

FOOD QUALITY DIMENSIONS AND CUSTOMERS' LOYALTY TOWARDS FAST-FOOD RESTAURANTS

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ABSTRACT

This study examined food quality and customers' loyalty towards fast-food restaurants, specifically seeking to determine the effects of food taste, safety, presentation, and quality of ingredients on customers' loyalty. It had its foundational underpinning in the enticement-repellent theory and adopted a cross-sectional survey research design. Primary data were collected from 276 customers of fast-food restaurants using a structured questionnaire and were analysed and interpreted through descriptive statistics, while the hypotheses were tested using multiple linear regression in the Statistical Package for the Social Sciences. The findings revealed that food quality dimensions, including food taste, safety, presentation, and quality of ingredients, had significant positive effects on customers' loyalty towards fast-food restaurants. Hence, the study recommended that managers of fast-food restaurants should ensure the taste of their meals remains consistently enjoyable by incorporating a blend of rich flavours, carefully selected seasoning tailored to both local and international palates, and tantalizing aromas that create an irresistible dining atmosphere, thereby encouraging repeat patronage and positive word-of-mouth. It was further recommended that managers should implement strict food hygiene protocols, maintain spotless restaurant environments, ensure proper storage, and incorporate natural food preservatives such as vinegar or rosemary extract in order to guarantee consistently high food quality, minimize health risks, and build trust among customers, while other recommendations were made to enhance dimensions of food quality such as food presentation and quality of ingredients in fast-food restaurants.

Keywords: Food quality, Customers' loyalty, Fast-food restaurants, Food taste, Food safety, Food presentation, Quality of ingredients

INTRODUCTION

In a highly competitive business environment such as the fast-food industry, the ability for firms to consistently maintain customer loyalty is a significant driver of sustainable competitive advantage. This is because consistent customer loyalty ensures a steady stream of repeat business transactions, reduces marketing costs associated with acquiring new customers, and enhances brand reputation for fast-food restaurants (Rajput & Gahfoor, 2020). Moreover, loyal customers are more likely to provide positive word-of-mouth referrals, which can attract new customers at a lower cost than traditional advertising campaigns (Namin, 2017). Recognizing the marketing value of customer loyalty, fast-food restaurants in contemporary times are seeking several strategies aimed at achieving customer loyalty amidst growing competitive pressures. One of these popular strategies is improving food quality (George et al., 2019; Nwokah & Adiele, 2018; Adediran & Adebisi, 2021). According to Nwokah and Adiele (2018), food quality is the overall standards and characteristics of food served in food marketing firms, including taste, freshness, nutritional value, presentation, health and safety considerations. Fast-food restaurants are prioritizing improved food quality for several reasons, driven largely by changing consumer preferences and heightened awareness about health and nutrition (Adiele & Kenneth-Adiele, 2017).

This is because in contemporary times, consumers are increasingly conscious of what they eat, showing a strong preference for healthier and more natural ingredients (Ditlevsen et al., 2019). This shift is partly due to the widespread availability of information on diet and health, leading to greater scrutiny of the nutritional content and sourcing of food. As a result, fast-food chains are compelled to adapt by offering options that align with these health-conscious trends to attract and retain customers (Mathur & Gupta, 2019). Moreover, there is a growing concern about food safety and sustainability, which means that consumers are not only interested in healthier options but also in the ethical and environmental impact of their food choices (Yu et al., 2018). Fast-food restaurants have responded by adopting practices that emphasize transparency, such as sourcing ingredients from sustainable farms and reducing the use of artificial additives and preservatives (Mohd-Yusof et al., 2021). This not only enhances the perceived quality of their food but also aligns with the values of a significant segment of their customer base, thereby fostering brand loyalty and trust.

Furthermore, another factor driving the focus on food quality is the competitive landscape of the fast-food industry (Zhu, 2022). With numerous dining options available, fast-food chains are trying to differentiate themselves to stand out. By improving the quality of their food, they attempt to appeal to a broader audience, including those who might have previously avoided fast food due to health concerns. In this case, enhanced food quality is often used to justify higher prices, thus potentially increasing profit margins while offering a perceived value that justifies the cost to consumers. In addition, regulatory pressures and public health campaigns have played a role

in pushing fast-food chains towards better food quality (Shahzadi et al., 2018). The Nigerian Government and global health organizations have been advocating for reductions in unhealthy ingredients such as trans fats, high sodium levels, and excessive sugars. Restaurants are realizing that complying with these regulations not only avoids legal repercussions but also positions their brands as responsible corporate citizens that contribute to public health objectives (Nwokah & Adiele, 2018). This study was therefore carried out to determine the contributions of food quality dimensions of fast-food restaurants to customers' loyalty.

Problem Statement

In recent times, fast-food restaurants in Nigeria have been perceived as major promoters of unhealthy food choices, particularly among health-conscious consumers (Emeka & Muhammed, 2020; Etteudo et al., 2023). This issue is increasingly critical and it stems from a growing body of evidence linking fast food consumption to various long-term health challenges, including obesity, cardiovascular diseases, diabetes, and other metabolic disorders (Osayomi & Orhiere, 2017; Uthman-Akinhanmi et al., 2022; Obasi et al., 2019). These health risks are exacerbated by the high calorie, sugar, fat, and sodium content typically found in fast-food offerings, which often lack essential nutrients and are heavily processed (Ajieh et al., 2023). The enormity of this problem is reflected in the escalating prevalence of unhealthy food-related challenges such as obesity, cardiovascular diseases, diabetes, high blood pressure, liver damage, and dental issues among consumers of fast food in Nigeria. To put it in perspective, Adeloye et al. (2021) reports that as of 2020, about 12 million Nigerians were estimated to be obese, with prevalence considerably higher among women. In this case, the consumption of highly-processed diets from fast-food was identified as one of the leading causes of this epidemic in the country.

Similarly, other recent studies indicate a rising prevalence of diabetes and cardiovascular diseases (CVDs) in Nigeria, largely attributed to the consumption of fast food and other ultra-processed foods. As of 2023, approximately 4.6 percent of the adult Nigerian population is affected by diabetes, while the prevalence of hypertension, a significant risk factor for CVDs, stands at 35.3 percent (Chukwunonso et al., 2023). The study also showed that the growing trend of fast-food consumption in urban areas, characterized by high levels of unhealthy fats, sugars, and sodium, is a major contributor to these health issues. However, the problem persists due to the lack of adequate nutritional education among the general populace in Nigeria, leading to poor dietary choices among consumers. Many consumers, especially among the younger demographics, are not fully aware of the long-term health consequences of regular fast-food consumption. Additionally, there is often insufficient regulatory oversight regarding the nutritional content and labeling of fast-food products, allowing restaurants to prioritize profit over health. Against this backdrop, this study was designed to investigate the role of food quality in addressing this practical research gap by examining its potential effect on customers' loyalty towards fast-food restaurants.

