TOWARD PLEASURABLE EATING BEHAVIOR
BY DESIGN

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Abstract: Eating is one of the most complex human activities, as it involves many biophysiological, psychological, socioeconomic, sociocultural, and environmental factors that almost always work simultaneously to meet the objectives of eating, including meeting physiological demands, providing comfort, sociocultural reasons, and providing pleasure. This paper aims to explore which factors significantly influence people’s eating behaviors and examines how design could play a role in modifying the eating environment. From this review, we found that taste develops before birth. Although emotions were identified as driving people to crave foods, people basically have less control over their desire to eat. Sociocultural, natural, and food environments govern people’s choices of and desires for foods more significantly than hunger motives. Packaging, symbols, brands, and environmental designs made for food promotion were found to be effective in influencing people’s choice of food and eating behavior. Therefore, research on the eating behavior–environment relationship seems to be a promising topic for design psychology research.

Keywords: Taste perception, eating behavior, eating environment, food environment, social eating

1. Introduction

In the past, food was needed only to sate hunger. Therefore, food was consumed only when biological cues told the brain to eat. Gradually, after industrialization occurred and farming, food, and packaging technology became more advanced, foods became ubiquitously available, shifting the eating activity from only meeting rigid physiological needs to also satisfying sociopsychocultural values. Supporting this notion, Cohen and Farley say, “Eating is an automatic behavior over which the environment has more control than do individuals…the amount of food consumed is strongly influenced by factors such as portion size, food visibility and salience, and the ease of obtaining foods” [1]. Human behavior develops in accordance with experience, environment, and cognitive capacity.

With the massive scale of food production and quick and vast distribution, consumers can easily and conveniently find food; yet, at the same time, they face a new problem, because they are continually confronted by advertisements that persuade them to buy and eat more than they need. Current advertisements no longer promote how delicious foods are as part of a reasonably sized meal. They can seductively imply how a daily social event would be even more enjoyable and memorable if it involved tasting foods with friends. In such an example, the purpose and experience of mealtimes have been reinterpreted totally differently, suggesting that food can be bought, enjoyed, and experienced at any given time and place, and is guaranteed to enliven your sociocultural life. Wansink [2] even said that we often eat while doing something else (e.g., watching TV), which is referred to as “meal multitasking.” Contemporary food promotion has indeed changed the cultural values of eating as it manipulates objects of mere hunger into objects meant to fulfill looser sociocultural values.

In line with this way of thinking, food service companies like fast-food restaurants have grown globally and have appealed to children, young adults, and family consumers. Most people like eating in such restaurants because fast
food is reasonably low-priced, served fast, and offers a new experience of eating. In fact, as competition among fast food businesses grows ever fiercer, companies have now shifted from selling foods and services to selling “eating experiences.” In such businesses, customers are prompted to do something fun prior to buying the products, in order to make the shopping adventure more enjoyable and memorable. In the future, there will be many more experience-based food products offered to customers, in response to customers’ changed eating and drinking behaviors, marking the fourth stage of economic evolution, which Pine and Gilmore [3] call the experience economy.

Thus, we understand that we often eat in response to external cues, not just internal ones (i.e., when the stomach contracts, the content of glucose in our blood lowers, or our insulin increases). This is why Wansink claims, “people’s tastes are not formed by accident,” and most of us eat more than we need, but not out of hunger. He also adds that we do this because of “family and friends, packages plates and, names and numbers, labels and lights, colors and candles, shapes and smells, distraction and distances, cupboards and containers” [4].

Psychologists have long been involved in studying what and how people behave toward food though much of it remains unresolved. In turn, design professionals have responded to solve the problems of food marketing and hospitality, and have published some textbooks on restaurant planning and design. However, since the issues of taste perception and eating behavior are becoming more complex as a result of the vast development of our sociocultural environment, design may also need to look at eating more deeply, through a scientific framework at the core of design psychology. In this paper, a framework for studying the design psychology of eating will be discussed on the basis of a line of thought as illustrated in the following schematic framework (Figure 1), developed from the theoretical basis proposed by Wansink [5] and Ogden [6].

