

Exploring the Influence of Packaging Design on Children's Food Choices: Insights from the Chinese Market

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Abstract

This research explores the influence of packaging design on children's food choices, with a specific focus on the Chinese market. In today's consumer-driven world, food packaging plays a critical role in shaping purchasing decisions, particularly for young consumers. Children are especially susceptible to visual stimuli, and packaging can significantly impact their food preferences, both positively and negatively. This study aims to examine how packaging elements such as colors, characters, typography, and graphics affect children's choices in food products, contributing to both their dietary habits and overall brand engagement. A qualitative research approach was employed through in-depth interviews with parents, children, and food marketing experts to gain a comprehensive understanding of the perceptions and preferences related to children's food packaging. The interview data revealed key insights into how various packaging elements attract children's attention, influence their food requests, and ultimately shape their eating behaviors. Moreover, the interviews with experts provided professional perspectives on the marketing strategies used in designing children's food packaging within the Chinese market. The significance of this study lies in its potential to inform both marketers and policymakers about the effects of packaging design on children's food choices, contributing to discussions on healthier food promotion. Understanding the persuasive power of packaging design can lead to more responsible marketing practices and support initiatives to curb unhealthy eating habits among children. Additionally, this research can serve as a foundation for future studies focused on the ethical considerations of food marketing to young consumers, particularly in regions experiencing rapid market expansion and evolving dietary trends, such as China.

Keywords: Packaging Design, Children's Food Preferences, Chinese Market, Visual Appeal, Brand Loyalty, Nutritional Content.

Introduction

The influence of packaging design on children's food choices is an increasingly important area of study due to the rising impact of marketing on children's eating habits. In today's visually driven consumer environment, packaging plays a pivotal role in attracting children's attention and shaping their food preferences. This is particularly concerning as many food products targeted at children are high in sugar, fats, and artificial ingredients, contributing to poor nutrition and the growing issue of childhood obesity. In the Chinese market, where consumer behavior is rapidly changing, the need to understand how packaging design affects children's food choices is crucial. With increasing urbanization and exposure to global food brands, children are becoming more susceptible to the visual appeal of packaging. This research is essential for identifying how packaging can be responsibly used to promote healthier eating habits and guiding parents, marketers, and policymakers in making more informed decisions to protect children's health.

Children are physically and physiologically different from adults, designing a box to hold their things is no easy task. The aesthetics of children's goods packaging in China reflects the country's growing information landscape and cultural orientation (Vila-López & Kuster-Boluda, 2016). The entire rationale for this sales % in China rests on these neglected parts of this study. Local businesses in China need to be creative if they want to stay in business due to cultural differences in packaging such as language and color. Packaging designers must pay close attention to the color scheme because different hues have different meanings such as good luck, bad luck or royal. It is essential to consider the Chinese market while designing the product's appearance, and adding a Chinese flavor to the package can increase sales in that market (Wu, 2023).

Because it may affect kids' actions, the construction and content of kids' food containers is a big concern (Elliott & Truman, 2020). Sustainable management of plastic packaging has the potential to enhance environmental pollution and children's health. There is zero correlation between the widespread use of these plastics in China's design of children's food products and environmental consciousness (Deng et al., 2020). Nevertheless, food packaging in particular benefits from the use of imaginative color pictures in order to pique the interest of Chinese children. This study delves into the topic of environmental sustainability, which could be a linked concern to the overall packaging system and how it is designed for product sales. Chinese manufacturers give their items a more realistic appearance by using a common plastic.

The authors Boginet al. stress the need of documenting not just the food chain but also the global value chain. Improving the system's overall functionality and ensuring the continuing protection of the environment requires making appropriate modifications to the packaging (Halabi & Hands, 2018). According to Silayoi & Speece (2004), this type of packaging is effective in boosting sales in a competitive market by enhancing the convenience elements that customers associate with any product. That is why it is so important to keep adopting eco-friendly packaging that works. Among other things, this is one of the main points made in the study. The use of biodegradable plastics can pave the way for similar improvements to the packaging system. Therefore, to attract children and increase sales in their easiest market,

it is crucial to concentrate on the specifics of food packaging in China. The flexible packaging rules in China are driving a 59% growth in the food packaging market (Li et al., 2020). Even while normal plastic has its own environmental problems, many brands nevertheless use it to make aesthetically pleasing product packaging.