LITERATURE REVIEW

Conceptual framework

This study centered on food quality and customers' loyalty towards fast-food restaurants. It sought to demonstrate the causality between food quality and customers' loyalty towards fast-food restaurants. To this end, the following food quality dimensions were obtained from extant relevant studies: food taste, food safety, food presentation and quality of ingredients (Hanaysha, 2016; Suhartanto et al., 2019; Nwokah & Adiele, 2018; Adeniran & Adebisi, 2021; Ahmad & Ismail, 2021). Also, the dimensions of customers' loyalty, the dependent variable, (customer preference, customer patronage, customer repeat patronage and customer referral) were obtained from extant relevant studies (Carranza et al., 2018; Zhong & Moon, 2020).

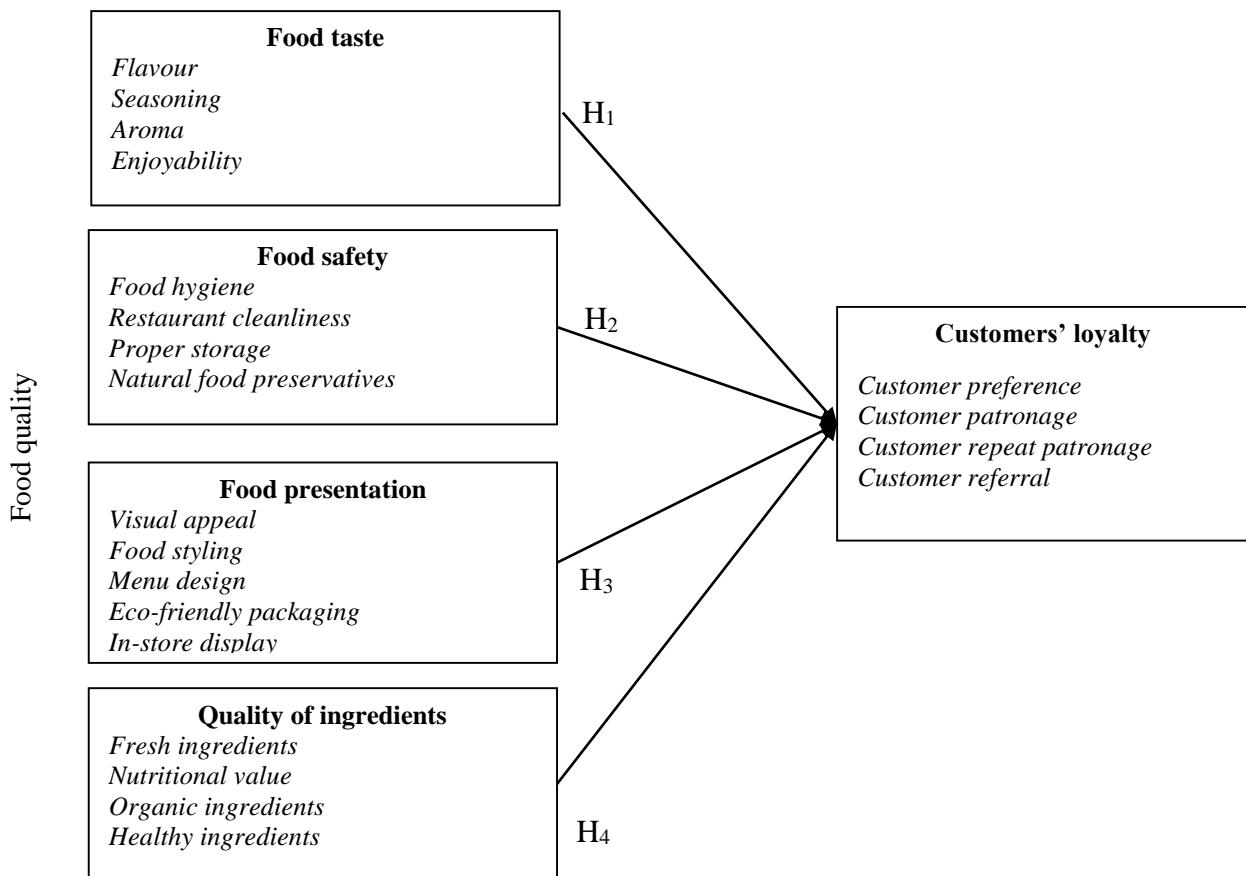


FIG. 1: Conceptual model of the study

Source: Independent variable parameters adapted from Hanaysha (2016); Suhartanto et al. (2019); Nwokah and Adiele (2018); Adeniran and Adebisi (2021); Ahmad and Ismail (2021). Dependent variable parameters adapted from Carranza et al. (2018); Zhong and Moon (2020)

For the sake of clarity in the context of this study, the dimension 'food taste' was operationalized as the flavor profile, quality, and overall sensory experience of the food served by fast-food restaurants to customers. Food safety is operationalized as the practices and protocols put in place to ensure that food is handled, prepared, and served in a way that minimizes the risk of foodborne illness or contamination in fast-food restaurants. Similarly, food presentation is operationalized as the visual arrangement and aesthetic appeal of food dishes served quickly to customers, typically emphasizing speed and efficiency alongside basic presentation standards to ensure attractiveness and appeal. Whereas, quality of ingredients is operationalized as the freshness, nutritional value, sourcing standards, and safety of the raw materials used in food preparation in fast-food restaurants. In the context of this study, it is presumed that these dimensions of food quality could have a role to play in enhancing customers' loyalty towards fast-food restaurants in Calabar, Nigeria. This presumption has been integrated into a conceptual model (see FIG. 1.) showing the hypothesized relationship between the independent and dependent variables in the context of fast-food restaurants.

Food quality

Food quality refers to the characteristics and attributes of food that make it acceptable and desirable to consumers. This encompasses several dimensions, including nutritional value, taste, texture, appearance, and safety (Aschemann-Witzel et al., 2018). High-quality food is not only free from contaminants and harmful substances but also offers a pleasurable eating experience through its flavor and presentation. Additionally, food quality involves meeting regulatory standards and ensuring that the food is produced, stored, and prepared under hygienic conditions (Brunner & Siegrist, 2018). In contemporary times, fast-food restaurants are increasingly prioritizing food quality due to changing consumer expectations and awareness (Feldstein et al., 2018). This is because in today's health-conscious society, people are more informed about the nutritional content and potential health impacts of their food choices. This shift has prompted fast-food chains to rethink their menus and ingredient sourcing to offer healthier options and transparently communicate nutritional information (Kessler et al., 2017). By improving food quality, these establishments aim to attract a broader customer base that includes health-conscious individuals and families seeking convenient yet nutritious meals (Moser, 2017).

