數減少 I eat less main meals
	── 吃小餐/點心的次數減少 I eat less snack meals
	── 吃正餐和小餐/點心的次數減少 I eat less main and snack meals

23.	在使用美食外送平台後,您一天中最後吃東西的時間有改變嗎? After using food delivery apps, are there any changes in the time you usually have your last meal or snack of the day? *
	Mark only one oval.
	有(請繼續填答)Yes (continue to next question)
	── 沒有(請跳至第26題) No (skip to question 26)
24.	在使用美食外送平台後,您一天中最後吃東西的時間是? After using food delivery apps, at what time in a day do you usually have your last meal or snack?
	Mark only one oval.
	── 晚上9點以前 Before 9 pm
	────────────────────────────────────
	○ 晚上11點至凌晨1點 From 11 pm to 1 am
	── 凌晨1點以後 After 1 am
25.	(承上題)什麼原因使您一天中最後吃東西的時間改變了?請說明 (Cont'd) Why is there such a change in your meal time? Please explain.

26.	在使用美食外送平台後,您平時的飲食口味選擇有改變嗎? Are there any changes in the flavor of the food you eat after using food delivery apps? *
	Mark only one oval.
	 有(請繼續填答) Yes (continue to next question) 沒有(請跳至第28題) No (skip to question 28)
27.	在使用美食外送平台後,您平時的飲食口味選擇有何改變? What changes are there in the flavor of the food you eat after using food delivery apps?
	Mark only one oval.
	── 較清淡 More light flavored
	── 趨於普通(□味均衡)Tend to become general (neither light nor strong flavored)
	 ─ 較重□味 More strong flavored Other:
28.	在使用美食外送平台後,您的飲食選擇有改變嗎? Are there any changes in the types of food you eat after using food delivery apps? *
	Mark only one oval.
	有(請繼續填答) Yes (continue to next question)
	── 沒有(請跳至第五部分) No (skip to section 5)

29.	您在使用美食外送平台後的飲食有何改變?(可複選)What changes are there in the types of food you eat after using food delivery apps? (can have multiple answers) *食物分類可參考此連結 Link for food classification reference: https://nutri.jtf.org.tw/index.php?idd=1&aid=3&bid=203&cid=21
	Check all that apply.
	 □ 我吃更多水果 I consume more fruits □ 我吃更多蔬菜 I consume more vegetables □ 我吃更多全毅雜種類 I consume more whole grains □ 我吃更多豆魚蛋肉類 I consume more meat and protein □ 我吃更多乳品類 I consume more milk dairy products □ 我吃更多油脂與堅果種子類 I consume more fats and nuts □ 我吃更多垃圾食物 I consume more junk food □ 我吃更少水果 I consume less fruits □ 我吃更少蔬菜 I consume less vegetables □ 我吃更少全穀雜種類 I consume less whole grains □ 我吃更少豆魚蛋肉類 I consume less milk and dairy products
	 □ 我吃更少油脂與堅果種子類 I consume less fats and nuts □ 我吃更少垃圾食物 I consume less junk food Other: □
30.	(承上題) 什麼原因使您的飲食選擇改變了?(飲食預算、健康顧慮、食物取得的 方便性、個人偏好等) 請說明 (Cont'd) Why is there such a change in your food choice? (food expenses, health concern, food accessibility, personal preference etc.) Please explain.
	五部分:美食外送平台滿意度與重複使用意願調查 Section 5: Ratings and lingness to reuse the apps

31.	對於您使用過的美食外送平台的整體滿意度評分(請在「其他」註明美食外送平台 名稱) Please rate your satisfaction for the app(s) you use based on the delivery services' overall quality. (Please provide the name(s) of the food delivery app(s) in "Other") *
	Check all that apply.
過)	您使用過的美食外送平台的個別滿意度評分(沒有使用過的平台其問題可直接跳 Please rate your satisfaction for the app(s) you use respectively, based on h delivery service's quality. (skip the questions for the app(s) you have not used pre)
32.	對於「優食 UberEats」的滿意度 Satisfaction towards "UberEats" Mark only one oval.
33.	您願意再次使用這個美食外送平台嗎? Are you willing to use this app again? Mark only one oval. ② 是 Yes ③ 否 No ③ 可能 Maybe

