# **Research on Application of Color on Food Packaging Design**

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**Abstract:** Different wavelengths of light projected into human eyes will form different colors, so people have a strong perception of colors. Although the color itself exists objectively and does not contain emotional factors, people will produce corresponding psychological effects after receiving various colors, so that the mood will have different changes according to the projection of colors. This psychological change is sometimes people's Self-reaction is sometimes the association caused by color. Therefore, the rational application of color in food packaging design can give full play to the psychological function of color, which can not only fully display the attributes of food, but also stimulate consumers' desire to consume and guide Its consumer behavior. The article mainly discusses the application of color in food packaging design.

# **1. Introduction**

The characteristics of color psychology in food packaging design are mainly reflected in the following aspects:

### 1.1 The Attractiveness of Packaging Colors

Different colors have different attractiveness to people. Different colors have different attractiveness to people. Under normal circumstances, the purity and brightness of colors, such as red, orange, and yellow, are more attractive to people. The more attractive the product, the more it can attract consumers' attention. Of course, the attractiveness of high-brightness and high-purity colors to people is instant, not suitable for long-term viewing, and can only attract people's attention in a short time. Therefore, the attractiveness of colors should be fully and appropriately used in packaging design. Features.

# 1.2 The Emotional Symbolism of Color

The category of aesthetics includes vision, hearing, touch and other aspects, and the aesthetic form shown by color has the most popular characteristics, and it is easier for people to experience emotional changes through color changes. Since ancient times, traditional social culture has had a direct impact on the application of color. For example, red is used in road signs and warning signs, which often represents danger. Yellow is reminiscent of warmth and is a typical warm color, while blue is a typical cool color. With calmness and so on, these corresponding relationships are more easily accepted by people. Applying them to food packaging can make the product features more intuitive and accurate. Of course, different nationalities and different regions have given different connotations to colors. The summary of these connotations mainly includes two parts: concrete expression and abstract expression. The so-called concrete representation of color refers to a certain thing based on color. For example, in milk drinks, red represents the taste of red food, strawberries, red beans and the like, green corresponds to the taste of green food, such as aloe vera, green apple, and yellow represents the taste of yellow food The direct application of the color associated with the product itself in food packaging can enable consumers to more intuitively distinguish the product itself. The abstract symbol of color means that when people see certain colors, they have more associations based on their own experience and sensory judgments. For example, ancient golden yellow is a symbol of power, and traditional food using golden yellow can give people a feeling of wealth. . The abstract image of color is not an imagination, but a habit of thinking that people have formed for a long time.

#### **1.3 Taste Association of Food Packaging Color**

Colors are not presented to people alone. People will associate certain colors based on their own experience and experience. Colors not only stimulate people's visual senses, but also make people's relationships established through experience and memory affect people. The sensation of taste produces a stimulating effect, which is even stronger than the food itself. Foods with warm red and orange colors in nature will make people have very delicious associations. Many fruits will turn red when they are ripe. Therefore, red has become a symbol of ripeness and sweetness. Therefore, choosing these colors for food packaging is more acceptable to people. White gives people a more delicate taste, because rice and white noodles are fine grains and have finer fibers; while dark brown makes people feel that the texture of the food is thicker and gives people an endless aftertaste.

#### 2. The Application of Color in Food Packaging Design

In the specific food packaging design, the rationality of color application can be improved from the following aspects:

#### 2.1 Reasonable Application of Food Packaging Design Colors

Common food packaging colors in the market can be simply divided into three categories, namely achromatic, red-yellow and blue-green.

The so-called achromatic system refers to the two extreme colors of black and white. Because black has a special sense of solemnity, it is rarely used in food packaging, but mostly in wine packaging. Although black has a prominent position in the packaging market, it is not suitable for large-scale application in food packaging design. On the contrary, white is more widely used in food packaging. White gives people a light, soft, and pure visual experience, and it is easier to make people feel relaxed. Therefore, white can be used as the main color of packaging, or used with other colors. , Can produce better visual effects.

Red and yellow are imminent colors and are frequently used in food packaging design. Warm colors are bright, radical, and bright. People seeing this color will feel warm, festive and active, thereby stimulating consumption The desire to buy. Red and yellow warm colors are widely used in leisure and instant food packaging, such as candy, potato chips, pastries, etc. The application of warm colors can stimulate consumers' appetite, especially in traditional Chinese culture. Red and yellow have a deeper meaning Meaning, red symbolizes auspicious celebration and is essential in traditional Chinese festivals, because red, as a unique national characteristic of China, is more in line with consumers' consistent psychological feelings.

Blue-green series, also known as evanescent color, is a cool color series opposite to red-yellow series. Because blue-green has a high proportion in nature, it will remind people of vigorous vitality, so it is a product of marine industry, agriculture, forestry and other products. The main color in. Green will give people a positive connection with health, freshness, vitality, etc. The logos of official food certification agencies such as the China Green Food Quality Certification Mark and the EU Organic Food Certification Mark are all green, especially the packaging of fresh vegetables and fruits. With bright hues such as grass green, emerald green, and light green, consumers will feel that the food in the package is healthy and fresh. On the contrary, if gray-green and olive green are used, it will give people a grayish feeling due to the dim tone. On the contrary, the food is not fresh and cannot stimulate consumers' desire to buy. The blue color reminds people of the ocean, ice and snow, lakes, etc., giving people a cool and peaceful feeling. Therefore, the packaging design of seafood foods, frozen foods, beverages, etc. is mainly blue, and consumers are more likely to recognize the products. the quality of.