Moreover, the emphasis on food quality is a strategic move to differentiate fast-food restaurants in a highly competitive market (Popkin & Reardon, 2018). With numerous dining options available, consumers are more discerning and selective. High food quality can be a significant selling point, setting a brand apart from its competitors. Fast-food chains that invest in better ingredients, more innovative recipes, and sustainable practices can build a stronger brand reputation, fostering customer loyalty and repeat business. This focus on quality also extends to addressing environmental concerns, such as using locally sourced produce and reducing food waste, which can enhance a brand's image and appeal (Schäufele & Hamm, 2017). Additionally, regulatory and safety considerations play a crucial role in the prioritization of food quality by fast-food restaurants (Van der Linden, 2018). This is because foodborne illnesses and contamination scandals can severely damage a brand's reputation and financial standing. By maintaining high food quality standards, fast-food restaurants can mitigate these risks and ensure compliance with health regulations. This not only protects the customers but also safeguards the business from legal repercussions and loss of consumer trust. Investing in food quality, therefore, serves as a proactive measure to uphold food safety and maintain a positive public image (Moser, 2017).

Customers' loyalty

Customer loyalty refers to the consistent preference and allegiance of consumers to a particular brand or business, demonstrated through repeat purchases, positive word-of-mouth, and resistance to competitors' offerings (Chinomona & Dubihlela, 2017). It signifies the depth of the relationship between a business and its customers, often cultivated through positive experiences, satisfaction, and emotional connections. In the context of fast-food restaurants, customer loyalty means customers frequently choose the same chain or location for their meals, despite the plethora of alternatives available (Dholakia & Zhao, 2020). This loyalty can stem from various factors such as quality of food, convenience, customer service, pricing, and brand identity (Jain & Bagdare, 2017). According to Khan and Fasih (2017), customer loyalty is critical to the performance of fast-food restaurants because loyal customers provide a steady stream of revenue for the business. The predictable nature of their patronage allows fast-food chains to forecast demand more accurately, optimize inventory management, and reduce waste. This stability is particularly vital in an industry characterized by thin profit margins and intense competition (Kim & Moon, 2020). Moreover, loyal customers tend to spend more over time, not just on their primary purchases but also on higher-margin items like beverages and desserts, thereby enhancing the restaurant's profitability.

Also, customer loyalty significantly impacts marketing effectiveness and cost efficiency of restaurant businesses (Liu & Jang, 2017). This is because acquiring new customers is considerably more expensive than retaining existing ones. Loyal customers require less marketing expenditure as they are already familiar with and committed to the brand. They also become brand advocates, promoting the restaurant through word-of-mouth and social media, which is often more credible and impactful than traditional advertising. This organic promotion can lead to new customer acquisition at a much lower cost, effectively multiplying the returns on the restaurant's initial investment in quality and service (Loureiro & Kastenholz, 2018). Similarly, customer loyalty contributes to brand resilience and long-term success of restaurant businesses (Veloutsou, 2019). As such, in an industry prone to fluctuations due to trends, economic conditions, and shifting consumer preferences, a loyal customer base provides a buffer against these uncertainties. This is because loyal customers are more forgiving of occasional service lapses or minor price increases, ensuring a consistent revenue flow (Dholakia & Zhao, 2020). They also provide valuable feedback, acting as a sounding board for new products or services, which can guide the restaurant in making strategic decisions.

Food taste and customers' loyalty

Food taste, as a dimension of food quality, refers to the sensory experience of flavour, encompassing the combination of aroma, texture, and the basic tastes of sweetness, sourness, bitterness, saltiness, and umami (Sharma & Gupta, 2020). It is the primary determinant of a consumer's immediate reaction to a dish and often dictates their overall perception of the meal (Yildirim & Demir, 2019). Taste is not merely a matter of personal preference; it is influenced by cultural background, individual taste sensitivity, and previous experiences with similar foods. The interplay of these factors makes taste a complex yet crucial element of food quality, significantly impacting customer satisfaction and repeat patronage (Tan & Lee, 2021). In the context of fast-food restaurants, the role of taste is amplified due to the competitive nature of the industry (Haddad & Mansour, 2021). Fast-food chains rely heavily on their ability to deliver consistent and appealing flavors quickly. A positive taste experience can enhance a customer's perception of value, even if the food is relatively inexpensive or the dining environment is basic (Al-Momani & Haddad, 2018). This is because when customers find the taste of food to be enjoyable, it creates a positive association with the brand, which can override other potential negatives such as long wait times or minor service issues (Kim & Park, 2023).

Furthermore, the importance of taste in enhancing customer loyalty is also linked to the consistency of flavor (Ngwenya & Smith, 2020). Fast-food restaurants that can consistently deliver the same high-quality taste across different locations create a reliable and trustworthy brand image. Customers know that no matter where they go, they can expect the same satisfying experience. This consistency helps in building a strong brand identity and encourages repeat business, as customers feel confident in their choice (Rahman & Putri, 2018). In addition, in an industry where customers have numerous options, the reliability of a consistently good-tasting meal can be the deciding factor in fostering long-term loyalty and success (Kearney, 2017). The foregoing viewpoint suggests that food taste, as a dimension of food quality, substantially enhances customers' loyalty in the context of fast-food restaurants. This viewpoint is backed by the study of Hanaysha (2016), which revealed that food taste has a significant positive effect on customer satisfaction in the Malaysian fast-food restaurant industry. The viewpoint is also supported by the study of Suhartanto et al. (2019), which revealed that food taste has a direct positive effect on customer loyalty towards online food delivery firms in Indonesia. In addition, the viewpoint aligns with the study of Adeniran and Adebisi (2021), which revealed that food taste has a significant positive influence on customers' patronage of food service outlets in Kwara State, Nigeria. Against this backdrop, the study proposed and tested the following research hypothesis:

H₀₁: Food taste has no significant effect on customers' loyalty towards fast-food restaurants.

