Consumers' Perception Towards Food Personalization During the COVID-19 Pandemic

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Abstract: This study offers an insight as to how consumers view food personalization. It seeks to analyze customer perceptions about food personalization and determine how the pandemic has influenced consumers' specific requests. The perception of 17 participants may be utilized as a resource not just for promoting information about the rising concept of food personalization but also for company owners who wish to evaluate food personalization as a market strategy during and after a pandemic. It raises awareness among all individuals whether there is a need to determine if this growing idea is practical during the pandemic, primarily due to the rising need for healthier food options. The researchers then used online interviews to understand the diverse perspectives of the participants in order to know the consumers' perceptions of food personalization in this time of the pandemic. The data suggest that people have a wide range of preferences and desires. The study discovered that food personalization is beneficial and has evolved into a meal that may improve one's everyday routine. As this notion spread throughout social media, this meal became more prevalent among individuals and became more accessible. This sort of meal plan is great to try for anyone who wants to try something new during this pandemic.

Keywords: consumers, COVID-19, food personalization, pandemic, perception.

I. INTRODUCTION

The increased awareness of the health effects of food has resulted in an increase in the number of options for healthy diets. This creates the potential for the food sector to offer customers personalization. (CIO Applications, 2019). People now understand that one's diet influences health and wellness, which has changed their expectations towards food. According to Wheatley (2020), people no longer buy the concept of one size fits all, which is highly reflected in individuals' dietary selections. As a result, food businesses are emerging to desire more personalized and customized food and beverages. With many food start-ups catering to different diets, food personalization has helped clients make better food decisions in achieving a much healthier transformation.

The novel coronavirus or COVID-19 has struck the globe affecting the global economy. The accompanying public health initiatives have caused chaos in global food chains. According to Ong et al. (2020), an examination of frequently distributed food products indicates that the present Filipino diet satisfies acute hunger but lacks the nutrients needed to develop and sustain health. Because of the public health safety implementations, most households have compromised their nutritious intake by eating ration food to sustain their hunger. As the concept of food personalization is becoming readily accessible to the public, it is best to explore whether this is a feasible concept during COVID-19.

According to Francois (2019), food personalization from the word itself is about personalizing food. It is a tailored experience based on the consumer's wants and needs. The desire for more customized solutions is becoming more

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significant. It mirrors the customer's view of what they want and their perceived needs and preferences (Wheatley, 2020). With the increase in consumers' desire to customize their meals using healthier ingredients, more brands have started to reconsider their marketing techniques (Tartalio, 2020). One strategy, in particular, is the introduction of "ready-made meals" or "pre-made meals" in the food industry. These meals are already prepared before they are delivered to consumers (Ladd, 2018). They are classified according to different meal plans such as keto, low-carb, gluten-free, and the likes. Consumers can choose their desired ready-made meal kits according to their dietary preferences or needed nutritional requirements. According to Wilson (2019), online food delivery is expected to grow into a \$365 billion industry, having groceries and pre-made meal kits as some of its contributing services. Along with the increase of technology-enabled delivery over the last decade for both groceries and ready-to-eat meals, consumers are taking full advantage of this concept at the expense of their convenience (Deloitte, 2019).

In the Philippines, several food establishments offer personalized food, often through delivering nutritionally balanced meal kits. In a Euromonitor International (2021) survey, with increased health awareness in the Philippines, ready-made meals are predicted to register an 11 percent growth in 2020, compared to a 5 percent increase in 2019. Hence, it is essential to continuously provide healthy meal choices among Filipino customers to maintain their interest in consuming Filipino food (Glorioso et al., 2017). Furthermore, to address food insecurity in healthy diets, food system transformation should provide supportive food settings that encourage people to make healthy food choices (FAO et al., 2020).

The Universal Health Care Act or the Republic Act No. 11223 states to protect and promote the good health of the people and inculcate health consciousness in them. This act also emphasizes an approach that ensures all Filipinos are health competent, supplied with healthy living circumstances, safeguarded against dangers, guaranteed fair access to high-quality and low-cost health care. This must be done by formulating, implementing, monitoring, and evaluating health policies, programs, and initiatives (National Nutrition Council, 2020).