34.	(承上題)請說明您想/不想/可能再次使用這個美食外送平台的原因 (Cont'd) Please note the satisfactory/unsatisfactory factors of the app that make you want/don't/might want to reuse it.
	Check all that apply.
	 □ 送餐速度快 Fast delivery speed □ 價格便宜 Cheap price □ 折扣多 Many discounts □ 食物品質好 Good food quality □ 食物選擇多 Various meal choices □ 平台(app)介面明瞭/易操作 Handy app design □ 送餐速度慢 Slow delivery speed □ 價格較貴 Expensive price □ 折扣少 Less (or no) discounts □ 食物品質差 Bad food quality □ 食物品質差 Bad food quality □ 食物遇擇太少 Few meal choices □ 平台(app)介面複雜/難操作 Complicate app design Other: □
35.	對於「空腹熊貓 Foodpanda」的滿意度 Satisfaction towards "Foodpanda" Mark only one oval.
	● 非常滿意 Very satisfied
	() 滿意 Satisfied
	普通 Neutral
	○ 不滿意 Dissatisfied
	非常不滿意 Very dissatisfied
36.	您願意再次使用這個美食外送平台嗎? Are you willing to use this app again?
	Mark only one oval.
	是 Yes
	〇 否 No
	── 可能 Maybe

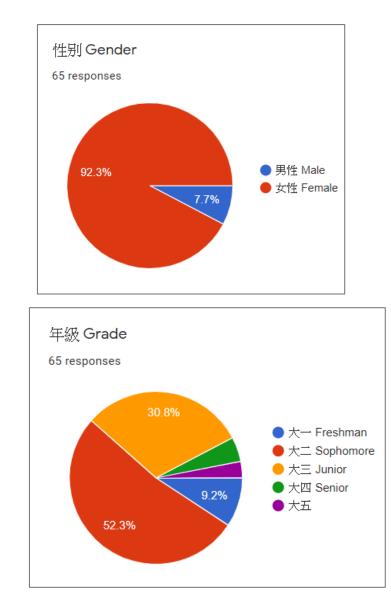
37.	(承上題)請說明您想/不想/可能再次使用這個美食外送平台的原因 (Cont'd) Please note the satisfactory/unsatisfactory factors of the app that make you want/don't/might want to reuse it.
	Check all that apply. 送餐速度快 Fast delivery speed 價格便宜 Cheap price 折扣多 Many discounts 食物品質好 Good food quality 食物選擇多 Various meal choices 平台(app)介面明瞭/易操作 Handy app design 送餐速度慢 Slow delivery speed 價格較貴 Expensive price 折扣少 Less (or no) discounts 食物遇擇差少 Few meal choices 平台(app)介面複雜/難操作 Complicate app design Other:
38.	對於「戶戶送 Deliveroo」的滿意度 Satisfaction towards "Deliveroo" Mark only one oval.
39.	您願意再次使用這個美食外送平台嗎? Are you willing to use this app again? Mark only one oval. ② 是 Yes ③ 否 No ③ 可能 Maybe

40.	(承上題)請說明您想/不想/可能再次使用這個美食外送平台的原因 (Cont'd) Please note the satisfactory/unsatisfactory factors of the app that make you want/don't/might want to reuse it.
	Check all that apply.
	 □ 送餐速度快 Fast delivery speed □ 價格便宜 Cheap price □ 折扣多 Many discounts □ 食物品質好 Good food quality □ 食物選擇多 Various meal choices □ 平台(app)介面明瞭/易操作 Handy app design □ 送餐速度慢 Slow delivery speed □ 價格較貴 Expensive price □ 折扣少 Less (or no) discounts □ 食物品質差 Bad food quality □ 食物選擇太少 Few meal choices □ 平台(app)介面複雜/難操作 Complicate app design Other: □
41.	對於「有無快送 YoWoo」的滿意度 Satisfaction towards "Yowoo" Mark only one oval.
	→ 滿意 Satisfied
	● 普通 Neutral
	一 不滿意 Dissatisfied
	●非常不滿意 Very dissatisfied
42.	您願意再次使用這個美食外送平台嗎? Are you willing to use this app again?
	Mark only one oval.
	是 Yes
	否 No
	──── 可能 Maybe