Food safety and customers' loyalty

Food safety is a critical aspect of food quality, encompassing the practices and conditions necessary to ensure that food is safe to consume (Liu & Jang, 2017). This involves the proper handling, preparation, and storage of food to prevent contamination and foodborne illnesses. Ensuring food safety means adhering to rigorous standards and regulations that cover everything from the sourcing of raw materials to the hygiene practices of food handlers, and the cleanliness of food preparation areas (Ahmad & Ismail, 2021). It also includes the implementation of food safety management systems such as Hazard Analysis and Critical Control Points (HACCP), which help identify, evaluate, and control hazards that are significant for food safety (Kamau & Njoroge, 2020). In the context of fast-food restaurants, food safety is paramount due to the high volume of food being prepared and served, often under time constraints (Mensah & Boateng, 2018). This is because fast-food establishments must maintain strict food safety protocols to mitigate risks associated with cross-contamination, undercooking, and improper food storage temperatures. These protocols not only involve staff training and regular audits but also the use of technology to monitor and ensure compliance (Adediran & Adebisi, 2021). In the views of Nwokah and Adiele (2018), food safety significantly enhances customer loyalty in the fast-food industry, because when customers are confident that the food they are consuming is safe, they are more likely to return and recommend the restaurant to others. This trust is built over time through consistent adherence to food safety practices and transparent communication about these efforts (Hanaysha, 2016).

As such, fast-food chains that prioritize food safety can differentiate themselves in a competitive market, fostering a loyal customer base that values both convenience and health. Moreover, in an age where information spreads rapidly through social media and online reviews, maintaining food safety can prevent negative publicity and the consequent loss of customer confidence (Carranza et al., 2018). This is because a single food safety incident can quickly go viral, leading to long-term repercussions for the brand. Conversely, a strong track record of food safety can serve as a powerful marketing tool, showcasing the restaurant's dedication to customer well-being (Grace et al., 2021). This not only enhances customer loyalty but also attracts new customers who prioritize health and safety in their dining choices. Thus, food safety is not merely a regulatory requirement but a strategic advantage that can drive customer satisfaction and loyalty in the fast-food sector (Liu & Jang, 2017). The foregoing viewpoint suggests that food safety, as a dimension of food quality, substantially enhances customers' loyalty in the context of fast-food restaurants. This viewpoint is backed by the study of Ahmad and Ismail (2021), which revealed that food safety had a significant positive effect on customer satisfaction and loyalty in fast-food outlets in Malaysia. The viewpoint is also backed by the study of Kamau and Njoroge (2020), which revealed that healthy options (food safety) had a significant positive influence on customer loyalty in quick-service restaurants in Nairobi, Kenya. Similarly, the viewpoint is backed by the study of Mensah and Boateng (2018), which revealed that food safety had a significant positive relationship with customer loyalty in fast-food restaurants in Accra, Ghana. Against this backdrop, the study proposed and tested the following research hypothesis:

H₀₂: Food safety has no significant effect on customers' loyalty towards fast-food restaurants.

Food presentation and customers' loyalty

Food presentation, an essential dimension of food quality, encompasses the visual appeal and arrangement of food on the plate (Smith & Popkin, 2019). It involves the careful selection of colors, shapes, textures, and overall plating techniques to create an aesthetically pleasing dish. This aspect of food quality not only influences a customer's initial perception but also their overall dining experience (Cohen & Story, 2016). In the context of fast-food restaurants, where speed and convenience often take precedence, the importance of food presentation can

sometimes be overlooked. However, even in this fast-paced environment, how food looks can significantly impact customer satisfaction and loyalty (Rahman & Putri, 2018). This entails that effective food presentation in fast-food restaurants can transform a mundane meal into an enjoyable and memorable experience. As such, when food is thoughtfully presented, it signals to customers that the establishment values quality and attention to detail, despite the quick-service nature of the business. For example, a neatly assembled burger with fresh, vibrant toppings, perfectly placed condiments, and a side of crisp, golden fries arranged in an appealing manner can make a significant difference. This visual appeal can evoke positive emotions, making the meal more enjoyable and encouraging customers to return (Ahmad & Ismail, 2021).

Moreover, Adediran and Adebisi (2021) maintained that food presentation plays a crucial role in this by making customers feel valued and appreciated. This is because when customers perceive that a fast-food restaurant takes the time to present its food well, they are more likely to develop a positive association with the brand. This positive association fosters loyalty, as customers are more inclined to choose a restaurant that consistently delivers a visually and gastronomically satisfying experience. This entails that food presentation is a vital aspect of food quality that can enhance customer loyalty by creating enjoyable dining experiences, encouraging social media engagement, and fostering a positive brand image (Nwokah & Adiele, 2018). The foregoing viewpoint suggests that food presentation, as a dimension of food quality, substantially enhances customers' loyalty in the context of fast-food restaurants. This viewpoint is backed by the study of Hanaysha (2016), which revealed that food presentation had a significant positive effect on customer satisfaction in the Malaysian fast-food restaurant industry. The viewpoint is also backed by the study of Suhartanto et al. (2019), which revealed that food presentation had a direct positive effect on customer loyalty towards online food delivery firms in Indonesia. In addition, the viewpoint is supported by the study of Adeniran and Adebisi (2021), which revealed that food presentation had a significant positive influence on customers' patronage of food service outlets in Kwara State, Nigeria. Against this backdrop, the study proposed and tested the following research hypothesis:

H₀₃: Food presentation has no significant effect on customers' loyalty towards fast-food restaurants.

Quality of ingredients and customers' loyalty

The quality of ingredients is a crucial dimension of food quality, encompassing the freshness, nutritional value, and overall integrity of the components used in food preparation (Hanaysha, 2016). High-quality ingredients are those that are fresh, free from harmful additives or preservatives, ethically sourced, and retain their nutritional benefits. In the context of food quality, the term refers to the intrinsic properties of the ingredients themselves as well as the processes involved in obtaining and preserving them (Suhartanto et al., 2019). This dimension is fundamental because it directly impacts the taste, safety, and health benefits of the food, which are essential factors in consumer satisfaction and overall dining experience (Carranza et al., 2018). According to Feldstein et al. (2018), in fast-food restaurants, the quality of ingredients plays a pivotal role in differentiating brands and creating a competitive edge. As consumers become more health-conscious and informed about what they eat, there is an increasing demand for transparency and higher standards in ingredient sourcing and preparation. This entails that fast-food chains that prioritize high-quality ingredients, such as using organic produce, hormone-free meats, and non-genetically modified products, can significantly enhance their reputation (Sharma & Gupta, 2020). This commitment to quality can manifest in the taste and freshness of the food, making it more appealing to customers who are seeking healthier and tastier options even when opting for quick meals.