From the schematic framework (Figure 1), we are aware that eating involves many factors besides psychology, and all factors influence people simultaneously, which results in their behavior toward eating. The effect of these influences is varied and can be negative, even damaging, or positive. People may employ design in an effort to control external factors, so that they can gain favorable effects, making the experience of eating a memorable and pleasurable one. In fact, design is meant to improve life, including expectations from an eating experience. In this paper, we will discuss how design can respond to this expectation by examining how each of the aforementioned factors influences people’s eating behavior and how design can anticipate and help people achieve their desired eating objectives.

![Figure 1. Schematic framework for studying the design psychology of eating](image)

Design psychology, as a part of design science, strives to develop its sub-body of knowledge by underpinning a theoretical basis of design and exploring psychological phenomena. In this paper, behavioral phenomena related to eating are discussed, with the hope that design might play a more meaningful role.

2. Eating Attitude by Design

Research reveals that babies are initially introduced to particular tastes through the amniotic fluid in utero. Even after birth, they tend to like foods with the same taste, according to Mennella [7]. Thus, pregnant mothers can wisely consider this knowledge when planning to prepare their daily meals, in order to create better and lifelong dietary habits for their babies. Otherwise, parents will later have difficulty encouraging their children to eat fruits and vegetables for a balanced diet, because people tend not to like foods unfamiliar to them. Thus, babies’ eating attitudes can be anticipated by design if mothers are aware of this.

The familiarity of foods may therefore become a paradigm of eating psychology design research to identify problems of children’s food choices in relation to diet heredity. Additionally, the attachment quality to mothers may also influence how children behave toward certain foods, as children are naturally attached to their mothers when they are in the womb. In response to this, some research questions may be raised concerning food familiarity and the child–mother attachment. The objective of such research may be to find out how children perceive food familiarity. Do they perceive it only through taste perception (i.e., food taste)? Are they influenced by other senses such as smell
(e.g., mother’s smell), hearing (e.g., mother’s voice), and vision (e.g., mother’s face)? Does their attachment to their mothers play a role? The results of this research may be beneficial in suggesting an eating environment for serving food that children perceive as familiar food, which psychologically fits into the high-quality child–mother relationship required for those who care for their healthy future baby.

However, previous research has shown that the above condition can turn out conversely. Children can influence the family’s decision making regarding eating, even more so as they grow older. However, when deciding the place of purchase and the amount spent, the parent still takes the lead [8].

The findings of such research can help chain family restaurants reevaluate their marketing communications and services for their young customers. Design is strategic in meeting this need by reprogramming the facility, transforming its look to conform to children’s interests and transforming its taste to satisfy family customers. A child-friendly menu, dining environment, and play facilities like games or an indoor recreational area could be developed to accommodate the children’s tastes and attitude toward eating.

However, although children have chances to decide, they may now feel uneasy doing so, as choices of foods in the market are so numerous and varied and make them aware that reasons for eating may need redefinition. Motives for eating have indeed evolved beyond food itself (i.e., hunger and healthy eating), and depend on how every individual perceives eating events in association with psychosocial and cultural values. Thus, research may be needed to uncover how these factors influence children in making decisions to choose foods, so that designers can have some information on which to base their response to solving problems of food display, including place design for children.

**3. Contemporary Eating Motives and Choice of Foods**

The very basic motive of eating is hunger; other motives are pleasure, sociability, comfort, and communion, according to Santich [9]. This idea is also supported by Mach et al. [10], who has stated that eating is a basic human need that brings pleasure and happiness. Studies show that we can enjoy food pleasurably through biological, psychological, and sociological phenomena. However, there might be a trend for people to try more obsessively to achieve the psychosocial motives of pleasurable eating in everyday life, and design may help fulfill this desire. This is even practiced as part of the culinary culture of some nations, including Japan. Japan has a tradition of making all food-related activities enjoyable ones; at the same time, this is used as a recipe for promoting health. The slogan “joyful eating is identical to health” is used in a campaign launched by the Norwegian government, and a similar program has been implemented by Korea and Great Britain.

In the context of eating as a social motive, Wansink also says, “One of life’s great pleasures is to share food with family and friends.” In such situations, we have several opportunities to make eating fun; for example, we could dine while watching TV. However, according to the research, children and adults feel less hungry when snacking during such activities than when snacking without watching TV [11].