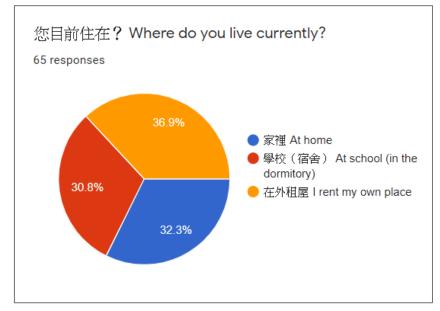
	Check all that apply.
	☐ 價格便宜 Cheap price ☐ 折扣多 Many discounts
	
	 □ 平台(app)介面明瞭/易操作 Handy app design □ 送餐速度慢 Slow delivery speed □ 價格較貴 Expensive price
	 □ 折扣少 Less (or no) discounts □ 食物品質差 Bad food quality
	 □ 食物選擇太少 Few meal choices □ 平台(app)介面複雜/難操作 Complicate app design
44	Other:
44.	請為您使用過的美食外送平台提供一些改進或優化的建議(任何關於提升服務品質或app介面及功能的建議)Please provide some suggestions for improving service quality and the app interface/functions regarding the app(s) you use. *
44.	□
	□
Skip	請為您使用過的美食外送平台提供一些改進或優化的建議(任何關於提升服務品質 或app介面及功能的建議)Please provide some suggestions for improving service quality and the app interface/functions regarding the app(s) you use. *

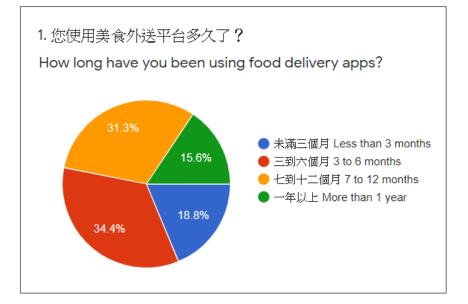
45.	不使用美食外送平台之原因(可複選) Why don't you use food delivery apps? (can have multiple answers)
	Check all that apply.
非常 Thai	咸謝您的參與! hk you for your participation!
	This content is neither created nor endorsed by Google.
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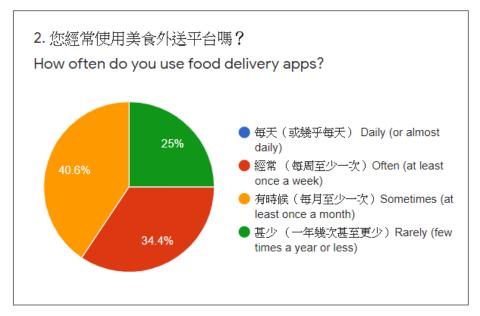
Appendix B: Survey Results