Similarly, consistently high-quality ingredients ensure that the food's taste and nutritional value remain reliable, leading to repeat business. Moreover, satisfied customers are likely to share their positive experiences, either through word-of-mouth or online reviews, further enhancing the brand's reputation and attracting new customers (Haddad & Mansour, 2021). In addition to customer satisfaction and trust, the quality of ingredients can also have a significant impact on brand loyalty in fast-food restaurants by aligning with broader societal trends and values (Al-Momani & Haddad, 2018). This is because many consumers today are concerned about sustainability, ethical sourcing, and the environmental impact of food production. Fast-food chains that emphasize the quality of their ingredients by sourcing locally, supporting sustainable agriculture, and reducing their carbon footprint can appeal to these values (Kim & Park, 2023). This alignment with customers' ethical and environmental concerns can create a deeper, more emotional connection with the brand, fostering loyalty that goes beyond just the immediate dining experience. In this way, the commitment to high-quality ingredients not only enhances the immediate appeal and satisfaction but also contributes to a brand's long-term success and customer loyalty (Omondi & Mwangi, 2019). The foregoing viewpoint suggests that quality of ingredients, as a dimension of food quality, substantially enhances customers' loyalty in the context of fast-food restaurants. This viewpoint is backed by the study of Ahmad and Ismail (2021), which revealed that quality of ingredients had a significant positive effect on customer satisfaction and loyalty in fast-food outlets in Malaysia. The viewpoint is also backed by the study of Kamau and Njoroge (2020), which revealed that quality of ingredients had a significant positive influence on customer loyalty in quick-service restaurants in Nairobi, Kenya. Moreover, the viewpoint aligns with the study of Mensah and

Boateng (2018), which revealed that quality of ingredients had a significant positive relationship with customer loyalty in fast-food restaurants in Accra, Ghana. Against this backdrop, the study proposed and tested the following research hypothesis:

H₀₄: Quality of ingredients has no significant effect on customers' loyalty towards fast-food restaurants.

Review of empirical studies

TABLE 1 summarizes available literature on food quality and customers' loyalty, highlighting their research purpose, methodologies, key findings, conclusions, and observed gaps.

TABLE 1
 Review of empirical studies

SN	Authors and Year	Purpose of the Research	Methodology	Findings and Conclusion	Observed Gap
1	Zhong and Moon (2020)	To determine factors influencing customer satisfaction, loyalty, and happiness, with a focus on gender in restaurants	Structured questionnaire (421 consumers), SEM analysis	Perceived price, food, service, and physical environment quality positively affected satisfaction	Did not specify which aspects of food quality contributed to satisfaction, especially in Nigerian fast-food restaurants
2	Hanaysha (2016)	To examine effects of food quality, price fairness and environment on customer satisfaction in Malaysian fast-food	Structured questionnaire (242 customers), SEM	Food quality (presentation, taste, diversity, healthy options, freshness, temperature) positively influenced satisfaction	Limited to Malaysia, no reference to Nigerian food quality and loyalty dynamics
3	Suhartanto et al. (2019)	To examine influence of food quality and e-service quality on loyalty in Indonesian online food delivery	Structured questionnaire (405 customers), variance-based PLS	Food quality positively affected loyalty towards OFD services; e-service quality not supported	Limited to OFD in Indonesia, no reference to Nigerian fast-food loyalty context
4	Nwokah and Adiele (2018)	To examine the predictor effect of food quality on customer patronage of quick-service restaurants in Port Harcourt, Nigeria	Structured questionnaire (370 customers), descriptive stats, Spearman rank correlation	Food freshness, deliciousness, and menu variety positively affected patronage	Did not address food safety, presentation, or quality of ingredients in Nigerian fast-food
5	Adeniran and Adebisi (2021)	To examine effect of food quality attributes on customers' choice of food outlets in Ilorin, Nigeria	Structured questionnaire (685 customers), descriptive stats, multiple regression	Food taste, appearance, quantity, and ingredient quality positively influenced patronage	Overlooked the role of food safety in loyalty among fast-food customers
6	Ahmad and Ismail (2021)	To determine impact of food quality on satisfaction and loyalty in Malaysian fast-food outlets	Structured questionnaire (382 customers), descriptive stats, SEM	Quality of ingredients, food presentation, and food safety positively affected satisfaction and loyalty	Restricted to Malaysia, no Nigerian context on food quality-loyalty link
7	Kamau and Njoroge (2020)	To examine influence of food quality on customer loyalty in quick-service restaurants in Nairobi	Structured questionnaire (482 customers), descriptive stats, multiple regression	Ingredients quality, healthy options, taste and presentation positively affected loyalty	Limited to Kenya, no Nigerian fast-food loyalty perspective
8	Mensah and Boateng (2018)	To examine relationship between food quality and loyalty in fast-food restaurants in Accra, Ghana	Structured questionnaire (512 customers), descriptive stats, Pearson correlation	Food safety, taste, and ingredient quality had positive effects on loyalty	Limited to Ghana, no specific reference to Nigerian food quality and loyalty

Source: Authors' literature review

Across the reviewed studies, there is a consistent recognition of food quality as a critical driver of customer satisfaction and loyalty. Authors such as Hanaysha (2016), Ahmad and Ismail (2021), and Kamau and Njoroge (2020) established that multiple dimensions of food quality, including taste, presentation, healthy options, and the quality of ingredients — have significant positive effects on both customer satisfaction and loyalty in fast-food or quick-service restaurant contexts. Similarly, Mensah and Boateng (2018) and Suhartanto et al. (2019) affirmed that food safety, variety, and quality of ingredients are vital in building and sustaining customer loyalty, whether in traditional restaurant formats or online food delivery services. These converging results highlight the universal importance of food quality attributes as central to enhancing customer experience, irrespective of location or market segment. Nonetheless, differences emerge in the methodological focus and contextual scope of these studies. While Zhong and Moon (2020) uniquely included the moderating role of gender, their findings did not specify detailed food quality dimensions, unlike the more detailed frameworks of Hanaysha (2016) or Adeniran and Adebisi (2021). Moreover, studies carried out in Nigeria (Nwokah and Adiele, 2018; Adeniran and Adebisi, 2021) mainly explored taste, freshness, and menu variety but paid less attention to food safety and presentation, a gap not overlooked by Kamau and Njoroge (2020) or Ahmad and Ismail (2021). Overall, while these studies collectively affirm the importance of food quality to customer loyalty, they vary in which aspects of food quality they emphasize, and most fall short of addressing these dynamics within the Nigerian fast-food industry, providing a valuable agenda for further research.