The significance of this study lies in its potential to inform key stakeholders such as parents, marketers, and policymakers about the powerful impact of packaging design on children's food choices. By understanding how visual elements like colors, characters, and graphics influence children's preferences, the study can guide marketers in creating responsible and ethical packaging strategies. It also provides valuable insights for policymakers to develop regulations that promote healthier food choices. Ultimately, the study aims to contribute to public health initiatives by curbing unhealthy eating habits among children, particularly in the rapidly evolving Chinese market, where consumer behavior is increasingly influenced by visual appeal.

Literature Review

Considering the psychological angle linked to the one-of-a-kind picture rate and its ever-changing transformation is crucial when examining a child's attention span. Colors cannot evoke any particular feelings in young toddlers, even if they may be able to identify a few. The distribution of early stages of children's psychological development is shown in the table above. The data in the table, as stated by Erie, are dependent on this variable and the relationship between children's visual sense and their logical capacity. According to Liu et al. (2017), most of the replies are from children aged four to six. Even if they aren't always consistent, those kids can name the primary colors: yellow, red, green, blue, black, and purple. Their personalities mirror their chronological age, as seen by the age distribution. Packaging for foods that are safe for children shares some of the advantages of integrating visual design in commercial interactions.

Two variables are thought to control visual attention: Feelings of touch can set off bottom-up forms, which in turn cause sudden, unexpected changes in attention to reinforcements that could be useful. Applying deliberate strategies and top-down frameworks that direct focus to goal-relevant shocks is essential for long-term success. The bottom-up features of a stimulus, such as its engaging quality, should greatly influence initial visual attention, according to Vermeir & Roose (2020), but conscious aims and self-regulatory components should have a greater impact on subsequent visual attention. A child's view of the world is distinct from that of an adult. Colors that reflect light captivate them. Because they are simpler to see and understand, these colors are popular among children.

Even though babies with basic vision may sense some colors as early as 4 to 5 months old, they are far better at differentiating between light-reflecting hues. Even as they get older, children can't get enough of vibrant hues. Package colors should be carefully considered, especially for products geared towards youngsters. Products could benefit from using color as a promotional technique (Halabi, 2021). To catch the eye of kids, several brands adopt this strategy on their packaging. Its impact on consumer habits is enormous. To attract kids' attention, some kid-friendly products feature characters from popular media on the box. The

kids' snack selections are greatly influenced by food branding and licensed characters on packaging (Isaacs et al., 2022). For example, what were once seen as cheerful or sorrowful scenarios were shown in images of children. As they examined each picture, the students were free to use any color they preferred. Children are more likely to buy products with bright, eye-catching packaging. The brand's colors can help people remember it even when they're far away from a store, street, or other heavily populated display location. To a child, the brand will be completely unidentifiable due to the terrible color scheme. Companies are beginning to see the potential for a sizable profit in the children's sector. Both the "initiator" and the "customer" roles are filled by these individuals, thus businesses strive to get them.

According to the key principles and a successful children's food packaging plan, the use of primary colors such as red, yellow, green, and blue and simple pictures makes the product more appealing to children. This verdict was arrived at after taking into account the traits of kids and the results of showcasing studies (Syriopoulou-Delli & Sarri, 2023). As children develop, the packaging of their food becomes more noticeable, which allows researchers to observe how children perceive color (Wikström et al., 2014). Consider the fitting color hypothesis, center your evaluation on principal chromatic information, and keep in mind the emotion that color expresses as the primary component while assessing the effects and qualities of complimentary hues.

Parents consider health-related factors when making food purchases for their children, thus it stands to reason that packaging signals indicating well-being links might impact these choices (Mahmoud & Grigoriou, 2022). If we are serious about encouraging children to eat healthily, we must alter the food environment. We require regulations that facilitate the maintenance of a healthy caloric deficit and lessen our dependency on dietary additives associated with noncommunicable diseases. As an example, there is the layout of directional encouragement. An important public health policy has long been acknowledged: ending the inappropriate marketing of dangerous products to youngsters. The use of packaging to target children for commercial purposes is still uncommon, nevertheless.

Legislation addressing the most apparent features of packaging targeted towards children is necessary to control advertising on packaging (He & Harris, 2020). While it's common knowledge that food labels shouldn't deceive consumers about a product's ingredients, processing, or other qualities, it's also common knowledge that deceptive health-related signals abound. Claims about health and nutrition on packaging increase the likelihood that customers will buy products with poor nutritional profiles, according to a large body of research. Adults and children alike would benefit from a prohibition on misleading health-related visual and textual cues since they raise health consciousness and inform decision-making. Illustrations of nutritious meals and allusions to home-cooked foods in product names are particularly persuasive sources of health-related associations and hedonic expectancies (Kacen & Lee, 2002). Standardization of packaging across all industries is not something that will happen overnight. In the food security and trade debates in particular, attempts by governments worldwide to legitimize such norms have met with strong resistance. The food business actively seeks deregulation through corporate political efforts, which should be noted.