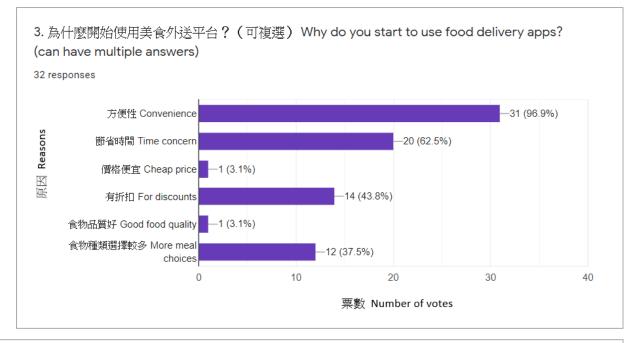


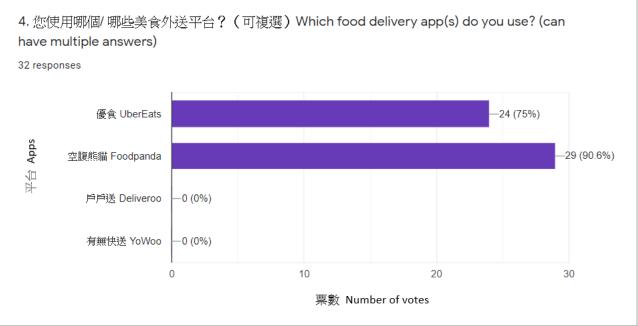


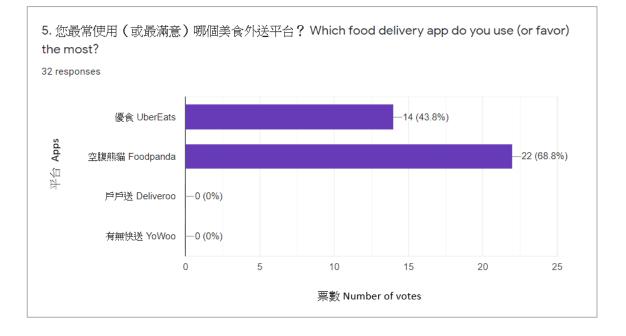




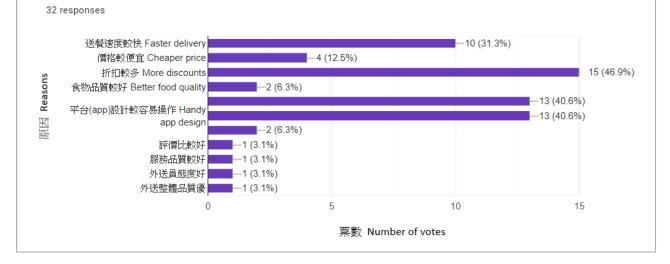


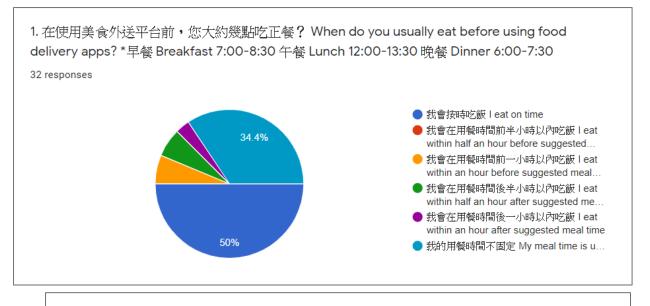


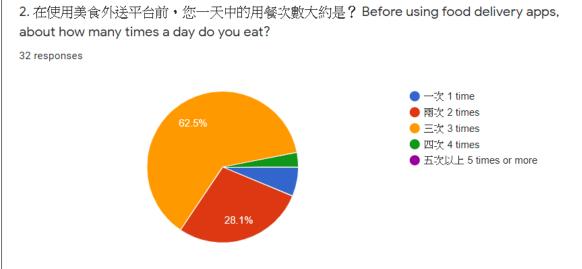


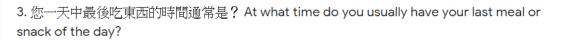


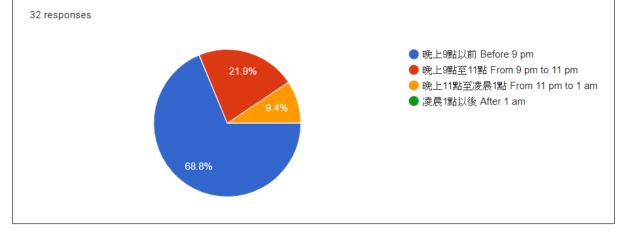
6. (承上題)為什麼最常使用(或最滿意)這個美食外送平台?(可複選)(Cont'd) Why do you use (or favor) this food delivery app the most? (can have multiple answers)

