

**Branding Their Business and Developing and Refining Their Menus: A Qualitative Study
of Mobile Food Vendors in Southeastern Michigan**

Kylie M. DeVlaminck¹, Melissa M. Reznar, PhD, MPH¹, Jaclyn E. Talbot¹, BS, Candis Jarbo¹,
BS, Faith I. Liechty¹, BS, Sophia M. Simbeni¹, BS

¹Oakland University School of Health Sciences, 433 Meadow Brook Road, 3102 Human Health
Building, Rochester, MI, 48309. Email addresses: KMD (kylievedvaminck@oakland.edu); MMR
(reznar@oakland.edu); JT ((jaclyn.talbot@aol.com)); CJ (candisjarbo13@gmail.com); FL
(faithliechty05@gmail.com); SS (smjsimbeni@gmail.com)

Kylie M. DeVlaminck is the corresponding author.

Abstract

A modernized aspect of the food away from home (FAFH) culture are food trucks, as they allow consumers to make more educated decisions about their food consumption, while basing their business practices around co-creation. Thirteen qualitative interviews were conducted using semi structured questioning to investigate how food truck operators brand themselves and refine their menus. Using open, line-by-line coding in order to identify key phrases of text, coded information was analyzed to determine overarching themes. Following interview analysis, it was concluded that food truck operators developed a unique identity for their trucks to stand out amongst competitors and attract customers. These identities were primarily based on life experiences and personal cultural perspectives. Upon implementation of their identity, external (from consumers) and internal (from truck operators) feedback influenced menu adjustments in a physiology-like feedback loop model. Consumer's specific menu needs, ingredients, nutrition, preparation, and ethnicities in the food all had an influence on menu specifications. Applicable to both food trucks and restaurants at large, co-creation, or working directly with the consumers to better reflect their desires, allows consumers to make more educated decisions about their meal purchases. Thus food trucks may just be the bridge between healthier meals and FAFH.

Keywords: Food Trucks, Food Away From Home, Food Environment, Menu Creation, Menu Feedback, Co-Creation, Food Retail, Nutrition, Brand Image, Consumer Behavior

1. Introduction

Food away from home (FAFH) has been a contributor to US culture for over 50 years (1) and accounts for \$1.77 trillion in revenue annually (2). On average, households in the United States allocate 44% of their total food spending for FAFH, and this amount continues to rise over the years (3). With almost half of an individual's average food consumption money being spent on fast food, there is an increase in their caloric intake (4). Approximately one third of an individual's daily caloric intake comes from FAFH (5). Processed meals purchased by individuals on the go are generally higher in saturated fat (6), added sugar (7), and sodium (8), leading to adverse health conditions (9). Therefore, the prepared food industry plays an important role in public health (10).

Obesity has rapidly increased in the United States since the 1990s as a very prominent health condition, especially in children and young adults (11). Daily increased caloric intake from processed meals predisposes individuals to having a greater probability of becoming obese (12). To attempt to combat this public health problem, the US enacted a law in 2018 stating that chain restaurants must post calorie content on their menus (13). This was enacted with the hopes that individuals could make more health-conscious decisions about their meals when consuming FAFH (13). However, it was found that nutrition labels and calorie counts may not be helpful for all consumers as not everyone has basic nutritional knowledge (14).

In an effort to bring greater customer knowledge to the FAFH experience, many prepared food industry companies use co-creation when developing their menus (15). Co-creation between

companies and consumers allows for a better restaurant experience because consumers can make more educated decisions about their meal purchases (15). Company and customer co-creation, however, requires a personal interaction in order to form a connection (16). This may be challenging for large chain FAFH companies to achieve, thus allowing smaller companies to gain an advantage over their competitors and stand out (16).

Food trucks are therefore these smaller companies able to thrive using co-creation to influence their menu as a redefined model of the food service industry (15). Yet there have been no studies examining food trucks using co-creation, albeit they may be ideal partners for this type of relationship with their consumers. Like many businesses, they are able to stand out amongst their competitors by finding a unique type of cuisine to include on their menu, as branding their business is important to culture and quality of food (16). However, no study has qualitatively examined how food trucks go about creating their menu using co-creation tactics. The factors that currently influence companies to create their menus may be able to work with the customer co-creation model. Therefore, the purpose of this study was to explore how food trucks develop and refine their menus based on their established brand and identity.