Methodology

To learn how different aspects of packages affect both kids and their parents, focus groups are a useful study tool. Mainly because in a dynamic group setting, students have a better chance of hearing other points of view. The interaction amongst group members may generate more nuanced responses than would be revealed by individual interviews or surveys, and the facilitation of thorough discussions allows participants to express their viewpoints and experiences. In order to gain significant qualitative insights, researchers can actively observe and study emotions and interactions as they happen using this approach. When it comes to studying complex attitudes and actions regarding packaging, focus groups are incredibly efficient since they offer rapid explanation and thorough analysis of certain themes. By working together, these interactions can reveal commonalities and differing viewpoints, which can help with designing packaging that parents and kids will love.

In this study, seven parents were asked to share their thoughts and feelings about choosing food packaging for their children in a focus group. Careful thought was given to the selection process of these participants to provide a diverse representation of viewpoints and backgrounds. We did this so that we could learn everything possible about the factors that influence parents' choices when it comes to food packaging. The purpose of the discussion was to learn more about their thoughts, feelings, and decision-making processes when it comes to choosing pre-packaged meals for their kids. We hope to uncover some critical insights about how the design, content, and attractiveness of the packaging affect their purchasing behavior. We were able to have a rich and engaging discussion because our small but varied group size enabled everyone a chance to speak up and help build a shared understanding of the subject.

Table 1

List of participants involved in the focus groups

Name code	Age	Occupation	Education background	Income per year
ZW	36	School teacher	Bachelor in Education	120,000
LH	40	Software engineer	Master's in computer science	300,000
WJ	32	Graphic designer	Bachelor in Graphic Design	200,000
CL	28	Lecturer	Undergraduate in Business Administration	200,000
ZY	45	Medical doctor	Doctor of Medicine (MD)	400,000
LT	38	Businessman	Diploma in Culinary Arts	250,000
XM	34	Marketing manager	Master's in Marketing	280,000

Results

These are the list of questions for the focus groups to explore the various dimensions of how packaging influences parental buying behavior, including aesthetic appeal, health and safety concerns, environmental impact, cultural factors, and practical considerations.

Table 2

Themes emerged from the questions list

Reasons	Questions
Initial Impressions	"What are your first thoughts when you see a product's packaging? What elements catch your eye immediately?"
Influence of Visual Appeal	"How does the visual design of packaging (like colors, images, or characters) influence your decision to consider a product for your child?"
Understanding of Nutritional Information	"How often do you read the nutritional information on packaging? How does this information affect your purchasing decision?"
Role of Branding	"Do specific brands influence your trust in a product based on their packaging? If so, can you give examples?"
Safety Concerns	"What packaging features make you feel a product is safe and suitable for your child?"
Environmental Considerations	"Does the environmental friendliness of packaging (like recyclability or use of biodegradable materials) play a role in your product choices for your children? Why or why not?"
Cultural Influences	"Are there cultural aspects that you look for in packaging when choosing products for your children?"
Impact of Endorsements	"How do celebrity or cartoon character endorsements on packaging influence your willingness to buy a product for your child?"
Practicality and Convenience	"How important is the convenience of packaging (ease of opening, storage, etc.) in your decision-making process?"
Educational Value	"Do you consider any educational value in the packaging (such as informative content or interactive elements) when purchasing products for your children?"
Price Perception	"Does the packaging of a product influence your perception of its value or quality? Does it affect your willingness to pay a higher price?"
Changes and Improvements	"What changes or improvements in packaging would make you more likely to purchase a product for your child?"