Theoretical framework

The theoretical underpinning for this study is the enticement-repellent theory, propounded and popularized by Weller, Stevenson and Palmer (2002). It explains the role of product quality as an enticement or a repellent to consumer purchase behaviour. The enticement-repellent theory of product quality was developed by Weller, Stevenson and Palmer (2002), a group of social behaviour researchers at Illinois State University, Chicago, United States of America. The theory was propounded in a bid to model the relationship between product quality and consumer buying behaviour. The theory is premised on the notion that product quality can be an enticement or a repellent to consumers seeking products to purchase (Weller et al., 2002). Product quality is an enticement when the quality is high, but it becomes a repellent to consumers when the quality is low or poor. In that sense, when quality is high, consumers will be enticed to buy, repeat purchase and spread good word of mouth. Conversely, consumers will withdraw patronage and spread negative word of mouth if product quality is low or poor. Therefore, a critical element of a product capable of attracting customer patronage and loyalty is quality, among other factors (Weller et al., 2002). In this way, the theory perceives product quality as the ability of a product to meet or exceed customers' expectations (Lee & Kim, 2017). It espouses the assertion that if quality is maintained over the long term, it translates into customer retention or brand loyalty; whereby the customer insists on buying a particular brand irrespective of price or available alternatives (Weller et al., 2002).

The enticement-repellent theory has been applied in various previous empirical studies aiming to determine the role of product quality in influencing consumer buying behaviour, with positive outcomes for theory and practice. In one study by Hoe and Mansori (2018), product quality (reliability, durability, performance and repairability) was found to positively enhance customers' satisfaction towards mobile phone consumers. In another study by Grace et al. (2021), product quality was found to be a significant enticement that encourages customer patronage and loyalty in the fast-moving consumer goods industry. Nevertheless, there are still scholars who are critical of the central premise of the enticement-repellent theory in all circumstances. One of the most common scholarly critiques levelled against this theory is that product quality is not the only determinant factor of customer patronage and loyalty as purported by the theory. Scholars argue that a product may offer the most quality, yet it does not attract substantial customer patronage and loyalty due to other critical factors like affordability, price, consumers' income, brand image, among other market dynamics (Johnson & Smith, 2016; Lee & Kim, 2017; Carter & Williams, 2018). However, in the context of this study, it is presumed that the central premise of the enticement-repellent theory may hold substance in the fast-food context since consumers of this business model are mostly quality-sensitized, given that their health is at stake. As such, on the basis of the central premise of this theory, this study proposes that there is some form of causal relationship between food quality and customers' loyalty towards fast-food restaurants in Calabar, Nigeria.

METHODOLOGY

Research design

This study adopted cross sectional survey research design by using a structured questionnaire to obtain data from customers of fast-food restaurants in Calabar, Cross River State. In applying cross-sectional survey research design, the data-collection procedure was not repeated over an extended period of time. Instead, data were obtained from respondents on a one-time basis within a short period of time, thereby minimizing time and effort involved in data collection.

Population, sample and sampling procedures

The target population of the study comprised all the customers of fast-food restaurants in Calabar, Cross River State. This population is numerically unknown due to the unavailability of credible public records of customers of all fast-food restaurants operating in Calabar. Additionally, there are several fast-food restaurants in Calabar, so it was unfeasible to obtain a reliable record of all customers of these firms in Calabar. Therefore, for the sake of sample size determination, the study followed the Topman sample size determination procedure. Since the population of the study was numerically unknown or infinite, the researcher relied on the Topman sample size determination procedure to statistically determine a sample size of 280 customers of fast-food outlets approximately. The study adopted convenience sampling technique to include customers of fast-food restaurants into the survey exercise. In applying this technique, we sought to focus on fast-food restaurants that were conveniently located in areas with huge customer traffic, so that a large number of customers could be surveyed within the shortest possible time period. To that end, we along with a 2-member team of assistants visited seven popular eateries in Calabar for sampling.

Instrumentation and reliability test

The instrument for data collection in this study was a structured questionnaire. The questionnaire was a 5-point Likert-type of instrument with 5 being Strongly Agree and 1 as Strongly disagreed. The instrument comprised statements regarding the variables of the study. For accurate and reliable measurement of the variables of the study, the parameters of measurement were adapted from existing relevant studies (see TABLE 2).

TABLE 2
 Variable measures and empirical sources

SN	Variables	Parameters	Empirical Sources
1	Food taste	Flavour Seasoning Aroma Enjoyability	Hanaysha (2016); Suhartanto et al. (2019); Nwokah and Adiele (2018); Adeniran and Adebisi (2021)
2	Food safety	Food hygiene Restaurant cleanliness Proper storage Natural food preservatives	Suhartanto et al. (2019); Ahmad and Ismail (2021)
3	Food presentation	Visual appeal Food styling Menu design Eco-friendly packaging In-store display	Hanaysha (2016); Suhartanto et al. (2019); Adeniran and Adebisi (2021)
4	Quality of ingredients	Fresh ingredients Nutritional value Organic ingredients Healthy ingredients	Adeniran and Adebisi (2021); Ahmad and Ismail (2021)
5	Customers' loyalty	Customer preference Customer patronage Customer repeat patronage Customer referral	Carranza et al. (2018); Zhong and Moon (2020)

Source: Authors' compilation through literature reviews

Prior to field survey, the questionnaire was confirmed for reliability through the Cronbach alpha reliability procedure. A pilot survey was conducted by administering draft copies of the questionnaire to a random selection of 30 students in the University of Calabar, which were deliberately excluded from the actual survey. This was done to reduce the possibility of respondents' biases due to previous exposure to the questionnaire elements during the actual survey. The selected respondents were debriefed and guided on how to accurately respond to the questionnaire statements to minimize erroneous responses. Subsequently, the data obtained were coded and entered into the Statistical Package for the Social Sciences for reliability analysis. The questionnaire was hence deemed reliable and adopted for the study, because all its measurement scales generated Cronbach's alpha coefficients not less than the benchmark of 0.7 as displayed in TABLE 3.