2. Methods and Materials

This study was part of a three phase, mixed-method research project: (1) survey food truck operators to quantitatively assess their attitudes and behaviors regarding food preparation, including the use of nutritionally-oriented practices (17), (2) an environmental assessment and menu analysis of food trucks in the geographical area, (3) a set of semi-structured interviews

among 13 food truck operators about food truck operations, menu creation, and perspectives on the food truck industry. This paper focuses on qualitative interview data from the third phase of the study.

Purposive sampling was utilized in order to maximize variation in cuisine types and locations. Food trucks were identified through online searches, local events, and word of mouth. During this interview phase, truck operators who completed the previous survey were contacted using a phone script. Those without phone numbers included on the survey were emailed to the address on their website or social media page. If the message was not reciprocated within a week, a follow up call or email was made. Further, if no communication took place within that week, another call or email was made. After three contacts, this food truck was considered non-recruitable. The food truck operators, who agreed to participate, were put in touch with research personnel to determine an agreeable time to interview.

At the beginning of the semi structured interviews, the research personnel and truck operator introduced themselves to each other, and the interviewer explained the purpose of the study. Next, the participant was asked to review and sign a consent form agreeing to having their interview recorded, but the information remained confidential. The estimated time of each interview was one to two hours. The following interview questions were focused on for coding and data analysis:

How would you characterize the cuisine of your food truck? What types of menu items do you have?

How do you develop your menus? What factors play a role in the development?

Why do you think customers buy food from your food truck? What makes your truck distinct?

To what extent does nutrition and health influence the foods you sell?

What is your perception about the role healthfulness plays in consumer decision to buy a food?

What kind of nutrition information is available for your customers? What influences your decision to have/not have this available?

Following the completion of the interviews, all recordings were transcribed and uploaded to NVivo software (version 12.5.0, QSR International, Doncaster, Australia) for analysis. The data were evaluated for common phrases and topics between interviews. The research personnel used open, line-by-line coding in order to identify key phrases of text. Thus, pieces of text may have been assigned to multiple codes, coming to agreement on codes for similar concepts. Once all of the coding was complete, the coded information was analyzed to determine overarching ideas and themes. When writing the results of the study, food truck initials were used instead of full food truck names to protect confidentiality. The identifiers throughout the results follow the pattern: (first letters of company name, cuisine).

The study was approved by the Oakland University Institutional Review Board prior to initiation of any research activities.

3. Results

Interview participants provided insight into how food truck operators brand themselves to attract customers and how they develop and refine their menus along the way. The study found that menu creation was based originally on the truck operator's idea of a unique identity.

Characteristics of the food truck cuisines and their owner-operators are included in Figure 1.

When asked about what specifically influenced the type of food they were serving, or their identity, some truck operators talked about prior restaurant experience. Most of the respondents had been working in the food industry for many years. Some of which took their menu from their brick-and-mortar restaurant and used it for the truck.

"I actually started with a restaurant in Canton. My menu in my restaurant was very suitable for a food truck. I wanted to start a restaurant in any campus town, for that matter, because it was very typically geared to people on the go. Of course on the go was my tag line. Fresh and ... was on the go. " (BW, Indian)

Additionally, some truck operators commented that their identity and menu was developed based on their life experiences. Others stated that their identity was influenced by their heritage.

"I knew what kind of food I wanted to do because obviously being from Trinidad, Caribbean food made sense, and no one was doing that, not even in a restaurant environment on a nice scale." (NG, Caribbean)

Upon implementation of the original menu identity, internal and external feedback influenced menu adjustments, similarly to a physiological feedback loop. External feedback, or modification based on consumer's preferences and needs, was more prevalent in affecting menu adjustments. From there, ingredient modifications were implemented in order to meet said needs. Additionally, varying ingredients affected the level of nutrition in the menu. Less prevalent in affecting menu adjustments was internal feedback, or modification based on operator and employee experience in the field. Difficult preparation of menu items sometimes drove changes in the products. In trucks that focused on ethnic cuisine, the owner's desired level of authenticity was sometimes modified after implementation of the menu. (Figure 2)

3.1. External Feedback: Consumer's Needs

The consumer's needs were primary driving factors in menu adjustments. Many truck operators said that based on the clientele and geographic location they were serving, menu changes may occur to increase business. Prior to an event, multiple truck operators stated that they would modify their menus to reflect the population they would be selling to. Other truck operators would alter their menus at their next event based on previous experience in that location.