Color and Packaging elements

Table 3

Results from focus group discussions

Descriptions	ZW	LH	WJ	CL	ZY	LT	XM
Influence of color choice on perception	X	X	X			X	X
Bright and vibrant colors attract attention	X			X	X	X	X
Warm colors (red, yellow) stimulate appetite		X		X	X		
Cool colors (blue, green) indicate freshness			X	X	X		X
Cultural associations of colors		X					
Red symbolizes luck, happiness, celebration	X	X	X	X	X	X	X
Green indicates natural or organic ingredients	X	X	X		X		X
Impact of color psychology on children				X	X		
Bright and lively colors create excitement	X			X			
Colors stimulate appetite		X	X	X			
Colors evoke freshness and healthiness					X		
Graphic influence attention to eat		X	X			X	
Reflecting brand identity and values				X	X	X	
Trust and reliability associated with graphic cartoons or celebrities		X	X	X	X	X	X
Nutritional information labeling informs the healthy ingredients	X		X	X		X	X

*Note: "X" indicates that the participant mentioned or addressed the specific theme in their answer.

The results demonstrated that seven out of ten focus group participants believed that color significantly influences consumers' perceptions of brands and products. People said the packaging's color scheme did a good job of attracting their attention, making them excited about the product, and sending messages to their target demographic.

The need of utilizing vibrant, eye-catching colors to capture children's attention was stressed again and time again. In order to attract a younger demographic of buyers, participants 1 and 2 stressed the need of using bold colors. The fourth participant suggested wearing warm colors, such as red and yellow, because they stimulate the appetite. Having one or more of these colors in a food product is likely to make children feel good about it because these hues are often associated with energy, happiness, and enthusiasm.

However, Participants 3 and 5 said that cool colors, such as green and blue, make people feel healthy and refreshed. Brands of children's food in China may find these colors particularly significant because parents there tend to prioritize the safety and quality of their children's

diet. If you want your brand's packaging to exude an air of reliability and trustworthiness, try employing tones of blue or green.

Another concept that emerged from the participants' comments was the cultural significance of various colors. In Chinese tradition, the color red represents good fortune, joy, and the spirit of celebration, as the second participant pointed out. Strategic use of this color in packaging design may strike a chord with Chinese consumers and leave a positive impression. Consistent with the current trend of Chinese parents favoring healthier food options, Participant 3 also mentioned that the color green is associated with natural or organic components. Nutritional knowledge is crucial, according to major participants, since parents are paying greater attention to their children's food and health. Parents can make educated judgments about their children's healthy eating habits by reading nutrition labels, which include crucial information about ingredients and nutritional value.

The impact of color psychology on children's perceptions of food was another subject covered by the participants. A fourth speaker elaborated on the area of color psychology's claims that different hues have the power to influence people's emotions and actions. Bright, lively colors, they said, might make people feel happy and excited, which would make the food more enticing to kids. Furthermore, Respondent 5 stressed the significance of designers comprehending children's color choices and emotional reactions to create aesthetically pleasing packaging that elicits positive product connections.

Another important consideration, according to some participants, is if the brand's colors match its personality. Identifying the company's identity and beliefs is crucial when selecting packaging colors, as pointed out by participant 6. The chosen colors should represent the brand's personality and its position in the market. Alignment like this can aid in creating a consistent and cohesive brand image, which boosts brand awareness and devotion among consumers.

Participant 7 also brought up the idea that people associate certain colors with trustworthiness and reliability. They said that one surefire approach to win over this demographic is to use colors like blue, which are associated with reliability. They realized that when shopping for their children, Chinese parents care deeply about the products' quality and safety.

The first participant brought up the topic of involving the target audience in the color selection process as the last subject to be discussed. They highlighted the benefits of surveying or focus grouping parents and children to learn about their color preferences. Improved package appeal and engagement can be achieved by using this interactive method to determine which colors will resonate with the target market.

Based on the comments, we can see that there are a few main themes about how different brands of Chinese children's food use color and nutritional information labels in their packaging design. Topics covered ranged from the power of color psychology to its effect on children's food perception, from the significance of trust and reliability in color selection to

the role of the target audience, and from the influence of vivid and attention-grabbing colors on consumer perception to the influence of color psychology on children's food perception. The intended recipients also took part in the process. To better design aesthetically pleasing and effective packaging for children's food firms, Chinese designers would do well to familiarize themselves with these repeating elements.

The significance of container design aligning with Chinese aesthetic tastes and standards was highlighted by Participant 1. Among these include the use of lively, quirky illustrations and bright, primary colors. They also noted that correct labeling is mandated by Chinese law in this area and brought up the difficulties of handling allergy information while keeping ingredient transparency. Question 2's focus was on how different types of products are subject to different labelling standards. Specifically, they highlighted the fact that there are regulations on the composition, nutrition, and safety standards of certain children's food products. Dietary information, ingredient lists, storage instructions, and any applicable health claims or certifications must all be clearly labeled in accordance with these rules. The packaging design must also adhere to these standards.