This paper attempts to answer the gaps in literature aimed at customers' perceptions about food personalization. However, despite the growing popularity of personalized food, these services serve a modest population proportion. Therefore, there is a need to understand whether this emerging concept is viable during the pandemic, especially as there is an increased demand for better food choices (Helble, 2020).

In order to assess the reputation of food personalization, the market is to be represented by consumers of selected restaurants and food delivery services that offer personalized food in Metro Manila. The following list of food establishments is based on articles by lifestyle websites such as Booky, Cosmopolitan, and Click the City, listing down restaurants where customers can curate and create their meal tailoring to their needs or customize meals in accordance to their dietary preferences:

- 1. *Juju Eats* a full-service salad bar and restaurant with branches in Eastwood and Makati City. Juju Eats offers a set menu and offers a do-it-yourself salad bar where customers can create a more personalized meal.
- 2. Poke a poke bar that allows guests to customize their own poke bowls from the base and flavor to the toppings.
- 3. *BRGR Project* is a burger joint famous for allowing customers to customize everything in their meal, from buns, toppings, and even sauces.
- 4. $Ramen\ Nagi-$ a ramen place recognized for its personalized noodle bowls. Customers may choose their desired flavor strength, thickness, and hardness of noodles, meat and vegetable tops, spice, as well as the intensity of their broth.
- 5. *Salad Stop* a quick-service restaurant that offers hearty bowls and wraps. Customers can also customize their bowls and wraps from their wide selection of greens and toppings.
- 6. The Sexy Chef widely known as a premier diet and a food delivery service, The Sexy Chef has various meal selections to choose from varying from calorie-count, type of diet plan, and healthy packed meals customized according to one's preference and budget.
- 7. $Pickle\ PH-$ a food delivery subscription service offering ready-to-eat meals that can be customized according to one's dietary preference, allergens, and sensitivities.

The findings of this study can be used as a reference not only for spreading awareness regarding the emerging trend of food personalization but also for business owners who want to assess food personalization as a market strategy during and post-pandemic.

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Research Paradigm

The framework below demonstrates that the factors affecting their viewpoints must be considered to acquire the customers' perception of food personalization. The independent variables are the different factors affecting buying behavior when purchasing personalized food. These factors are based on literature by various authors regarding what influences consumer perception. The first factor is the external or sociocultural influences, as stated by Monterrosa et al. (2020). Other factors are also taken into account, and these variables are tailored to individual needs according to Michelle (2019), nutritional benefits as said by Serhan & Serhan (2019), convenience by Jewell (2021), quality, and price as stated by Mercer (2019).

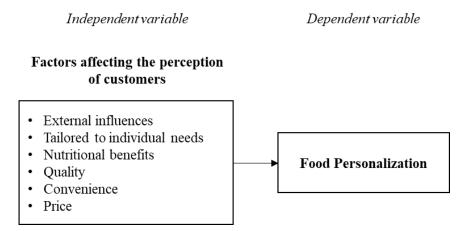


Fig 1: Independent and dependent variable paradigm

Factors influencing customer behavior are external influences, tailored to individual needs, nutritional benefits, quality, convenience, and price.

The independent and dependent variables have a cause-and-effect connection in this paradigm. Therefore, how food personalization is perceived depends on the different factors affecting customers' views.

Objectives of the Study

This study aims to provide an overview of how customers perceive food personalization. This paper also seeks to identify consumers' attitudes towards food personalization and distinguish how the pandemic has changed customers' individual needs. Customers' perceptions of food personalization will be assessed using the following variables gathered from respondents: external influences, tailored to individual needs, nutritional benefits, quality, convenience, and price.

With the objectives mentioned above, it is hoped that this research will provide answers to the following research questions:

- What are the insights of consumers towards food personalization?
- How did the pandemic influence the needs of consumers with regards to the personalization of food?
- How viable is food personalization during this time of pandemic?