TABLE 3
 Summary of reliability results

SN	Variables	No. of items	Alpha coefficients
1	Food taste	4	.795
2	Food safety	4	.811
3	Food preparation	5	.772
4	Quality of ingredients	4	.886
5	Customers' loyalty	4	.748
		21	

Source: Authors' analysis via SPSS 2025

Data analysis techniques

The primary data obtained from respondents were analyzed and interpreted using descriptive statistics. The hypotheses of the study were tested using multiple linear regression in the SPSS software to determine the causality between the independent and dependent variables. According to Bangdiwala (2018), the general multiple regression states thus:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + e$$

Where:

Y = Dependent variable

a = The intercept

$\beta_1, \beta_2, \dots, \beta_n$ = Coefficients of the independent variable

X_1, X_2, \dots, X_n = Parameters of independent variable

e = Error margin (5 percent)

For this study, the dependent variable is customers' loyalty (CUSTLOY), while the independent variables are: food taste (FTASTE), food safety (FSAFTY), food presentation (FOODPRES), and quality of ingredients (QUALING). Therefore, the regression model is stated thus:

$$CUSTLOY = a + \beta_1 FTASTE + \beta_2 FSAFTY + \beta_3 FOODPRES + \beta_4 QUALING + e$$

Where:

$CUSTLOY$ = Customers' loyalty

a = The intercept (or constant)

β_1 FTASTE = Coefficient of food taste

β_2 FSAFTY = Coefficient of food safety

β_3 FOODPRES = Coefficient of food presentation

β_4 QUALING = Coefficient of quality of ingredients

e = Error margin (5 percent)

DATA ANALYSIS AND HYPOTHESES

A total of 280 copies of the questionnaire were administered to customers of fast-food outlets in Calabar, Cross River State. Out of the 280 questionnaire copies distributed, 276 or 98.6 percent of the questionnaire were successfully retrieved and usable, while 4 or 1.4 percent of the questionnaire could not be retrieved.

Hypothesis one

Ho: Food taste has no significant effect on customers' loyalty towards fast-food restaurants in Calabar.

Hypothesis two

Ho: Food safety has no significant effect on customers' loyalty towards fast-food restaurants in Calabar.

Hypothesis three

Ho: Food presentation has no significant effect on customers' loyalty towards fast-food restaurants in Calabar.

Hypothesis four

Ho: Quality of ingredients has no significant effect on customers' loyalty towards fast-food restaurants in Calabar.

Independent variables: Food taste, food safety, food presentation, and quality of ingredients

Dependent variable: Customers' loyalty

Test statistic: Multiple linear regression

Decision criteria: Accept the alternative hypothesis if ($P < .05$) and reject the null hypothesis, if otherwise.

TABLE 4
 Model summary of the effect of food quality on customers' loyalty towards fast-food restaurants

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.614 ^a	.426	.416	2.31909

a. Predictors: (Constant), Food taste, food safety, food presentation, and quality of ingredients

TABLE 5

ANOVA^a of the effect of food quality on customers' loyalty towards fast-food restaurants in Calabar, Nigeria

Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	998.147	4	249.537	50.330
	Residual	1343.491	271	4.958	
	Total	2341.638	275		

a. Dependent Variable: Customers' loyalty

b. Predictors: (Constant), Food taste, food safety, food presentation, and quality of ingredients

TABLE 6

Coefficients^a of the effect of food quality on customers' loyalty towards fast-food restaurants in Calabar, Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	16.042	.827			9.403	.000
Food taste	.344	.073	.332	.4720	.000	
Food safety	.234	.028	.411	3.652	.000	
Food presentation	.321	.159	.408	7.762	.000	
Quality of ingredients	.538	.086	.360	1.996	.002	

a. Dependent Variable: Customers' loyalty

Interpretation of result

The multiple regression results in Tables 4, 5, and 6 show the effect of food quality on customers' loyalty towards fast-food restaurants in Calabar, Nigeria. The model summary (Table 4) reveals a very high correlation of 61.4 percent between food quality and customers' loyalty towards fast-food restaurants in Calabar. Also, the regression coefficient ($R^2 = 0.426$) in Table 4 indicates that about 42.6 percent of the variation in customers' loyalty towards fast-food restaurants in Calabar can be explained by food quality. Similarly, the F-test (50.330, $P < 0.05$) confirms that the relationship between food quality and customers' loyalty towards fast-food restaurants in Calabar is statistically significant.

Furthermore, Table 6 highlights the predictive power of the food quality dimensions tested on customers' loyalty towards fast-food restaurants in Calabar. The result in Table 6 revealed that all the food quality dimensions tested (taste, safety, presentation and quality of ingredients) significantly predicted customers' loyalty towards fast-food restaurants in Calabar because their p-values are less than the 0.05 error margin threshold. Also, the positive t-test values exhibited by all the tested dimensions indicate a direct positive relationship with customers' loyalty towards fast-food restaurants in Calabar. In addition, from the standardized coefficients column of Table 6, it was revealed that the highest contributing dimension to the model is food safety ($\beta = 0.411$), followed by food presentation ($\beta = 0.408$) and quality of ingredients ($\beta = 0.360$). Whereas, the dimension, food taste, contributed least to the model ($\beta = 0.332$). In sum, given that the p-values of all the tested food quality dimensions were less than the error margin of 0.05, we reject all the null hypotheses, accept all alternative hypotheses and conclude that food taste, safety, presentation and quality of ingredients have significant positive effects on customers' loyalty towards fast-food restaurants in Calabar.

Discussion of findings

Food taste and customers' loyalty towards fast-food restaurants

From the test of hypothesis one, it was revealed that food taste has a significant positive effect on customers' loyalty towards fast-food restaurants in Calabar. This finding is backed by the study of Hanaysha (2016), which revealed that food taste has a significant positive effect on customer satisfaction in the Malaysian fast-food restaurant industry. The finding is also supported by the study of Suhartanto et al. (2019), which revealed that food taste has a direct positive effect on customer loyalty towards online food delivery firms in Indonesia. In addition, the finding aligns with the study of Adeniran and Adebisi (2021), which revealed that food taste has a significant positive influence on customers' patronage of food service outlets in Kwara State, Nigeria. This finding highlights the critical role that food taste plays in cultivating and maintaining customer loyalty in the fast-food industry, particularly in Calabar. It suggests that the sensory experience of the food—its flavor, texture, and overall quality—directly influences customers' decisions to return to a particular fast-food restaurant. A significant positive effect means that as customers perceive the taste of the food to be favorable, their likelihood of continued

patronage increases. This underscores the notion that, despite other factors such as pricing, convenience, or marketing efforts, the intrinsic quality of the food itself is a primary driver of customer retention. For managers, this finding implies that ensuring consistently high food quality is essential for building a loyal customer base, as it significantly contributes to the restaurant's long-term success and competitive advantage in the market.