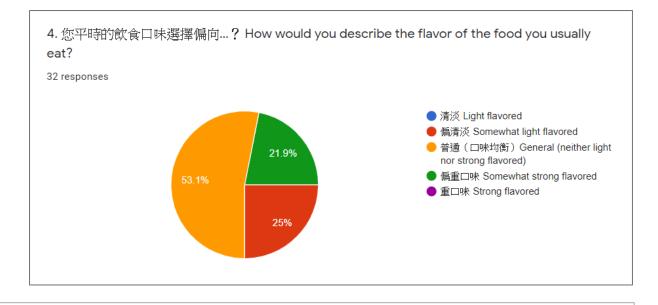




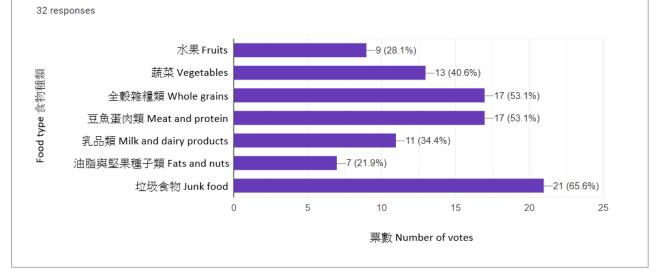


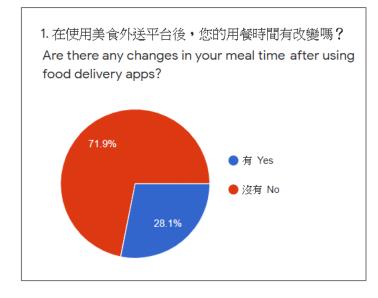






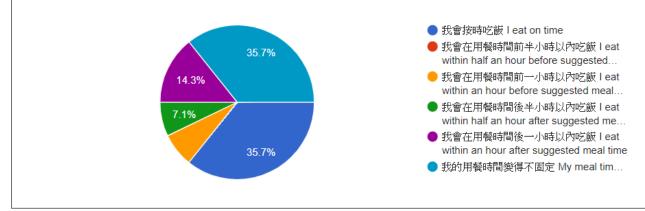
5. 您在使用美食外送平台前的飲食選擇是? (可複選) What types of food do you usually eat before using food delivery apps? *食物分類可參考此連結 Link for food classification reference:https://nutri.jtf.org.tw/index.php?idd=1&aid=3&bid=203&cid=21

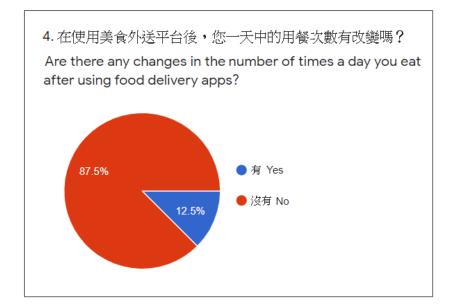


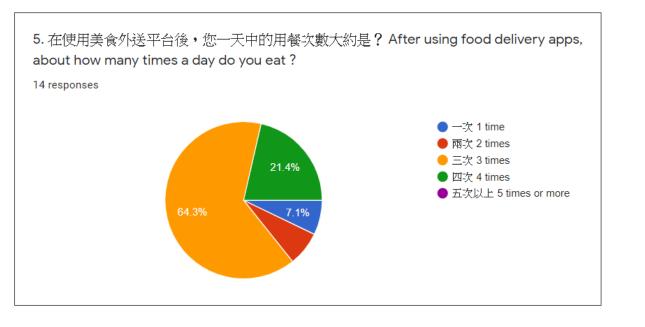


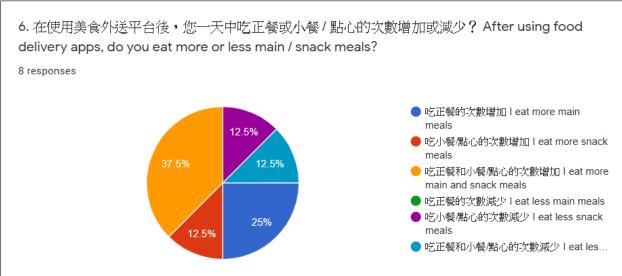
2. 在使用美食外送平台後,您的用餐時間有何改變? What changes are there in your meal time after using food delivery apps? *早餐 Breakfast 7:00-8:30 午餐 Lunch 12:00-13:30 晚餐 Dinner 6:00-7:30