"Well, I try to get as much information as possible. [...] Who are the majority of the customers? What type of food would they like? Do they want more of a meal type? Do they want more of a sandwich type? Do they want more of an appetizer where they just, like, finger food type?" (LB, smokehouse)

For public events, such as food truck rallies or festivals, many truck operators stated that they would have a larger menu but based on following their metrics of what they were selling, would stock up on extra ingredients for items they knew tended to sell better. On the contrary, private events boasted a limited menu.

"But I'll make the menu smaller. Hot dogs and brats, just keep it real simple instead of hot dogs, polish, Italian, chicken sausage, all that stuff. I'll make it really streamline." (F, hot dogs)

By adjusting the menu in order to better serve the customers, specific diet considerations were added to many menus. While most trucks had limited vegetarian options, many operators added that they would like to expand this part of their menu, though many menu items can be customized already.

"So, we did that, and we can do a Reuben with corned beef or turkey or a veggie meat and hit everybody but either way it's a great sandwich and so that was something that I want to try more often." (ND, Indian)

Many of the food truck menus also included gluten free options. Some operators mentioned that they will often use separate cooking utensils and a distinct prepping surface when preparing these menu items.

"But we do have a gluten free mix [...] we have to set up a separate machine for that."

(DMD, donuts)

A few of the truck operators also included that they started including gluten free options unintentionally, stating "The gluten free happened by accident." (SS, vegan and gluten free).

Some of the food truck menus included dairy free options as well. There were limited dairy free options, but modifications can be made. It was also mentioned that these options may be added or removed, based on selling location.

"People are so thankful for the shakes, because there's a lot of people, especially African Americans, who are lactose intolerant, and they haven't had a shake in years. And so, they come back and they're like, "That's the best shake I've ever had!" (SS, vegan and gluten free)

Allergens were also considered when creating food truck menus in order to better suit customers. Many truck operators added that they display a common allergen sign on their truck to inform customers of possible allergens that could be in their products, stating: "she made me make a sign that said, eggs, wheat, soy, everything possible that someone could be allergic to and put it up." (DMD, donuts). Additionally, truck employees are prepared to openly discuss allergen information with the customers in order to keep them safe and informed.

3.2. External Feedback: Ingredients

The addition of new diet considerations to a food truck's menu causes ingredients to be modified in order to create those new menu items. Additionally, customer feedback on ingredients in general caused truck operators to rethink the products they were serving. Most food truck operators claimed that they strive to use mostly whole and fresh ingredients. By using fresh ingredients, they said that the quality of the ingredients increased, thus increasing the quality of their menu. Additionally, many menu items across multiple food trucks were made fresh daily.

"People need fresh warm hot food, and comparatively I think food trucks do give fresher food you know. My food was completely prepared fresh every day." (BW, Indian)

Locally sourced ingredients were another factor that many truck operators took into consideration when developing their menus. Most of the food truck operators said that they try to source most of their ingredients from within the state of Michigan, instead of sourcing out to other states and having ingredients shipped in.

"Our coffee is locally roasted in Linden, Michigan, and then we found an organic farmer in Lake Orion." (SSC, organic & natural)

Multiple truck operators also said that they source a lot of their ingredients from local farmer's markets, adding "Fresh tomatoes, so it was more about how natural it can be, how local can you get, you know" (CC, Italian).

The need for a simple menu also affected the ingredients that truck operators used. Multiple food truck operators claimed that it can be challenging to maintain a fancy or large menu. For private events, they will use a smaller menu with less ingredients in order to give customers less options to make production quicker.