Literature Review

Food Personalization as a Food Concept

According to Custom Culinary (2021), personalization has evolved and shifted through the years. It is now extensively recognized in the food industry. More operators recognize the need to guide guests toward a curated offering. It provides inclusiveness by delivering a choice of services to satisfy the demands of a wide range of consumers. As modern companies begin to develop offerings based on the way they provide food and the food itself, personalization is an area that is ripe for innovation and investment (Leatherhead Food Research, 2019).

On the other hand, customization has evolved for one's health and dietary needs. Alternatives like meat-free, dairy-free, and lower carb have grown in popularity over several years. Through alternative offerings, it provides the benefit of inclusivity to meet various consumers' needs. Consequently, meal kit companies have begun to offer add-ons in their meal

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options, such as snacks and desserts, in addition to their extensive meal selection. This invention gives consumers a sense of individuality in their meals (Meal Finds, 2020). As a result, meal kit services have grown in popularity through the years. This trend is expected to continue due to COVID-19 lockdown measures and restaurant closures (Sentisum, 2020).

The Current Situation of Food Industry

Government procedures and different levels of lockdown enforced in nations worldwide have resulted in changes in customer behavior toward the food and beverage sector (Nortjé, 2020). According to Line (2021), COVID-19 has caused customers to spend more time at home than ever before, dramatically impacting their cooking and dining habits. This is related to the increased risk of viral transmission associated with dining out and supermarket shopping. In addition, restaurant and café closures have made it difficult for customers to eat out. According to research done by Sultana and Islam (2020), COVID-19 has caused local restaurant sales to drop by up to 50%. As a result, businesses have turned to e-commerce or online food ordering systems to help them deal with their profit problems.

Food Personalization and the Pandemic

The new coronavirus outbreak significantly impacts consumer eating and drinking habits, especially given the scope of COVID-19 problems, which encompass both health and economic concerns. According to Hughes (2020), as consumers become aware of their health, they want to improve their immunity, minimizing their susceptibility to illnesses. As a result, individuals become more aware of their health and more careful about taking care of themselves. In addition, according to Pu et al. (2020), individuals have limited their frequency of going out because of quarantine restrictions. As a result, there is a need to participate in healthful habits at home. They have also emphasized the necessity of people practicing healthy habits throughout the COVID-19 pandemic.

In a survey by the International Food Information Council in 2020, there is a developing recognition of the importance of wellness in the food sector. The survey also states that 54 percent of customers are more concerned with the nutritional value of their food choices in 2020. Compared to the survey in 2010, customers consider the healthiness of the food as the most influential factor, outweighing flavor and price. With that said, this opens opportunities for personalized meal programs to cater to more consumers. The meal-kit is a pre-portioned prepared food meal, and although its idea is new to the market, it is expected to grow with time to fulfill the demands of its clients (Meal Finds, 2020). Meal kits are also assumed to impact consumer diet plans and community health and promote good lifestyle practices. (Moores et al., 2020).

Goddard (2020) states that as people grow more concerned about their health, the pandemic's limitations have changed their perception of food purchases. According to Eftimov et al. (2020), there has been a substantial shift in individuals' eating habits throughout the pandemic. It has also been observed that quarantine led to a reduction and rise in the frequency of the foods. Aside from this, the frequency of salt, fat/oil, sweets, and fruit juice have decreased. Changes in such frequencies are justifiable because homemade meals are becoming more common than pre-processed foods as more people stay at home.

Factors Affecting the Perceptions Towards Food Personalization

Although the significant element influencing customer impression is their experience with the product or service, more underlying variables should be considered when understanding customers' perceptions. Mercer (2019) defines the primary variables affecting consumer behavior. These are price or value for money as well as quality.

- **Price** Though the price may not be the most essential aspect in establishing a customer's perceived value, it does impact their purchasing choices (Winsky, 2017). According to Zhong & Moon (2020), the perceived price regulated consumer satisfaction and perceived quality attributes. They have also found out that a reasonably priced product directly impacts customers' perception of overall quality.
- Quality Mercer (2019) defines quality as attributes that can satisfy or disappoint a customer. It includes the usability and reliability of the product. Quality is often linked with satisfaction as the customer's experience with a product determines their perception of quality.