# 2.2 Reasonable Application of the Three Elements of Color in Food Packaging Design

The so-called three elements of color refer to hue, purity, and lightness. Even if it is the same color, as long as any one of the three elements changes, it will convey different color feelings to

people. The change in purity can change the overall effect of the packaging and adjust the lightness. Changes can make color design more expressive. For example, a certain brand of spicy noodles, which is popular among young people, started out in transparent packaging. Although consumers can see the product intuitively, the transparent packaging can see the heavy oil wrapped on the product, which will inevitably make consumers worry about food. Safety. Later, the product packaging used plastic opaque packaging, with bright white as the main color, which not only made the product look cleaner, but also invisibly enhanced consumers' sense of security, making the brand image look healthier and safer. Reasonably apply the principle of color contrast in food packaging design. As we all know, primary colors and their complementary colors are the strongest color contrast. For complementary color contrast, the hue difference between complementary colors is large and difficult to coordinate. Therefore, if the complementary color difference is not well coordinated in food packaging design, it will directly affect the coordination of visual effects. Sex. In the specific design process, the complementary color matching design can be handled in a reasonable way, such as using the difference in purity to reduce the purity of one of the color contrasts and reduce the conflict between color blocks; or use a reasonable area allocation to highlight the complementary color contrast effect, or Use intermediate colors for buffering, because the use of contrasting colors may make people feel abrupt. At this time, you can use intermediate colors with less obvious color tendency to buffer, which can effectively weaken the abrupt sense of contrasting colors. Although in the process of color matching, there are large differences in area, brightness, purity, cold and warm, and color factors, and even conflicts with each other, but as long as the law of harmony is used reasonably, a harmonious color matching effect will still be achieved. Under normal circumstances, color harmony can be divided into similar unity and relative change of color contrast. The so-called similar unity refers to the general unity and integration of various color elements, while the relative change of color contrast refers to the richer and brighter color elements. The application of color harmony in food packaging design can produce visual aesthetics, but it needs to be noted that the color harmony of the same color system must emphasize the color hierarchy in brightness and the richness of colors in purity to increase the attractiveness of packaging design.

# 2.3 Food Packaging Design Should Fully Consider Cultural Elements

Food is an important condition for people to survive. It is available in all regions, and each ethnic group has a wealth of food production. Even the same kind of food is produced in different places, and there will be different tastes, such as the southern orange and northern orange. Therefore, food packaging must fully consider regional and cultural factors. For example, West Lake Longjing, Yunnan Pu'er, Meishan Bamboo Leaf Green, etc., packaging design should highlight the cultural elements of the food production area as much as possible. These cultural elements can be local iconic scenic spots, folk customs, and even myths and legends that can represent local culture. , Through these cultural elements to highlight the regional characteristics of food. Food packaging design should make different design plans according to different consumer target groups. For example, for young people, you can emphasize the simplicity of color and the exquisiteness of packaging, because the aesthetic concept of young people tends to be concise, and packaging design is avoided. A variety of dazzling color arrangements. In addition, the color design of food packaging should also emphasize the characteristics of fun, and the packaging of fun is not limited to children's food. It can also improve the fun of food packaging design for young people. For example, it is designed on a liquor package mainly for young consumers. With interesting slogans, young people are guided to miss the good times of childhood according to their consumer psychological needs, arouse nostalgia, and stimulate consumers' desire to buy. For example, for children's food, the packaging design can use red appropriately to cater to children's lively and active psychological characteristics. In the consumer market of young people, the packaging design should avoid messy or darker colors, and adopt light tones or brisk colors. The color symbolizes the fashion and creativity of food and attracts young consumers to buy it.

### 3. Conclusion

In short, food is an important condition for people to survive. With the continuous development of human economy and society, the types of similar foods on the market are becoming more and more diversified. In this case, excellent packaging design is important to quickly attract consumers' attention. Conditions, through unique colors, personalized shapes, flexible and changeable visual expressions, etc., accurately and quickly deliver product information to consumers. Color design has greatly improved the expressive power of food packaging design, improved the market competitiveness of food, and can successfully complete the interaction between food packaging and consumers. It can be seen that packaging designers must correctly understand and apply color properly, and The importance of color elements in packaging design is brought into full play. In the actual design process, designers should thoroughly study the theoretical knowledge of color psychology, color matching, visual effects, etc., and optimize the color design of food packaging from multiple aspects such as color recognition, color aesthetics, and color symbolism to highlight product attributes and focus on corporate image. The use of different colors in accordance with the characteristics of the psychological needs of target consumer groups makes food more unique among similar products, and can attract consumers' attention and stimulate their desire to buy.

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