"We'll do three ingredients, we'll do three/four ingredients in a dish and that's it." (CC, Italian)

3.3. External Feedback: Nutrition

Using different ingredients for the menu items then caused nutritional differences, according to the food truck operators. Some of the trucks took the previous external feedback and made changes to their menu's nutritional quality. Many truck operators added that having a nutritional menu, or at least nutritional options on that menu, attracted customers to the truck. By not including processed foods, they viewed their menu as being nutritious, and that was a standard they intended to uphold.

"If it's fresh vegetables or cooked vegetables, there's always vegetables. We know the importance of produce for your health and it's something that I felt like it's getting more popular over the years and getting more awareness." (PP, wraps)

Additionally, a few truck operators noted that the ingredients they included in their ethnic cuisine made them nutritious, stating: "Mind you Indian cooking, I mean Indian cuisine is the best food

actually because we make everything fresh, no preservatives at all even when I was in the restaurant or my food truck." (BW, Indian)

On the other hand, there were some food trucks that did not make nutritional changes to their menu, viewing their menu items as treats, noting "I know it is not the healthiest choice, but I do know that we're just a treat." (DMD, donuts)

3.4. Internal Feedback: Ethnicities in Food

Of the food trucks that chose to implement an ethnic cuisine as their identity, some of them chose to create menu items in a traditional way. That is, they created the meals as though they would be created in their native country, to spread their culture authentically in America.

"And it allows me to then cater to what I think people really want, but what I think represents Caribbean food, at least from Trinidad. So, I'm really trying to keep the representation, if you will." (NG, Caribbean)

Many of the truck operators claimed that it is very challenging to find their traditional food on the go, here in southeast Michigan, stating "Some people from my restaurant days, they would search for it and then come down to my food truck. Because certain flavors that I have you won't find it anywhere." (BW, Indian)

Some of the other food truck operators whose menus consist of ethnic cuisines chose to put an Americanized twist on the traditional food creation. A few of these food truck operators said that they made their menu like this to appeal to a larger population. Another reason for putting an Americanized spin on the menu items was that it is easier to prepare the order.

"Everything we had to cook at least, I started using instead of making fresh flatbread that I used to do in my restaurant, I started using tortilla, flour tortilla from Mexican [*sic*]." (BW, Indian)

3.5. Internal Feedback: Preparation

Preparation was also talked about as influencing the identity of the food truck, describing how and when they made the food or prepared the ingredients in order to allow their selling to run smoothly. Most of the truck operators mentioned that they perform a lot of preparation in their commissary kitchens.

"I cook in a licensed kitchen and then I bring my food into the truck, and I hold it in the steam pans" (NG, Caribbean)

Many of these individuals talked about how they prepare the food the day before, revealing "So pretty much everything is being prepared ahead of time but being cooked at the day, on the spot at each event that we're doing, because nothing is being cooked or premade a day before." (PP, wraps)

Multiple other trucks claimed that they prepare their food to order, meaning they make the food as it is ordered, specifically for that customer. Those food truck operators stated that they do that in order to serve the food hot. Additionally, some truck operators mentioned that they produce their menu items to order because it is easier to address specific dietary concerns and make any modifications.

"The cashier is the one that's ending their order, so any modifiers on orders, cause a lot of customers want something in their own way-if it's no tomatoes or no sauce or light sauce or extra this-so when we give the order the cashier really needs to see and make sure that the order was fulfilled in the right way." (PP, wraps)

Several truck operators also talked about preparing their menu items in large batches on the truck. They claimed that it is not practical to make the food in the commissary kitchen and transfer it, but it is also not feasible to make the items to order, stating "The other reason why we went prepackaged is because at these big festivals and things if you're serving 1000 people at a festival and you have 50 people in your line, you're not scooping to order. It's very, very quick." (VC, ice cream)

4. Discussion

This qualitative study is innovative in the knowledge surrounding how food trucks develop and refine their menus based on their established brand and identity. The results highlight a feedback

loop, similar to one seen in physiology, where different influences impacted the menu content and implementation.

Coming from a diverse group of food truck operator interview participants in southeast Michigan, all with previous food service experience, original identity and menu of the food truck was created with different intentions. Multiple truck operators stated that they took their restaurant menu and converted it to be sellable in a food truck. By using their original menus, or a modified version of it, the truck operators do not have to find new motivation for the chefs creating the food (18). Others stated that they based their menu off their heritage or life experiences. These individuals likely witnessed that certain culture or community firsthand and found their sense of belonging with that type of cuisine (19). That possibly made them want to create a food truck with that same culture in mind in order to help others have that same sense of belonging in food (19).