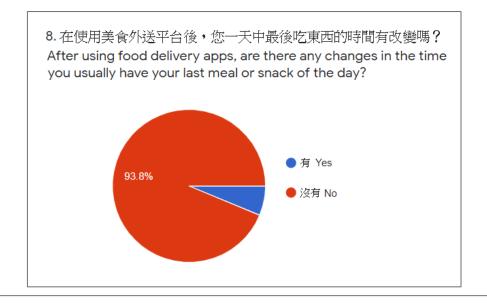
14 responses



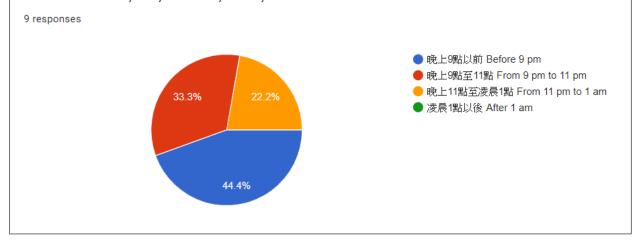


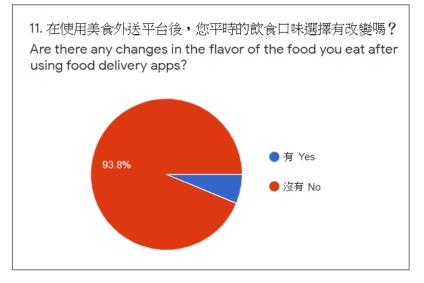


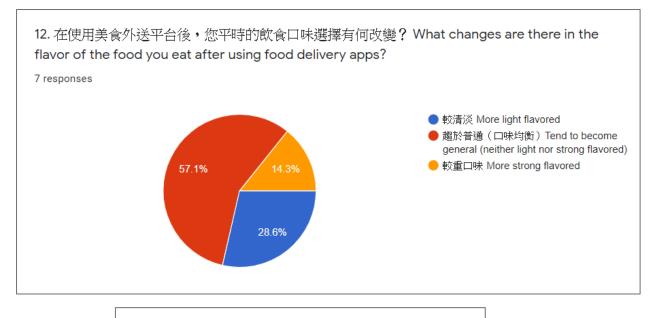


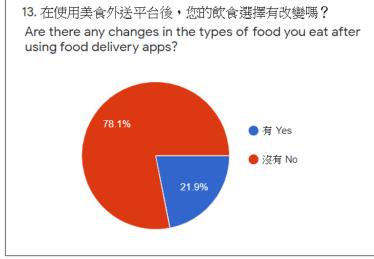


9. 在使用美食外送平台後,您一天中最後吃東西的時間是? After using food delivery apps, at what time in a day do you usually have your last meal or snack?

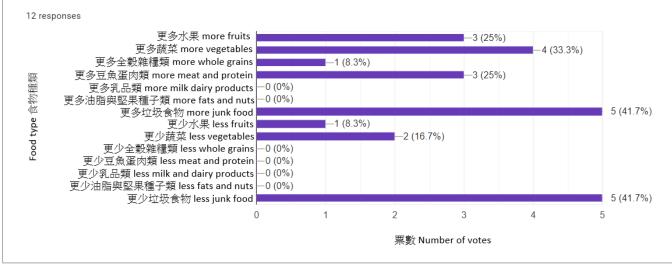








14. 您在使用美食外送平台後的飲食有何改變?(可複選) What changes are there in the types of food you eat after using food delivery apps? (can have multiple answers) *食物分類 可參考此連結 Link for food classification reference: https://nutri.jtf.org.tw/index.php? idd=1&aid=3&bid=203&cid=21



1. 對於您使用過的美食外送平台的整體滿意度評分(請在「其他」註明美食外送平台名稱) Please rate your satisfaction for the app(s) you use based on the delivery services' overall quality. (Please provide the name(s) of the food delivery app(s) in "Other")

32 responses