Participant 3 brought up the topic of how a children's food brand's positioning and general appeal are affected by the type of product chosen. They brought attention to the fact that different items meet the needs and preferences of children and their parents in different ways. In contrast to sugary snacks that promote themselves as choices that highlight flavor, enjoyment, and ease of use, healthy and organic food items may advertise themselves as premium and nutrition-focused solutions. The packaging's design should be in line with the intended positioning and target audience.

The last speaker provided several case studies of creative packaging designs for Chinese children's food goods. They emphasized portable food packs that can be sealed for later use, interactive packaging that includes written puzzles or games, and packaging that uses augmented reality features to engage children while they buy. Along with this, they highlighted the growing trend of eco-friendly packaging designs that prioritize sustainability and reduce waste.

An investigation of the potential effects of food packaging design on children's dietary choices was conducted by participant 5. To capture kids' attention and help them form positive associations with the product, they stressed the significance of eye-catching and engaging packaging. Children and their parents can benefit from more educated product choices when the nutritional benefits can be conveyed in an appealing and easy-to-understand way. The packaging's design has the power to evoke emotions and connect with the target audience, which can shape their tastes and encourage them to buy.

The sixth person took an interest in the possibility that brand loyalty may be fostered via the design of packaging for children's food. A consistent and unique package design that conveys the values and character of the business is of the utmost importance, they stressed. The packaging of a product can greatly enhance its usability, leading to happier and more devoted customers. By appealing to children's and parents' emotions, brands can increase brand

loyalty and repeat purchases through elements like interactive features, collectible designs, or personalized messaging.

Regarding the creation of packaging for the online sale of children's food supplies, Participant 7 focused on the most crucial factors to consider. They stressed how important it is to make packaging that can withstand transit without bending or breaking, stacks easily to save space, and provide accurate and thorough product information. Also, they raised attention to the fact that unwrapping videos are becoming increasingly popular and that better packaging design could lead to better online purchasing experiences. Finally, they voiced their belief that environmentally conscious consumers place a premium on packaging that is as kind on the planet as possible.

Discussion on Findings

Thematic analysis of the responses revealed many significant takeaways related to the design of packaging for children's food goods targeted at the Chinese market. These results shed light on the relevant elements affecting online sales, including considerations, hurdles, regulatory requirements, positioning in the market, innovative packaging design, impact on food choices, and brand loyalty.

The importance of tailoring the package's design to Chinese aesthetic preferences and tastes was highlighted by one of the participants. According to this conclusion, knowing the culture of the target audience and including cultural elements into the packaging design might boost the package's appeal. Addressing allergy information and ensuring transparency regarding the contents were further complicated by the additional labelling requirements imposed by Chinese regulators.

According to the second respondent, specific regulations and labeling standards apply to various types of children's food in China. In order to guarantee product safety, accurate information disclosure, and conformity to compositional, nutritional, and safety criteria, it is crucial to follow these guidelines, as this conclusion shows. Designers of packaging must be well-versed in the specific regulations that apply to each product category in order to ensure that their work meets all applicable criteria.

Participant 3 brought up the topic of how different product types impact the positioning and general attractiveness of children's food brands in China's market. Based on these findings, various goods are designed to meet the diverse needs and preferences of different types of consumers. Brands aiming to project an image of premiumness and healthfulness may provide more organic and wholesome food items, while those aiming to appeal to consumers' sense of taste, desire for adventure, and need for convenience may provide more decadent snacks. It is important for the packaging design to match the planned market positioning so that the brand's values and benefits may be properly communicated to the target audience. The last speaker provided several case studies of creative packaging designs for Chinese children's food goods. Some examples of such packaging include augmented reality components, resealable snack packets meant for on-the-go consumption, and interactive components like puzzles or games. Imaginative packaging designs may pique children's

interest and encourage participation, leading to an enjoyable and unforgettable experience for the buyer, according to this study.

The fifth participant brought up the idea that children's food preferences and choices are heavily influenced by the design of the packaging. The results suggest that kids are more likely to pay attention to and create positive associations with products whose packaging is both aesthetically pleasing and informative. Children and their parents can make better informed choices when products are packaged in a way that clearly communicates the product's nutritional value and other important features. Designing packaging in a way that appeals to consumers' emotions can influence their tastes and encourage them to buy.