Aside from these primary factors, the following factors are also to be considered when assessing the customers' perceptions. As this study focuses on the personalization of food, it is crucial to assess whether establishments deliver a personalized experience to the customers. Michelle (2019) stresses how a product tailored to one's needs can affect customer satisfaction.

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• Tailored to individual needs - As personalization grows, customers want brands to target them individually with products that are particularly relevant to them rather than broad-based marketing. (Lindecrantz et al., 2020). According to Michelle (2019), catering to specific customer needs and providing personalized experiences improves customer satisfaction and increases customer loyalty. This is because customers find value in exclusivity or specificity, such as a feature that operates in a way that matches their demands.

Consequently, Serhan & Serhan (2019) define nutritional benefits as an essential factor as the nutritional value of food significantly influences how the overall quality of food is measured.

• **Nutritional benefits** - Customers are more mindful about the nutritive value of the meals they consume Serhan & Serhan (2019). Kapur (2018) also states that individuals should be aware of all nutrient characteristics in their food and its benefits. Therefore, by assisting customers in making healthy meal choices, customer outcomes for healthy eating can be improved (Onyango & Wasike, 2018).

Another factor affecting consumer behavior is convenience, based on a report by Jewell (2021). Convenience is beginning to outweigh other purchasing decision factors such as price.

• Convenience - According to Jewell (2021), convenience has significantly affected consumer behavior. There seems to be an increasing demand for acquiring purchases with little effort enhancing the overall customer journey. With the innovations in technology expediting the ways people purchase their necessities, providing convenience and accessibility to consumers offers a competitive advantage.

The last factor affecting consumer perception is external or sociocultural influences; as stated by Monterrosa et al. (2020), External factors such as one's social and cultural background fall under this category.

• External influences - The larger sociocultural context also influences food choices. Therefore, they are also an essential determinant of nutritional status and health. External factors include sociocultural influences such as religious and social groups and cultural prohibitions (Monterrosa et al., 2020).

II. METHODOLOGY

As this paper aims to understand the participants' perceptions of food personalization, this study falls under qualitative research. Utilizing qualitative methods answer questions regarding the experience from the participants' viewpoints. Qualitative research is not amenable to measuring. However, it provides an in-depth understanding of one's experience from a personal experience, ensuring the richness and credibility of the data collected (Hammarberg et al., 2016).

Research Design

The study will be utilizing a qualitative research design, specifically in a phenomenological approach. According to Van Manen (2017), a phenomenological approach is used in a study that deals with experiences. The researchers used this approach because the study tackles a specific phenomenon understanding food personalization and its effectiveness during the COVID-19 pandemic from the customers' standpoint. This approach can help the researchers identify the different perspectives towards food personalization and understand the study participants' experiences.

Research Locale

Research locale refers to the place or setting of the study. Due to the COVID-19 pandemic, all direct physical interaction with other people has been halted in the meantime. Hence, this study will be entirely conducted online. This paper will be conducted during the academic year 2021-2022.

Participants of the Study

The researchers will use snowball sampling to gather information needed to answer the study's research questions. Snowball sampling is a qualitative research method that is used to create a pool of participants for a research study. (Frey, 2018). The researchers will ask the initial participants to recommend future participants to participate in the study. Thus, the initial number of participants would be a minimum of 15 individuals who are previous customers of selected food businesses that offer food personalization.

Aside from this, the researchers will also consider participants' demographics, such as their gender, age, dietary preference, and where they frequently consume personalized food. Participants will be gathered through crowdsourcing on various social media websites, including Facebook, Twitter, and the likes.

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Research Instrument & Data Gathering Procedures

Due to the coronavirus outbreak, the process of data gathering and analysis of acquired data will be entirely held online. Upon confirming the intent of the participants to participate in this study, they will be interviewed through online communication applications and software such as Microsoft Teams. The researchers will conduct a structured interview with the participants following an interview guide and script formulated through the research problem and research questions. In a structured interview, the same questions are asked to the respondents in the same way. Throughout the interviewing process, the researchers must stick to the order of questions and question wording (Adhabi & Anozie, 2017). Open-ended questions will also be asked to acquire as much information as possible. Verbatim transcripts, video documentation, and audio recordings will also be employed to promote the accuracy of the received data. For ease of transcribing, the researchers will also use software such as *ExpressScribe*, designed for transcribing interviews made via audio recordings.