Eating to comfort one’s emotions is practiced almost every day, and “comfort foods” are therefore innumerable. A study to relate emotions and the amount of food intake has found that during boredom, depression, and fatigue, people eat a lot. They tend to eat less when experiencing fear, tension, and pain [12]. Similar research findings also reveal that people tend to eat healthy foods when having positive emotions. They eat unhealthy foods during times of negative feelings, as confirmed by Lyman. In many cases, emotions related to eating have a negative impact on eating behavior and can cause eating disorders. To avoid emotional eating that may cause an eating disorder and instead promote pleasurable eating, people should try to enjoy foods, eat leisurely, and concentrate on the prominent features of the food and environment. Most importantly, they should regard eating activities as part of the socialization that takes place before, during, and after the meal [13]. Such eating requirements become an important reference for designers, as they can create conditions to meet the objective by designing the food environment or eating environment to satisfy customers’ emotions. However, in order to make sure that this works effectively for a wider scope of subjects, further study on emotional-eating-related issues should be done, considering biological and psychological viewpoints. Canetti was reluctant to make a general statement on the emotion–eating relationship, as it differs according to unique individual characteristics and emotional states [14].

Besides emotions and genetic makeup, as reported by researchers from Monell Chemical Senses Center, several other factors influence people when they choose foods, including the individual’s nationality, culture, community, family, and food likes and dislikes [15]. Citing Marshal, Bordi et al. [16] confirm this notion, saying, “Food choice is a complex process involving numerous contextual and en-
vironmental factors through a range of decisions and evaluations." To support this idea, these authors add, "Choice is the result of a sequence of stages through which the consumer navigates from problem recognition through search, alternative evaluation, choice, and finally to post-purchase evaluation" (17).

Aware that factors we may consider in choosing foods are remarkably varied, prevalent, and changing over time, to sum up this issue, Sobal et al. [18] create the following model of food choice processes. It tries to cover three key components comprehensively: "life course, influences (ideals, personal factors, resources, social factors and contexts), and personal system." These are interrelated and are considered when making a decision regarding food choice. This concept shows that food choice is done as part of a dynamic process for every individual over a lifetime. Beginning in childhood, people create a personal life course involving eating experiences that evolve as they learn cognitively, psychologically, and from the sociocultural environment.

Further studies on food choice in relation to social events should be undertaken, as their findings are essential for industries and organizations that are responsible for providing food services (e.g., hospitals, schools, military camps); these findings are also key for design professionals, who need thorough guidelines for improving the salience of food packaging or its attractive placement in shops, or for dressing tables for fine-dining restaurants.

In addition, designers also need to know how culture, together with our biological and psychological capacity, plays a role in guiding us to choose foods, as our task to survive by choosing foods becomes increasingly complex.

In our post-modern society, interest in searching for the good life has shifted from seeking everyday physical merchandise to desiring extraordinary objects, such as luxurious goods for enhancing self-image or personalized or customized products or services, or getting away from routine activities to try new experiences. Thus, people now may not hesitate to try a new food as long as it can satisfy these needs. Therefore, there is an emergence of products and services developed with an emphasis of attaching the essence of new experience to a variety of commodities in order to meet consumers' pursuit of the good life through the attainment of "contentment, pleasure, and happiness" [19].

Scott et al. also say that we are facing an experience economy that is marked by consumers' search for a continual stream of "fantasies, feelings, and fun." Therefore, the introduction of new foods from other cultures, which are now widely marketed, promotes the "total experience of eating."

It is not the mere taste of the food but its integration with several other elements, for example, the atmosphere, that creates the sensory effect leading to the consumers' imaginative eating experience.

Therefore, design psychology researchers need to look at how psychological factors of eating, such as taste perception and eating behaviors, are integrated with cultural values in order to define the current demand of consumers: a "pleasant eating experience." Then, they should conduct further study to evaluate the relationship between consumers' experiential expectations and their responses before, during, and after the eating experiences occur. The findings of this research may be beneficial for clarifying present consumers' demand for foods' presentation and eating experiences, which will be important for food service industries and designers specializing in hospitality design.