Upon implementation of the original menu identity, internal and external feedback influenced menu adjustments. External feedback, or modification based on consumer's preferences and needs, was more prevalent in affecting menu adjustments. Modifying the atmosphere and menu for the business allows the company to strive for an absolute positive experience for the consumers (20). Although it may have been unintentional, food truck operators were likely using company-consumer co-creation throughout the process of menu alterations (15). In small restaurants, co-creation has been used during restaurant startup to get a feel for what the clientele is looking for in their menu (16). By doing so, they can cater to the geographic location and style

of individuals without as much trial and error (21). Co-creation, in some cases, is first implemented by producing surveys for the public to complete and then analyzing the results (22). In these food truck businesses, co-creation ideologies may have been used when truck operators took consumers advice into consideration. The operators listened to the consumer's desires, such as adding gluten free options, and altered the menu without changing their theme or cuisine. Although there are no documented examples of co-creation in the food truck industry, this may be a viable strategy in the future to optimize customer response as well as nutritional quality to slightly adjust menu items.

This study found that the consumer's desires were a major factor in altering the menu, which is important because operators are not always able to accurately judge consumer's perceptions of the menu (23). Including certain dietary considerations, for example, were important changes made to the menu of many food trucks. On a larger scale, convenience, taste, and price are among the most important consumer desires (24). Many truck operators stated that they based their truck location in areas of most convenience of their targeted population. By doing so, they can sell their specific menus to consumers with desires most met (24). To provide better tasting items to their consumers, food truck operators stated that they create quick food on the go with the best value. Using fresh ingredients from local vendors, operators are able to create menu items that are tastier than the competitors (25). Creating valuable food on the go allows food trucks to stand out amongst their competitors.

From there, ingredient modifications, such as adding more locally grown produce, fresher ingredients, and items with fewer preservatives, were implemented in order to meet said desires. For instance, some food truck owners endeavored to incorporate predominantly local foods, which has been shown to be important to customers (26). Aside from supporting local businesses, incorporating more locally grown produce is healthier because it contains less preservatives (25). Fresher ingredients, as opposed to frozen or canned products, allow truck operators to make meals that are more satiable to the consumers (27).

Additionally, menu ingredients, and their nutritional attributes, were important to some food truck owners and their customers (28). Some food trucks put an emphasis on serving foods that were not processed and did not include preservatives (29). However, some food trucks placed little importance on nutritional quality, which correlates with the literature stating the majority of the restaurant food is high in nutrients of public concern (30, 31), that should be limited, such as saturated fat (6), added sugar (7), and sodium (8).

Less prevalent in affecting menu adjustments was internal feedback, or modification based on operator and employee experience in the field. Difficult preparation of menu items sometimes drove changes in the menu items. In addition, another form of internal feedback that occasionally prompted alteration of menus was ethnicities in cuisine. Some food truck owners featured menus that were very true to ethnic identity whereas others modified menus to be more “Americanized”, to appeal to a broader audience (32).

4.1 Strengths and Limitations

This qualitative study included 13 participants. The small sample size may thus not reflect the views and experiences of all food truck operators. However, the recruitment of participants of varying ages, experiences, and cuisines and the theoretical saturation of ideas presented in the last interviews increases confidence in the comprehensiveness of findings. Additionally, respondents were all from southeast Michigan, which may not be inclusive of food trucks in other parts of the state, or the country as a whole. Further, the use of semi-structured interview guide may have resulted in having broad interview questions left room for drifting from directly answering the question without redirection.

Although there were some limitations, our study had many strengths. By completing this study, we were able to fill a gap in food industry research by providing insight and information about food trucks that was not previously explored. While there have been operational studies conducted about food trucks (33-35), menu creation influences had not been researched yet. These findings will help support collaborations among food establishment owners, customers, and nutrition professionals to develop and refine menus that are tasty and nutritious.