The sixth respondent highlighted the importance of well-designed packaging for children's food items in encouraging consumers to remain loyal to the brand. Researchers found that consumers were more satisfied and loyal to brands whose packaging had a consistent and unique design that mirrored the values and character of the company. By appealing to children's and parents' emotions, elements like interactive features, collectible designs, or personalized inscriptions increase brand loyalty and repeat purchases.

The seventh participant focused on what should be considered most heavily when designing packaging for the online sale of food products for children. This finding highlights the significance of making packaging that can endure transportation, is stackable to make the most of storage space, and provides accurate and comprehensive product information. Additionally, it was brought to people's attention that unboxing experiences are on the rise and that packaging design has the ability to create better online shopping experiences. Furthermore, it was found that eco-conscious consumers were receptive to packaging that was optimized for environmental friendliness.

All things considered, the results of the theme analysis reveal how complex the packaging design of Chinese children's food products is. Among the many considerations that need to be made are cultural preferences, adherence to regulations, and notification of allergies. Selecting the right product category influences where a product is positioned in the market, while innovative packaging designs can boost appeal and interest. It is possible to influence customers' tastes and encourage brand loyalty through the design of food packaging. Packaging for online sales must also take environmental friendliness, product information, ease of unpacking, and transportation into consideration. Packaging designers and marketers seeking to create effective packaging strategies for children's food products in the Chinese market can get valuable insights from these studies.

Focus Group Discussions with Children

With parental permission already in place, we convened a focus group of kids to hear their thoughts on the features of the packaging for some of their favorite foods. This study set out to examine the visual aspects of food packaging, such as colors, characters, and patterns, and how children interpret and respond to these aspects. The study sought to get a deeper knowledge of the specific components of packaging that appeal to children, impact their preferences, and potentially sway their food choices by engaging directly with them. By

obtaining parental approval, this method ensured ethical research techniques and offered useful insights into the efficacy of packaging strategies from the perspective of the target demographic, the children. From the Guangzhou area, seven children, ranging in age from six to ten, were chosen. Children of varying ages and interests would provide unique insights into the persuasive power of various packaging features. What design elements are most appealing and impactful to children in this age range can be better understood with their input.

Table 4

List of participants (children) involved in the focus groups

Name code	Age	Gender	Interests
XM	6	Female	Drawings, cartoons
HH	7	Male	Sports, action figures
ML	8	Female	Reading, puzzles
CX	6	Female	Animals, outdoor play, games
YY	7	Male	Video games, superheroes
BW	9	Female	Storytelling, imaginative play
NM	10	Male	Astronomy, technology, arts and crafts

Important to our research on the effect of visual image on sales of Chinese children's food brand packages is the establishment of the focus group test and the gathering of baseline data. In this phase, we will review the fundamentals of the focus group, including its participants' demographics and whether or not they were minors. These details help to establish the context and evaluate the results accurately. The focus groups met in places that were conducive to free speech and not dangerous for children. The location was chosen with consideration to provide an environment where individuals could unwind and freely express themselves. In order to ensure that participants could engage in a stimulating and productive discussion, venues such as community centers, schools, or specialized research facilities that offer kid-friendly features were selected.



Figure 1. Sample of popular snacks in China.

Separate sessions were held for each age group during each session. The children were grouped according to their age to ensure their comfort and ability to participate. By maintaining focus on the topic of how people's mental pictures of food influenced their real eating patterns, the moderators encouraged active engagement. Prior to the focus groups,

we collected basic information about each child to put their background and experiences into context. Each participant had their age, gender, and location documented. Any variations in replies by age or region could be better understood with this data.

The three kinds of popular snack brands in China are shown in the figure above. Famous for its rich, milky taste, Wang Zai Milk Candy hails from China and is a beloved dessert. Want Want China Holdings Limited, a prominent food manufacturer in the region, is the Chinese firm that makes the candy. The rich, sugary flavor of Wang Zai Milk Candy is quite similar to milk flavor, and it is famous among both children and adults. The candy is usually sold in little pieces that are individually wrapped, so it's easy to share or munch on. The candy's creamy texture is commonly highlighted on the packaging, which has the brand's signature logo and design. Images of milk or other dairy-related motifs are common.

As a result of the numerous happy memories it evokes for Chinese children, Wang Zai Milk Candy has entered the country's popular culture. Not only is it a mainstay in Chinese marketplaces around the world, but it has also become rather popular in many other nations, particularly in regions where sweets and snacks from Asia are popular. Orion, a famous South Korean candy and snack brand with a strong presence in China and other Asian nations, also makes fish crackers as a snack. These fish-shaped crackers have a crunchy exterior and a salty, delicious interior. You can find them in stores all around China, and they're a hit with kids and adults alike.