Another group of consumers who have a specific demand and problems with food are female teenagers and young adults, as they are always concerned with their appearance but often cannot resist snacking. Such behavior results in a complex attitude and behavior toward eating.

4. Body Image and Gender Factor of Eating

As children age and their need for nutrients shifts from developmental reasons to fitness, they begin to think of their looks and their weight when they choose foods and decide on the amount of food they eat. This is especially true among females. Therefore, they risk not meeting the standard guidelines for food intake. This is because their food choices often reflect what their role models are seen eating in magazines or TV advertisements; these individuals tend to be tall, white, and slim or thin, which is in fact artificial. Young women are frequently worried about what and how they eat, and how that might negatively affect their appearance and image. Concerning this problem, social-scientific research done by Thompson and Heinberg [20], using a "survey, correlational and randomized control, and covariance structure modeling investigation" (statistical method to systematically assess the relative impact of hypothesized items on the subjects' behavior) showed that media significantly influences women's eating and body image disorders, beginning with skipping meals and starting to diet at a young age, and leading to more serious issues such as taking drugs/pills or starting to smoke to lose weight, undergoing unnecessary surgery (breast transplant, collagen injection, fat removal, etc.), and exhibiting signs of anorexia or bulimia.
Body image is artificially created by manipulating photographs of famous and pretty female models and using the computer as much as necessary to project ideal images of the female body, through media, to influence teenagers and adolescents, especially females. This is because they tend to be easily provoked by media; they mirror its message and criticize their own body image.

Critics of advertising often raise the above problems but seem helpless. Thus, social designers or the so-called design activists, as well as the governmental advertisement regulating body that has responsibility over such problems, are challenged to find solutions that address the issue either publicly or personally. Design psychology researchers could also respond to the issue by uncovering the underlying problem of the relationship between body image, self-body perception, and eating behavior.

Regardless of the image that females or males have and the influence that stems from it, gender seems to have its own problems regarding preferences for and behavior toward food. Grogan et al. [21] note that in Western countries, women tend to watch what they eat and are always worried about taking in food; eating little is associated with femininity. Wansink [22] also notes that gender differences in food preference are often examined, and he found that men and women have different reasons for food preference. Men prefer hot meals when they are happy, whereas women like ice cream, chocolates, and cookies to get rid of sad feelings. This may be related to the fact that sugary foods are effective in alleviating negative feelings; conversely, low-calorie foods are effective in increasing positive emotions.

5. Managing Children’s Eating Behavior by Design

Children have more taste buds than adults do, and are therefore more sensitive to taste than adults are. However, every child is varied in taste sensitivity because of genetic differences, though they mostly tend to like sweet foods and drinks [23]. Bitter-taste-sensitive characteristics among children have attracted the attention of researchers, owing to a health concern, as many children do not like vegetables. A taste-genotype relation study was done involving 143 children and mothers at the Monell Chemical Senses Center, by looking at gene variations as a basis for relating taste preference between children and their mothers. This research found that “children who carried one of the bitter taste alleles were much more sensitive to the bitter taste than mothers.” This proves that genes are not the only factor influencing children’s taste sensitivity. Eating experience and cultural background might have played a role in their taste preferences differing from their mothers [24]. This finding could help mothers manage their children’s diets by design, meaning that a mother could make a plan through which her child could experience having a meal in a more enjoyable environment, by manipulating food and the eating environment rather than giving up on the basis of the child’s eating characteristics.

Fast food restaurants prominent study topics in looking at how children recognize, judge, and choose favorite foods. Research done by Arredondo et al. [25] looked at how children recognized brand name logos of fast food compared with others; this involved 155 samples, 53% male, 87% Hispanic, all 4–8 years of age, who were selected from elementary schools. The result was that older and overweight children recognized fast food logos more confidently than they did other food logos. This research concluded that children have been extensively exposed to fast food advertising, yet the exposure also depends on the socio-demographic characteristic of their families.

Another study on brand recognition found that children at 2–3 years of age are aware of food brands, and preschoolers show brand recognition when exposed to spokes-characters and colored packages [26]. This author also says that when children enter the first grade, around 200 brands are well known; at about 10 years of age, the number of brands they can recognize reaches 300–400. Upon entering adulthood, around 1,500 brands are recognizable (see also Robinson Borzekowski, Matheson, and Kraemer [27]).