4.2 Implications

This study information regarding menu feedback and food truck identity can be applied to not only food trucks, but restaurants too. Emerging food establishments may find it beneficial to recognize different feedback from their customers and employees in order to better suit their consumers. Acknowledging changes that should be made to the menu in order to increase

customer satisfaction could allow the business to run more smoothly. Additionally, this study could be useful to an individual planning to open a restaurant because they can utilize the same feedback model to tweak their menu on a larger scale.

Further, information found in this study could be informative to those speculating about opening a business in the food industry. It may open their eyes to some of the complexity in menu creation and allow them to make note of information to be revisited once in operation. By knowing some of these common feedbacks and how they can affect the menu, a new food truck operator's menu may include specific diet considerations, for example, from the beginning. Company and consumer co-creation may be a viable strategy to address consumer's desires in the menu while also capturing the food truck's vision of nutrition and cuisine.

4.4 Conclusion

Food truck operators from southeast Michigan have described how they brand themselves to attract customers and how they develop and refine their menus along the way. External feedback from customers was often incorporated in the form of menu adjustments by food truck owners. Internal feedback from the owners or employees, on the other hand, did result in menu adjustments, though not as commonly. Through a physiological-like feedback loop, food truck menus were adjusted in order to maximize business and customer satisfaction.

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Southeastern Michigan food truck operators

Oakland University School of Health Sciences

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Declaration of Interest Statement

We certify that we have no competing interests or issues relating to journal policies.

References

1. Lin B. Food Away from Home. USDA Economic Research Service. 2019 August 21,:1-3.
2. Le T. Mobile order: Increasing incomes and changing tastes will continue to drive the industry. IBIS World. 2021 July(OD4322):1-37.
3. Todd JE, Mancino L, Restrepo BJ, Kavanaugh C, Dicken C, Breneman V. Food away from home and caloric intake: the role of restaurant menu labeling laws. *Economic Inquiry*. 2020 September 20,;59:1-19.
4. Rosenheck R. Fast food consumption and increased caloric intake: a systematic review of a trajectory towards weight gain and obesity risk. *Obesity reviews*. 2008 Nov;9(6):535-47.
5. Lin B, Guthrie J. Nutritional Quality of Food Prepared at Home and Away From Home, 1997-2008. USDA. 2012(A report from the economic research service):1-24.
6. Poti J, Slining M, Popkin B. Solid Fat and Added Sugar Intake Among US Children. *American Journal of Preventive Medicine*. 2013:1-9.
7. Bruening M. Associations Between Sugar-Sweetened Beverage Consumption and Fast-Food Restaurant Frequency Among Adolescents and Their Friends. *Journal of Nutrition Education and Behavior*. 2014 April 13,:1-9.
8. Heredia-Blonval K, Blanco-Metzler A, Montero-Campos M, Dunford EK. The salt content of products from popular fast-food chains in Costa Rica. *Appetite*. 2014 August 27,;83.
9. Jaworowska A. Nutritional challenges and health implications of takeaway and fast food. *Nutrition Reviews*. 2013:1-9.
10. Kim D, Ahn B. Eating Out and Consumer's Health: Evidence on Obesity and Balanced Nutrition Intakes. *International Journal of Environmental Research and Public Health*. 2020 January 16,:1-17.
11. CDC Media Relations. Obesity epidemic increases dramatically in the United States: CDC director calls for national prevention effort. CDC. 1999 October 26,:1-2.
12. Mohammadbeigi A. Fast food consumption and overweight/obesity prevalence in students and its association with general and abdominal obesity. *Journal of Preventive Medicine*. 2018:1-5.
13. Cawley J, Susskind A, Willage B. The impact of information disclosure on consumer behavior: Evidence from a randomized field experiment of calorie labels on restaurant menus. *Journal of Policy Analysis and Management*. 2020;39.
14. Camacho S, Ruppel A. Is the calorie concept a real solution to the obesity epidemic? *Global Health Action*. 2017 May 9,:1-13.
15. Im J, Hailin Q. Drivers and resources of customer co-creation: A scenario-based case in the restaurant industry. *International Journal of Hospitality Management*. 2017 April 12,:1-10.