Researchers monitored the kids' eating habits by keeping track of the foods they liked, the brands they preferred, and the factors that shaped their tastes. Their existing views and practices towards food items were better understood as a result of this. We wanted to know how exposed people were to different designs of children's food packaging, so we asked them about their experiences and thoughts on different designs.

Results

Salty foods were often mentioned by children as things they buy. When choosing their favorite meal, most kids let the packaging dictate their taste preferences. Packaging with appealing visual features, such characters and colors, was more popular with children. Visuals also played a role in how they perceived the healthiness of a product. Because of these appearances, some kids were led astray into thinking that some foods included vital nutrients when in fact they did not. The name, price, picture, and characters of a new product were the most frequently depicted elements in children's drawings of the same. Their emphasis on these features of food packing suggests that they were very important to them.

According to the results, the most popular items among Chinese youngsters were those with the most appealing packaging, those that were seen as having the healthiest ingredients, and those whose components were shown in the drawings. Using ATLAS.ti (version 6.2), data analysis was carried out. Audio recording devices were used to record the focus groups, which were subsequently translated word-for-word from Chinese to English. After the data was collected, the transcripts were carefully reviewed, and a coding system was created to highlight the themes that were pertinent to the research topics. The transcripts were

organized, classified, and analyzed using ATLAS.ti in a methodical manner. A team member who is proficient in both Chinese and English conducted the analyses in Chinese. This teammate also provided English translations of certain sections for quotations.

Regardless of grade, the flavor was the deciding factor for all of the students. Most people who took the survey said they liked the product because of some feature, including the strawberry flavor or the fact that it had salty or sweet ingredients. Some of the other attendees also commented on how good it tasted, with many praising the strawberry flavor in particular. Third through sixth graders said that the variety, abundance, or reasonable price of the product was a factor in their decision.

All participants would purchase Orion Fish Crackers due to their delicious flavor, according to the results. Wheat flour, corn starch, and a variety of seasonings are some of the ingredients that give the crackers their unique flavor. As a light snack, they are great for enjoying while you're out and about or while you're relaxing. Orion Fish Crackers are known for their fun and whimsical food, and its packaging reflects that. Typically, they have bright colors, cartoon fish, and fun patterns, which appeal to younger consumers. Among the many snack foods sold in the Asian market, Orion stands out for its chocolates, cookies, and various crackers, all of which are renowned for their high quality and delicious flavors. The delicious flavor and satisfying crunch of Orion Fish Crackers, along with the brand's established reputation in China, are the main reasons for the snack's enormous success there.

That parents will give in to their kids' requests while buying snack foods is in line with earlier research (Letona et al., 2014). According to studies conducted by Ares et al. (2022), Letona et al. (2014), and Silayoi and Speece (2004), parents often find it difficult to say "no" to their children's product demands. Having said that, the findings did reveal that packaging had an effect on both the items parents bought when they went shopping and the items their children tried to influence when they ate together as a family. Attempts to convince youngsters to buy harmful things are more likely to be made by appealing to their sense of aesthetics in packaging. Considering the present state of affairs in the United Kingdom and Europe, where health is assuming paramount importance and childhood obesity is making headlines increasingly frequently. Snack foods marketed to children in China are subject to stringent regulations and oversight by the government, which aims to ensure their health, safety, and proper nutrition. One example is the establishment of stringent requirements for the nutritional content of these meals. In an effort to tackle problems including starvation and childhood obesity, these regulations place limitations on quantities of sugar, salt, and fats.

The Chinese government is actively working to increase the availability of healthful snack options for kids by pushing food companies to create new, exciting, and kid-friendly items. Take yogurt as an example; it's packed with nutrients that kids need to grow and thrive. The calcium it provides is essential for healthy tooth and bone development. Protein, which is

essential for building muscle and general growth, is also present. According to one individual (HH).

Yogurt is not my favorite. I don't like the taste. First time my parents make me to eat yogurt, it tastes horrible. I don't like this yogurt, but I like the other yogurt. I forgot the name, but it has my favorite cartoon on the packaging!