Food safety and customers' loyalty towards fast-food restaurants

The test of hypothesis two revealed that food safety has a significant positive effect on customers' loyalty towards fast-food restaurants in Calabar. This finding is backed by the study of Ahmad and Ismail (2021), which revealed that food safety had a significant positive effect on customer satisfaction and loyalty in fast-food outlets in Malaysia. The finding is also backed by the study of Kamau and Njoroge (2020), which revealed that healthy options (food safety) had a significant positive influence on customer loyalty in quick-service restaurants in Nairobi, Kenya. Similarly, the finding is backed by the study of Mensah and Boateng (2018), which revealed that food safety had a significant positive relationship with customer loyalty in fast-food restaurants in Accra, Ghana. This finding highlights the critical importance of food safety in cultivating and sustaining customer loyalty in fast-food restaurants in Calabar. The significant positive effect of food safety on customer loyalty suggests that when customers perceive that the food served is safe, they are more likely to continue patronizing the restaurant, thereby enhancing repeat business. This underscores that customers place a high value on food safety, possibly due to concerns about health and wellbeing, which in turn influences their loyalty decisions. The implication is that food safety is not just a regulatory or health concern but also a strategic factor that directly impacts customer retention and long-term business success in the fast-food industry. This effect is particularly relevant in a competitive market where customer loyalty can be a key differentiator for businesses.

Food presentation and customers' loyalty towards fast-food restaurants

From the test of hypothesis three, it was found that food presentation has a significant positive effect on customers' loyalty towards fast-food restaurants in Calabar. This finding is backed by the study of Hanaysha (2016), which revealed that food presentation had a significant positive effect on customer satisfaction in the Malaysian fast-food restaurant industry. The finding is also backed by the study of Suhartanto et al. (2019), which revealed that food presentation had a direct positive effect on customer loyalty towards online food delivery firms in Indonesia. In addition, the finding is supported by the study of Adeniran and Adebisi (2021), which revealed that food presentation had a significant positive influence on customers' patronage of food service outlets in Kwara State, Nigeria. This finding highlights the crucial role that food presentation plays in shaping customers' loyalty toward fast-food restaurants in Calabar. It underscores that beyond the taste and quality of the food itself, how the food is visually presented significantly influences customers' overall dining experience and their likelihood to return. A positive correlation between food presentation and customer loyalty indicates that customers place a high value on the aesthetic appeal of their meals, which can evoke satisfaction and a sense of value. This suggests that food presentation is not just a superficial aspect of service but a substantive factor in customer retention, ultimately impacting the restaurant's long-term success in a competitive market.

Quality of ingredients and customers' loyalty towards fast-food restaurants

In testing the fourth hypothesis for the study, it was found that quality of ingredients has a significant positive effect on customers' loyalty towards fast-food restaurants in Calabar. This finding is backed by the study of Ahmad and Ismail (2021), which revealed that quality of ingredients had a significant positive effect on customer satisfaction and loyalty in fast-food outlets in Malaysia. The finding is also backed by the study of Kamau and Njoroge (2020), which revealed that quality of ingredients had a significant positive influence on customer loyalty in quick-service restaurants in Nairobi, Kenya. Moreover, the finding aligns with the study of Mensah and Boateng (2018), which revealed that quality of ingredients had a significant positive relationship with customer loyalty in fast-food restaurants in Accra, Ghana. This finding highlights the critical role that the quality of ingredients plays in fostering customer loyalty in the fast-food industry in Calabar. It underscores that fast-food restaurant customers in Calabar place considerable value on the quality of food they consume, directly linking it to their continued patronage of fast-food restaurants. The significant positive effect of ingredient quality on customer loyalty suggests that when customers perceive the ingredients as being of high quality, it enhances their satisfaction and trust in the brand, leading to repeat visits and long-term commitment. This relationship also implies that customers are likely discerning in their choices, associating the quality of ingredients with the overall dining experience, and this perception is a key driver in their decision to remain loyal to a particular fast-food establishment. Consequently, this finding indicates that maintaining high standards in the quality of ingredients is essential for sustaining customer loyalty in this competitive market.

CONCLUSION AND RECOMMENDATIONS

As observed at the outset of this study, the quality of food offered in fast-food restaurants has been a subject of intense scrutiny by Nigerian consumers, especially with respect to the implications for their health. This heightened awareness has led to growing demands by stakeholders for transparency in the ingredients used, the cooking processes employed, and the overall quality control measures in fast-food restaurants. This study was carried out to investigate the role that food quality can play in enhancing customers' loyalty towards fast-food restaurants. The study adopted a structured questionnaire to obtain primary data from customers of popular fast-

food restaurants in Calabar. Through descriptive and inferential statistics, the data obtained from respondents were analyzed and the hypotheses of the study were tested. The findings emerging from this analytical procedure revealed that food quality dimensions, including food taste, safety, presentation and quality of ingredients, had significant positive effects on customers' loyalty towards fast-food restaurants in Calabar. This insight underscores that maintaining high standards in these food quality dimensions is crucial for fostering customer loyalty, as it directly influences their overall dining experience and satisfaction. Therefore, the study concludes that in the context of fast-food restaurants in Nigeria, food quality plays an indispensable role in promoting the prospects of customers' loyalty in such a competitive industry. Taking the findings of the study as a foundation, the following recommendations are suggested:

1. Managers of fast-food restaurants should ensure that the taste of their meals is consistently enjoyable to customers by incorporating a blend of rich flavours, carefully selected seasoning tailored to local and international palates, and tantalizing aromas that create an irresistible dining atmosphere, thereby encouraging repeat patronage and positive word-of-mouth. This strategy ensures a memorable dining experience that aligns with customers' taste preferences, fostering a strong emotional connection and long-term loyalty to the brand.
2. Managers of fast-food restaurants should implement strict food hygiene protocols, maintain spotless restaurant environments, ensure proper storage, and incorporate natural food preservatives such as vinegar or rosemary extract in order to ensure consistently high food quality, minimize health risks, and build trust among customers. This approach will foster customers' loyalty by assuring them of safe, high-quality meals every time, leading to repeat patronage and positive word-of-mouth referrals.
3. Innovative food presentation methods such as attractive food styling, creative and user-friendly menu designs, and eco-friendly packaging can significantly enhance customers' loyalty towards fast-food restaurants in Calabar by creating memorable and appealing dining experiences that align with their values and preferences, encouraging repeat visits and positive recommendations.
4. Managers of fast-food restaurants should implement a system that prioritizes fresh, organic, and nutritionally-rich ingredients while clearly communicating their health benefits through engaging content and interactive in-store experiences in order to foster a strong, trust-based connection with customers. This commitment to high-quality ingredients will build a reputation for health-consciousness and quality, driving repeat patronage and customer advocacy.

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