16. Yen C. Innovativeness and Customer value co-creation behaviors: Mediating role of customer engagement. *International Journal of Hospitality Management*. 2020 March 28,;1-11.
17. Reznar MM, Brennecke K, Eathorne J, Gittelsohn J. A cross-sectional description of mobile food vendors and the foods they serve: potential partners in delivering healthier food-away-from-home choices. *BMC public health*. 2019 Jun 13,;19(1):744.
18. Tucker A, Sun G, Zargarani F, Yu S, Chau S, Trevillion U. Creating New Menu Development Guidelines for UBC Food Services. 2018 Jan 01,.
19. Petsch M. How Do Non-Formal Environmental Education Experiences Shape Pro-Environmental Behavior. *Environmental Education Commons, Natural Resources and Conservation Commons, Sustainability Commons*. 2019:1-28.
20. Anantadjaya SP, Rachmat TA, Putra AN, Alexandra Y, Christie L, Nawangwulan I, et al. What Does It Take to Maintain Proper Restaurant Design? *Advances in Economics, Business, and Management Research*. 2017(28):1-10.
21. Abrahale K, Sousa S, Albuquerque G, Padrao P, Lunet N. Street food research worldwide: a scoping review. *Journal of Human Nutrition and Dietetics*. 2018:1-23.
22. Bevelander K, Kwakernaak L, Laset E, Zeinstra G, Mollerman G. Placing healthy kids meals on the restaurant menu by co-creation between chef-cooks and children. *European Journal of Public Health*. 2019 November 13,;29:1-.
23. Nemeschansky B, von der Heide T, Kim PB. Customer-driven menu analysis (CDMA): Capturing customer voice in menu management. *International journal of hospitality management*. 2020 Oct;91:102417.
24. Roy R, Alassadi D. Does labelling of healthy foods on menus using symbols promote better choices at the point-of-purchase? *Public health Nutrition*. 2020 August 28,;1-34.
25. Marti-Quijal FJ, Khubber S, Remize F, Tomasevic I, Rosello-Soto E, Barba FJ. Obtaining Antioxidants and Natural Preservatives from Food By-Products through Fermentation: A Review. *MDPI*. 2021 July 7,;1-11.
26. Hendrickson MK, Massengale SH, Gantrell. Randolph. “No money exchanged hands, no bartering took place. But it’s still local produce”: Understanding local food systems in rural areas in the U. S. Heartland. *Journal of Rural Studies*. 2020 August 12,;1-11.
27. Kennedy SJ, Ryan L, Clegg ME. The Effects of a Functional Food Breakfast on Gluco-Regulation, Cognitive Performance, Mood, and Satiety in Adults. *Nutrients*. 2020 September 29,;1-16.
28. Hwang J, Lorenzen CL. Effective nutrition labeling of restaurant menu and pricing of healthy menu. *Journal of Foodservice*. 2008:1-7.
29. Pilli TD. Development of a vegetable oil and egg proteins edible film to replace preservatives and primary packaging of sweet baked goods. *Food Control*. 2020 March 25,;1-11.

30. Alexina S, Murphy B. Beyond the Menu: Assessing the Nutritional Quality of Canadian Restaurant Foods.
31. Vinyard M, Zimmer M, Herrick K, Juan. Wenyen, Reedy J. Healthy eating index-2015 scores vary by types of food outlets in the United States. *Nutrients*. 2021 August 7,;1-16.
32. Filimonau V, Krivcova M. Restaurant menu design and more responsible consumer food choice: An exploratory study of managerial perceptions. *Journal of Cleaner Production*. 2016 December 18,;1-12.
33. Fahlevi M, Zuhri S, Parashatski RD, Ekhsan M. Leadership Styles of Food Truck Businesses. *Journal of Research in Business, Economics, and Management*. 2019 June 18,;13(2):1-7.
34. Shin YH, Kim H, Severt K. Consumer values and service quality perceptions of food truck experiences. *International Journal of Hospitality Management*. 2018 December 17,;1-10.
35. Okumus B, Sonmez S, Moore S, Auvil DP, Parks GD. Exploring safety of food truck products in a developed country. . 2019 April 20,(*International Journal of Hospitality Management*):1-9.