Data Treatment and Analysis

The data collected from the participants will be analyzed qualitatively. Once data has been gathered, a transcript will be created recording each participant's statements. After transcribing, the data will be coded into themes with the framework of this study as its basis. The coded themes answer the specific objectives that deal with the effectiveness of food personalization during this time of the pandemic.

To retain the credibility of answers provided by the participants, data will be reported by quoting their statements and through narrative analysis. Aside from this, the findings will also be interpreted accordingly, relating them to previous related studies.

III. RESULTS AND DISCUSSIONS

The results of this study are organized according to different themes that fall into the six factors affecting the perception of customers towards food personalization: (1) external influences (2) tailored to individual needs (3) nutritional benefits (4) quality (5) convenience and (6) price. Each factor contains themes collected from the interviewed participants.

The first section of the interview tackles the demographics of the interviewee, asking personal details such as their name, age, gender, dietary preference, and the name of their frequently visited restaurant. The majority of the interviewed participants fall under the age bracket of 18-24 years old, with 11 candidates out of 17 named Restaurant 4 as their frequently dined in the restaurant. Most of the participants (13) did not provide their dietary preferences. However, some candidates have mentioned having low-fat (P2), gluten-free (P3), and high-calorie (P15) as their dietary preference.

3.1 External Influences

Participants were asked a series of questions regarding the external influences affecting their perception of food personalization for the first factor. This includes how they perceive this concept and whether their social and cultural background has affected their familiarity with personalized food. Participants were also asked how has the current pandemic affected their eating behaviors and purchasing decisions.

Food personalization as an influential food lifestyle

As most participants define, food personalization is a personal food concept based on one's set of choices. As stated by Participant 4, "It is all about making your own food and selecting your own set of ingredients." It is also considered to be a lifestyle as described by Participant 14, "It refers to my daily lifestyle as I base what I eat on the food preferences that I know is healthy for my body." This type of food concept has become more common among groups of people as "This concept has spread everywhere on social media" (P11). Food personalization is also perceived to be influential due to trends. "Nowadays, people are open to the public about what they eat," added by Participant 11. Therefore, this concept has gradually piqued people's interest, which is now, according to Participant 12, is "...becoming famous through word of mouth or social media". Participant 17 also stated, "When they (people) tell you to "try this," you will later learn about it and discover that it is good to order personalized food." Because of this, as stated by Leanne (2021), personalization is changing the face of the food and beverage industry. Brands are now creating meaningful connections with their customers through this food concept as a competitive strategy.

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Shifting to available market alternatives

The pandemic has also played a significant role in affecting the eating behaviors of the customers. As affirmed by Eftimov et al., in 2020, a major shift in individuals' eating habits is evident during the pandemic. Participant 2 stated that staying at home due to the pandemic has made them feel "...overwhelmed by all the foods available," which has led to not maintaining their diet. The same sentiment goes for Participant 6, saying, "The pandemic made me consume a lot of unhealthy food." Staying indoors has played a factor as food deliveries served as consumers' tools to cope with the restrictions to dine outside. Participant 8 described the influence of the pandemic on their food decisions as it made them get used to "...making homemade meals and ordering food online". Because of this, the rise of consumers' unhealthy food habits shed light on shifting to available market alternatives. Based on Pu et al.'s (2020) findings in a previous study, the decreased frequency of going out has resulted in consumers engaging in healthy eating habits at home. The availability of the products plays a role in this case, and as Participant 3 stated, "The available food in the market is very limited," and Participant 15 also specified that it left them with "no choice but to try and make use of whatever is available at the moment."

3.2 Tailored to personal needs

Regarding whether food personalization is tailored to consumers' personal and individual needs, the following themes highlight how consumers value personalization and how they begin to apply this concept in their food consumption.