Brands as part of the food environment are indeed increasingly complex, and the eating environment is invariably sophisticated, because the industries believe that they can influence consumers’ perception in order to make them purchase certain foods and eat more than they need.

6. Environmental Factors of Eating
6.1. Packaging Effect on Food Perception

Packaging, besides its basic function as a secure and hygienic container that provides important labeling information, importantly gives identity. Thus, it saves us time and, most important, guides our decision to buy products.

Research done by Siegrist et al. [28] studied how lay consumers (153 people) perceived nanotechnology foods and food packaging, and examined the factors that influence their willingness to buy these products. The findings show that although nanotechnology packaging is perceived as being more beneficial than nanotechnology foods, social belief in the food industry is an important direct determinant, influencing the effect elicited by these new products. The
study concluded that perceived benefit played the more important role in determining people’s willingness to buy.

6.2. Effect of Food Label Information on Product Evaluation

Kimura et al. [29] conducted research questioning whether food accessibility and amount of information affect consumers’ value judgment. One hundred and twenty Japanese students were asked to rate their willingness to pay (WTP) for three food products that were different in information accessibility (active search and read-only condition) and in amount of information (small, medium, and large). This study demonstrated that WTP was dependent upon the relationship of these two factors. In the active search condition, the value of food products with a large amount of information was significantly higher than that of food products with less information. In the read-only condition, food products with a medium amount of information were valued significantly higher than those with little information. Products with a large amount of information were almost similarly valued with those with a small amount of information in the read-only conditions. Kimura et al. concluded that products with a larger amount of information tend to be valued more highly only when people searched for the information actively, as opposed to people who are only permitted to read the information.

6.3. Effect of Interior Theme on Food Choice

Bell et al. [30] studied the interior impact on consumers’ food acceptance. They examined whether perceived ethnicity of food can be created without changing the food item, expecting a change in acceptability and food selection behavior. To examine this, some British and Italian foods were offered in a British restaurant for four days. The foods were then offered for two days in the restaurant with plain decoration. The next day, the same kinds of foods were offered in the restaurant for two more days under experimental conditions. In this case, ethnic names were applied to the menu and the foods, and the restaurant applied an Italian design style. In every visit, customers were asked to rate the perceived ethnicity and acceptability of food items, and the food selection was recorded. The result was that there was a greater appeal for food in Italian conditioning, like pasta and dessert (except for the fish). The Italian theme increased overall meals’ perceived Italian ethnicity, including that of British pasta items, fish, and veal. These results indicate that in order to change perceived ethnicity and food selection it is not necessary to alter food items, only to develop the design of the eating environment.

In addition to this, Wansink [31] (see also Sobal and Wansink [32]) also believes that there are many factors contributing to the food and eating environment besides “consumption norms and monitoring accuracy” that impact our food intake. Food environment is any element attached directly to foods, like salience of food, variety of food, container size, dish shape, glasses and bowls, and all other elements that enrich the food’s appearance. Eating environment is related to the room’s atmosphere or ambience, which is established to make the eating experience more enjoyable. This can be created with the use of lighting, odor, music, temperature conditioning, and other immediate appealing elements. Dimmed lighting can create silence and comfort our feelings so that we sit quietly, linger, and relax longer, leading to consumption of extra food. Such conditioning may even work more effectively when eating with others. In addition, aromatic odors may enhance or suppress taste, and can extend our eating duration. On the contrary, a distasteful aroma is likely to reduce meal duration. Another sensory cue that can regulate emotion is music and slow music may slow down the process of consumption; this is even more effective when it is a preferred song. On the contrary, in a crowded and noisy restaurant or one with loud music, people tend to spend less time.

6.4. Effects of Furniture Layout on Eating Behavior

Geriatric patients tend to be more passive and communicate less. Many geriatric wards have deprived spatial conditions that discourage socializing and communication among the patients. In order to slow down the degenerative process related to aging, Melin and Gotestam [33] conducted a study on the effects of furniture arrangement on mealtime routines of senile patients who were diagnosed as having behavior problems related to communication and appropriate eating. The research was done in a large government mental hospital involving 21 geriatric patients. The furniture in the ward was rearranged into a layout more conducive to communication (that is, round grouped tables instead of straight sitting along corridors walls), and the mealtime habits were changed to allow more eating opportunities, flexible choices in making meal compositions, and a more pleasurable atmosphere.