Figure 1

Respondent's Profile			
Gender:		Race:	
Male	7	White	8
Female	4	Asian/Pacific Islander	1
		Biracial	1
		West Indian	1
Age:		Cuisine Type:	
20-29	1	Indian	2
30-39	4	Italian	1
40-49	2	Caribbean	1
50-59	1	Donuts	1
60-69	2	Hot Dogs	1
Education:		Smokehouse/BBQ	2
High School		Sushi	1
Diploma/GED	1	Wraps	1
Some College	2	Vegan & Gluten Free	1
Associate's Degree	1	Ice Cream	1
Bachelor's Degree	4	Organic & Natural	1
Post Graduate Degree	2		

Figure 2

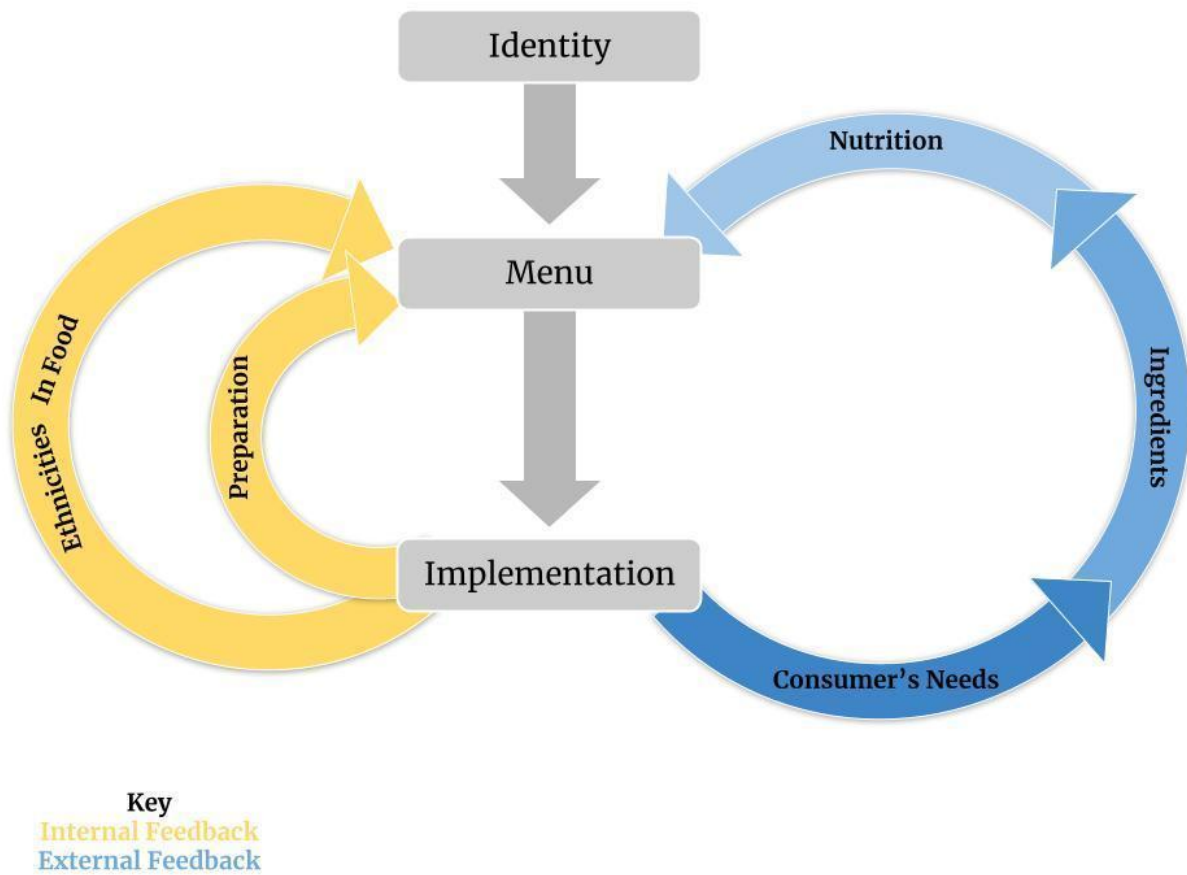


Figure Captions

Figure 1: Food Truck Interview Respondent Profile (n=13); demographic information missing for 2 respondents

Figure 2: Physiology-like Feedback Loop

Word Count

5725