Aligned to consumers' needs

Because of the pandemic, consumers begin to realize the value of personalization in their daily lives. Participant 4 states, "I value food personalization so much because I am a bit picky about food sometimes." Personalization allows them to adjust their needs and preferences accordingly, especially when eating food. As mentioned by Participant 17, "You cannot just stick to one thing all along. Not everything will fit everyone, of course, there are things you might like, but others do not". As consumers have different goals, wants, and needs, food personalization offers a medium to get what they want. Participant 1 defined the value of personalization as "something that is especially meant for me." Because of this, consumers are a lot warier of the concept of customization. They feel that "personalized foods fit so much in my palate because it was designed to cater what I want and need in a meal. I do not imitate others because of course it is personal," as articulated by Participant 3. Although in some cases, influences from other people affect consumers' meal choices. However, when it comes to personalized food, consumers seem to look for something that is precisely tailored to their liking. As a result, businesses providing this meal idea are considered inclusive to their customers since they give them a range of options to meet their specific demands (Custom Culinary, 2021).

Source of needed nutrition

Along with the influences of the pandemic, consumers view personalized food as a good source of their nutritional requirements. As consumers differ in their dietary preferences, food personalization makes it easier for individuals to manage their food intake aligned to their personal needs. When asked about what the consumers look for in a meal, most participants described their food as having much nutritional value. This is also seen in previous literature as there is a developing increase in recognition of the importance of health and wellness for consumers (International Food Information Council, 2020). For example, participant 15 states, "As we now begin to realize the value of our health, condition, and well-being, I have come to realize that I value food as much as I value my health." Participant 6 also states, "The health contents are important to me, especially since I have a lot of health problems, so, it is important to me what to put in the food." The concept of food personalization provides room for consumers to adjust their meals according to how healthy they want their food to be. Therefore, allowing consumers to realize their goals and individual needs includes being fit and healthy. This is critical because being informed of food's nutritional advantages helps customers make better choices to reduce their vulnerability to diseases (Hughes, 2020).

3.3 Nutritional Benefits

Nutritional value depends on the food itself

When asked regarding one's health expectations, the majority of the consumers believe that it all boils down to what is in the personalized food being consumed. For example, participant 14 states, "I do not have much expectation. As long as I get the food I want, I am okay with it." Participant 17 shared the same sentiment saying, "It depends on the choices, such as if there is an option that there is a healthier way, I would usually try to eat healthily. However, in terms of just plain

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customizing, I go with what I like or what I think tastes better." As establishments that offer food customization differ, the nutritional benefits of personalized food depend highly on what type of food is being ordered and whether the food is customized according to an individual's needed nutritional requirements. However, once businesses understand that their customers are evaluating the nutritional profile of their meals, they are more willing to provide healthier menus and options (McBride, 2016). Participant 8 also added, "If the ingredients are healthy, then the outcome will be good." The participants also shared mixed responses when asked about any noticeable changes in their physical health. For example, Participant 5 stated that they became fitter while others, such as Participant 17, did not see any positive changes. "Nothing yet, as far as I know, of. Maybe there is a change internally, but I see no changes so far. Maybe I will see some changes as I grow older," Participant 17 added.

Nutritional value can be easily adjusted according to one's diet

Food personalization has allowed consumers to quickly adjust and manage their meals according to their specific dietary preferences. Huang (2015) recognizes that customizing allows consumers to be fully aware of what they are eating, which can be advantageous for their health concerns. Participant 2 affirmed with the statement, "It has an important role because I am aware of what are better foods for myself." Participant 11 also shares that one positive thing about personalized food is adapting quickly to any individual's diet. "The good thing about personalized food is you get to choose a specific diet that will help your body maintain its stability according to your nutritional needs like keto diet or dash diet. Then, you can adjust your intake accordingly."

When comparing personalized food to traditional food, there is a significant difference in adapting food according to one's nutritional needs. With this in mind, Participant 2 shares, "The nutritional value of personal food is more important because you know what you are eating and the effect that it will have on your body. While for regular food, you do not know or you cannot measure how many calories you eat or whether if it is too fatty because you are not aware of what is in your food".