7. Sociocultural Factors of Eating

7.1. Social Motives of Eating

There are many activities where we are likely to feel contented in the presence of others, including eating. Eating often facilitates social events. We may make an appointment to introduce friends or for a business meeting in a café, not necessarily at mealtime. However, there are some effects we
may get from eating with others that we often do not realize during the meal, according to Wansink [34]; the meal can be more enjoyable, our meal duration can extend longer than we expected, and we may not realize how much we eat.

7.2. Foods for Dating

In the case of a consumer's social attachment characteristic, research conducted by Amiraian and Sobal [35] explored how, since dating is considered a courtship activity, the food is specially conceptualized. Three hundred and one students were given questionnaires and asked to name what foods are "dating foods" and what are "not dating foods," including the reasons for classifying these foods. The results showed that alcoholic beverages were considered to be "dating food." While women called feminine named (considered appropriate for females) foods dating foods, men did not tend to call masculine foods dating foods. Pungent foods causing bad breath were not considered dating foods. Neat and easy-to-consume foods were called dating foods.

These findings support the idea that dating scripts direct opinions about food choice to improve impression management. Food choices related to dating are important for present health and as prospective precursors to enduring eating relationships, such as marriage.

7.3. Cultural Psychological Factors of Eating

Each culture has its own values in defining what food is considered acceptable to eat, how food is prepared, who usually takes the serving role, and in what way food tasting is ritualized at the table. Psychological theory may study this as part of how it is branched, examining eating perceptions, habits, norms, and behaviors of people from differing cultural backgrounds. Attempting to understand differences across eating cultures, for the purpose of enriching the culture's psychological basis, is increasingly important at the present time, as food service companies are going global and must adapt for success in the global marketplace. Therefore, cross-cultural psychology of design research, particularly on consumers' eating-related problems may be needed for setting up a guideline of design for designers, especially those dealing with the hospitality business. Such a scientific approach to design as this is expected to propose wiser design solutions by learning from a variety of different cultures.

Prescott et al. [36] take a certain interest in the differences in food preference among the various ethnic groups that comprise Asian consumers. He and his colleagues conducted research that compared the motives behind food choice across groups of female consumers in New Zealand and Asian countries like Japan, Taiwan, and Malaysia using a Food Choice Questionnaire. Taiwanese and Malaysian consumers agreed that health, natural content, weight control, and convenience were the most important factors. Surprisingly, Japanese consumers regard price as the most important factor in choosing food, and consumers from New Zealand cited sensory appeal as most important. Some differences between consumer groups were shown in the degree of neophobia.

In addition to the influences of ethnic background, cultural symbols and human values can also affect taste perception. A clear example of this can be found in research done by Nevid as cited by Allen et al., which showed that subjects in an experiment preferred the taste of Perrier over an old-fashioned seltzer when the two options were labeled, yet did not show a preference when the two products were not labeled [37].

An individual exerts social control over other individuals or resources in the search for social power, prosperity, and social praise, or to maintain one's public image. The social interaction phenomenon has steadily materialized in studies of values across various cultures. People who have social power tend to pressure others to follow their preferences or ideas said Bardi and Schwartz as cited by Allen et al. [38]. A very clear example of this may have been demonstrated by the introduction of McDonald’s, a symbol of American consumer culture, to the global marketplace. In this case, Ritzer and Malone [39] dubbed the issue "McDonaldization" when defining the rationalization behind the food services introduced by the company. The main goal of applying such a radical method of rationalization is to achieve the highest efficiency of each controllable task in the food production process, by using a non-human technology system, rather than a human technology one, in order to produce predictable outcomes, with an expected quantity, rather than quality, that becomes a criterion of good performance. Behind such a rationalization are opposite effects, which are criticized by Ritzer as irrationality. In fact, the hamburgers and soft drinks served taste ordinary, as a result of the mechanized process of the food, and not healthy; many consider McDonald’s products “junk foods,” because most menu items are full of fat, cholesterol, salt, and sugar.