According to the results, marketers should use packaging components, like cartoon characters, to pique children's interest. Yogurt can be made more appealing and enjoyable for kids in order to increase their consumption. The producer can begin by selecting plain or naturally sweetened yogurt to minimize sugar content. Encourage kids to personalize their yogurt bowls with a range of nutritious toppings, such as fresh fruits, nuts, honey, or granola. They are able to experiment with various tastes and textures, and the experience becomes more engaging as a result. Yogurt can be presented in imaginative ways to attract their attention. For example, you might make yogurt popsicles, smoothies, or include it into dips and dressings. Using the cartoon character to teach kids about yogurt's health benefits—such as how it helps develop strong bones or improves digestion—can be a great way to get them to eat more of the food. Finally, integrating yogurt packaging with children's favorite cartoon characters like Elsa from Frozen, Spider-Man, Superman, or Batman can favorably impact their eating habits. This is because children often mimic the actions and choices of adults around them. However, another participant (HH) not agreed with the color of yogurt,

Why blue colour like this? It is not representing blueberries at all. It is all plain. Only fruits here. I like Pokémon cartoons!

The yoghurt preference of youngsters was established through a focus group discussion. The snack with the catchy name was preferred by 50% of the participants. Using cartoon characters that kids don't know on snack packages to make healthy snacks more appealing to elementary school kids. Both the evaluation of flavor and the desire to seek out the food were positively affected by the label snack. Findings indicated that "health plus fun" had a more pleasant flavor than "plain" or "health-only" products. Past studies have shown that kids are more likely to buy food goods featuring popular cartoon characters, so this marketing practice makes sense.

Conclusions and Further Research

Our study on the impact of visual imagery on sales in the packaging design of Chinese children's food products sheds light on the preferences, attitudes, and purchasing behaviors of both children and their parents. Through focus groups and in-depth interviews, we gained valuable insights into the key factors influencing consumer behavior in this market.

The research indicates that using bright colors, appealing images, and cartoon characters is highly effective in capturing children's attention and interest in a product. Brand recognition and popularity among young consumers are critical in building trust and increasing brand loyalty. Packaging that incorporates storytelling elements and recognizable characters can enhance engagement, leading to stronger consumer-brand connections.

Children also prefer packaging that clearly communicates nutritional information in a way that is easily understood by both themselves and their parents. The influence of peers plays a significant role in their purchasing decisions, as designs popular among classmates are often favored. Additionally, growing environmental awareness among children was evident, with many expressing a preference for eco-friendly and sustainable packaging designs.

Parental influence is another critical factor in shaping children's food choices, as parents' concerns and preferences play a significant role in determining what their children consume. These findings offer valuable guidance for packaging designers, marketers, and brand managers working in the children's food industry. Visually appealing designs, effective branding, storytelling, and clear product information can help companies engage both children and parents, strengthening brand loyalty.

The study of the influence of packaging design on children's food choices is crucial for multiple stakeholders, including parents, marketers, policymakers, and public health advocates, particularly in the Chinese market where consumer culture is rapidly evolving. For parents, understanding how packaging elements such as bright colors, characters, and fun typography influence their children's preferences can help them make more informed decisions when purchasing food. This knowledge empowers parents to recognize marketing tactics that may encourage unhealthy food choices, allowing them to guide their children toward healthier eating habits. For marketers, the findings of this research offer critical insights into how packaging design can drive consumer behavior, specifically in the growing segment of children's food products. The study highlights effective strategies for creating appealing designs that attract young consumers while also fostering brand loyalty. However, it also emphasizes the ethical responsibility marketers hold in promoting nutritious and balanced products to children, ensuring that the visual appeal does not solely drive preferences for unhealthy options.

Policymakers and public health professionals can benefit from this research by gaining a deeper understanding of the role that packaging plays in influencing children's dietary habits. With childhood obesity and poor nutrition on the rise, particularly in urban areas of China, this study sheds light on how regulatory measures could be implemented to control the design of food packaging targeting children. For instance, guidelines could be created to limit the use of manipulative packaging techniques on products that are high in sugar, fat, or salt, thereby promoting healthier choices at the point of purchase. In conclusion, this research is beneficial for those seeking to protect children's health, improve responsible marketing practices, and ensure that packaging design aligns with ethical standards in a rapidly developing market like China.

However, the study has some limitations, such as a relatively small sample size and a focus on a single country (China). Further research should explore how these findings apply to different cultural contexts, taking into account varying price points, packaging types, and cultural norms. Expanding the research to include diverse regions and populations will provide a more comprehensive understanding of the relationship between children's food packaging and sales.

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