3.4 Convenience

Good accessibility but with limited options

According to Jewell (2021), convenience has become a crucial element influencing customer behavior. Regarding this, food personalization is seen to be pretty accessible among consumers. According to Participant 6, "I am glad because our (Philippine) market is improving now because it used to be limited, but now consumers have the freedom to choose what ingredients to put in their food." Participant 8 also shared their thoughts about the market availability of personalized food in the Philippines, "There are now many who offer or cater this concept to customers. It is better because it is more accessible, and the customer can get more variations." Likewise, Participant 17 believes that "In the present time, it is becoming a lot more common because of the pandemic, and more and more businesses are starting up. So, I feel that there are now many businesses that offer customization based on our preferences."

Conversely, there are still limited options or availability of personalized food in the Philippine market compared to other establishments. Participant 13 affirmed, "Unlike in other restaurants, they are still fairly limited branches that I think cater personalized foods." The same thought applies to other parts of the country far from cities or distant from the metro. In the case of Participant 15, the accessibility of personalized food in the province is not that comparable to populated cities. "If I were to compare the accessibility of personalized food here in the province to the city, I think it is much more accessible there than where I am currently located," Participant 15 added.

Less convenient than traditional food

As stated by Letterhead Food Research (2019), aside from people being health-conscious, consumers are also aware of the convenience of their food. As a result, customers are frequently on the lookout for businesses that make it simple for them to reach their specific objectives. In terms of convenience when ordering, there is still a fine line between ordering personalized and traditional food. Participant 15 thinks that "Traditional food is still a lot more convenient since all you have to do is order. However, unlike when you order personalized food, you will be asked all these questions about what you like or prefer; many questions are involved." Participant 4 also states that there is a "struggle to choose and to pick what you want to eat." As personalized food is up to the consumer to decide how they want their meal to be, waiting time is highly dependent on how demanding a meal takes to prepare.

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Seamless transaction process

When asked regarding the convenience of the transaction process when purchasing personalized food, according to Participant 15, "It is a lot more convenient since cashless payment solutions are becoming more common these days. There is no need for physical contact with the staff, which encourages social distancing during the pandemic." The National Restaurant Association (2021) also claims that restaurant owners embraced contactless orders and payment systems faster. In addition, the rise of technological tools has made it easier for consumers to transact with businesses that offer the concept of food personalization. Participant 11 also thinks that "They are more convenient now because more people order online."

3.5 Quality

Excellent accuracy of order

Regarding the quality of personalized food, the accuracy of the order served to customers plays a significant role in determining the quality. When asked about what the participants liked the most about personalized food, they liked the accuracy of the order they personalized themselves. For example, Participant 14 says, "Since I can personalize my food, I can choose ingredients that I want, and I can balance my meal better." Customer satisfaction is directly affected by the correctness of a particular order. Making the order incorrect will take time and even money to fix specific mistakes (Callarman, 2020). Aside from this, Participant 14 explains that through food personalization, "I can choose the ingredients I want more or I will add or subtract ingredients from the meal I eat." The flexibility of options allows consumers to consume the meal they want in the most accurate way possible.

Commendable food concept

Food personalization is also recognized by CIO Applications (2019) as one of the most critical developments in the food sector. Because customers' preferences vary, catering to each need serves as a competitive edge in the market. As stated by the participants, food personalization is a commendable food concept in the sense that it allows consumers to mix and match their food however they like. Participant 2 states that they are likely to recommend this to their peers as "It is a very convenient way when you want to be the one to choose what you eat." Also, Participant 14 commends this food concept, especially to those trying to live a healthy lifestyle or dieting. Participant 2 also states, "I recommend it to my friends who do not have experience here yet so that they can try and compare what makes it different from what they eat regularly."

3.6 Price

Costly yet worth the money

According to Participant 8, "Personalized food is a bit pricy because you are the one to decide on your order along with food, ingredients or add-ons you would like to add to your food." As there is a customization process, consumers expect food personalization to be costly compared to traditional food. When foods are priced lower, consumers assume that cheaper, less nutritious ingredients were used in the recipe (Heneghan, 2016). Participant 17 believes that this price bracket is just right because "it makes up for the effort of the establishments when preparing your food." Along with the additional requests made by consumers, "the availability of the ingredients in the market and the effort to cook the food individually based on your preference" also plays a role, as affirmed by Participant 3. Therefore, it can be expected that personalized food is pricier but is reasonable in a way.