8. Conclusion

We have reviewed the literature to show how several factors, including biological, physiological, physical, and sociocultural factors and food environment influence people’s eating behavior. In this conclusion, we will summarize these factors and try to clarify how they are categorized and pro-
jected as a basis for design psychology research paradigms.

One of the studies showed that biological factors play a key role in people’s eating behavior. These discussions include how mothers pass on their eating behaviors to their babies, so that we can expect babies to have taste preferences similar to those of their mothers. We also become aware that basic human eating behavior is initially defined by how people taste food or become sensitive to food, which in fact changes with age. The unique perception of food as influenced by the cultural values adopted by Japan, Korea, Norway, and Great Britain also shows that eating experience and cultural background can also play more important roles in influencing eating behavior.

We realize that as children grow up, teenagers and young adults, especially females, strongly consider body image when determining what to consume. The ideal image of the female/male body is artificially created, primarily by the media, to influence targeted consumers to meet their business goals.

The research done by Arredondo looking at how children recognize brand names showed that the logo of an advertised food product was effective in ensuring a brand’s access to a family’s life and influencing the food preferences of children.

People’s willingness to buy is the ultimate stage of the consumer buying process. The research done by Siegriest, as discussed in Chapter 6, shows that consumers rely on social belief as a significant determinant of their willingness to buy better rather than newer technology. Similar research done by Kimura showed that the willingness to pay for foods was determined by food accessibility and the amount of food information available. Consumers valued foods with large amounts of information more highly than those with little information only when they searched for it actively. When they search for it passively, a food with moderate information was valued higher than those with little information.

The eating environment has proven to be a strong determinant in influencing eating behavior. In the research discussed, interior theme and food naming related to that theme had an influencing effect to consumers’ food choice, indicated by the increase in food selection after the changing of the restaurant’s interior theme from a plain style. However, it is not clear which element of interior theme is the most influential. This may inspire future design psychology research, especially on the relationship between interior elements and food choice or other food-related issues. In addition, other environmental attributes, such as temperature, odor, music, lighting, and other sensory environmental stimuli can support consumers’ feeling of calmness, providing effective conditioning during the meal. Furniture is meant to solve the problems within daily activities, including eating, and it was found that its rearrangement was effective in influencing patients having problems with eating.

Such environmental conditioning for eating becomes even more conducive, in terms of mood enhancement, with the presence of friends. In fact, another important finding just reviewed uncovers that the societal role in determining a consumer’s food behavior is crucial, and is discussed quite elaborately above. On the one hand, a social environment can function as a reason or driver for eating an extra meal or as a food-choice determinant, as shown from dating-food related research; on the other hand, the social environment can support eating events in terms of meal duration.

The research done by Nevid, as discussed in Chapter 7, showed that cultural symbols of products and human values influence the way people taste their food. This is why it was clearly proven that people value differently two groups of drink products with the same nature but different labels; people might have taste preference toward a particular brand. In fact, consumers sharing human values become prime subjects for the massive application of symbols on packaged food products. We have confirmed the fact that social power has been used by a particular group of people, society, or even countries as pressure to influence others to have the same ideas or preferences.

This was clearly illustrated by the worldwide promotion of its culture, including the introduction of fast food like McDonald’s and other famous global brands. After this entire move, “McDonaldization” has made people lose individuality in favor of homogenization. In other words, this concept has paradoxically resulted in the loss of the social function of food, that is, to promote consumption as a way of creating self-identity, which people may have missed, because of globalization and the domination of fast foods. The psychological effect of such a situation is that people may feel bored, as they find that foods are becoming very similar or, as Ritzer, cited by Finkelstein, says, “less interesting and less exciting”. A feeling of boredom is opposite to the sense of freedom, a feeling of purpose and action that people conventionally enjoy when shopping around [40]. Thus, it is interesting to study eating behavior from this perspective: the relationship between the need for the rationalization of food and the need to maintain its role as a social identifier. To what degree are foods wisely standardi-
Table 1. Behavior Descriptors: Eating Behavior Paradigm

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References

11. [2] p. 95
17. [16] p. 2


34. [2] p. 95


Food Quality and Preference 2002; 13(7-8):489-495.


38. [37] p. 298