Participant 11 also believes that "The more nutritious, the healthier the food, the more expensive it is and its ingredients." Notwithstanding the costly price people pay to order personalized food, Participant 14 believes that "During the pandemic, it can be a bit pricy, but because you are basing it on the quality of the food, it is justifiable." In addition, as described by the Food and Agriculture Organization of the United Nations (n.d.), because of the amount of time and effort required to produce a product, it is often more costly than usual.

IV. CONCLUSION

The primary objective of this paper is to determine the perceptions of customers from various establishments that offer personalized food during this time of the pandemic. Upon analyzing the gathered themes from the participants' responses, interpretations have been formed. The findings proved the effectiveness of food personalization during this time of COVID-19. Based on the results obtained, the researchers drew the following conclusions:

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Consumers' perceptions of food personalization are shown via six factors. Learning more about this food concept influences individuals' eating habits and allows them to have better food choices (Trieu & Hill, 2019). This concept has developed into a meal that influences one's lifestyle. As a result, this idea has spread throughout social media and has become more popular. For instance, it allows people to customize their food preferences. Thus, people are more aware of the need to customize and manage meals depending on dietary choices, making this food idea practical and helpful.

The data also shows that individuals have diverse preferences. People consider customized food as a decent supplier of their nutritional worth as the pandemic impacts their food purchasing decisions. Corresponding to the statement of Wheatley (2020), there is a growing consumer desire to gather beneficial nutrients to improve and better control one's health and well-being. Dietary preferences differ across individuals; therefore, food personalization helps them eat according to their preferences.

Food personalization is seen as more accessible. In terms of convenience, contactless food personalization is much more convenient for individuals, and online transactions are booming now. However, it is worth noting that there is still limited market distribution and awareness of this concept in the Philippines despite its growing popularity. Therefore, as stated by Miller (2021), food personalization still has a long journey if it is brought on a large-scale basis for restaurants. Food personalization may help customers enjoy a meal more efficiently and effectively. Thus, this concept is realistic during this pandemic, and this meal plan is worth trying, particularly for those attempting to live a healthy lifestyle.

V. RECOMMENDATIONS

Based on the conclusions drawn from the participants' answers, the researchers have established recommendations both for practice and future researchers:

Recommendations for Practice

- 1. As customers are transitioning to readily available and healthier choices, food personalization is an excellent alternative for consumers looking to supplement their nutritional intake. It can also serve as a substitute for foods unavailable in the market as it is considered accessible among its target customers. Finally, its accessibility and benefits to one's body are appropriate during the pandemic as individuals become more conscious of their health and adjust their food behaviors accordingly.
- 2. Restaurant owners are also advised to consider the gathered perceptions of the participants towards personalized food as a basis in improving their products and services. The study's findings may also serve as a guide in analyzing their target market and how they perceive this food concept. Aside from expanding their variety of personalized selections, restaurants should also prioritize the convenience and availability amongst consumers, especially in other parts of the country with limited access.
- 3. Furthermore, the Universal Healthcare Act encourages every Filipino to promote good health and health consciousness (National Nutrition Council, 2020). Thus, it is recommended that individuals utilize this food concept to spread health awareness to themselves and other people about the importance of having healthy eating habits during COVID-19.

Recommendations for Further Study

- 1. It is recommended for future researchers to expound more insights about food personalization through other forms of data collection. For example, utilizing a different research method to collect statistical data can back up or provide additional information regarding the study. Through this, future researchers can gather other relevant results in a reduced amount of time from a much higher number of participants.
- 2. Future researchers are also recommended to research other aspects of food personalization aside from physical and online food businesses that offer this food concept. Further studies on concepts such as personalized meal kits and ready-to-cook meals are also encouraged to determine other viable food concepts during the pandemic.
- 3. Lastly, future studies may focus on the viability of food personalization post-pandemic, assessing whether this food concept will remain relevant and permanent in the food market as the needs of consumers change.

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