Analysis of Visual Expression of Packaging Design for Kids Healthy Function Foods : A Case Study of Multivitamin Packaging

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Abstract: With the development of industrialization, the design forms of packaging have become increasingly diverse. Consumers understand products through packaging which has gradually transformed into a representation of product image. It conveys product information and showcases product features. The visual design of the packaging has become an important factor in enhancing product competitiveness. Against the backdrop of the COVID-19 pandemic, people's health awareness and parents' high concern for kids' growth and development are becoming increasingly important. The market potential for kids' healthy function foods is vast. This study analyzes the visual presentation of packaging for kids' healthy products, focusing on the multivitamin category on the large Korean online shopping platform, G-market. The top ten best-selling products in monthly sales were selected as case studies. The analysis is conducted from four aspects of visual design elements in packaging: color, layout, images, and fonts. The study examines the types of color representation used in packaging for color (colorful, colorless, or mixed colors), analyzes the composition types for layout(top-down layout, horizontal orientation, central orientation) and analyzes the types of English and Korean fonts used in the packaging for fonts. Furthermore, the study examines the types of image representation used in packaging (illustrations, photographs, or a combination of photographs and illustrations). The research finds that the usage of visually appealing colorful packaging is the highest. Sans-serif fonts are predominantly used for conveying information, while there is also a combination of handwritten and serif fonts to enhance visual effects. Affinity illustrations are used exclusively for images. In terms of layout, the most common arrangement is a vertical layout that follows the reading order.

Keywords: COVID-19 Pandemic, Healthy Function Food, Packaging Design, Visual Expression

1. Introduction

In recent years, against the backdrop of the COVID-19 pandemic, people's awareness of health management has gradually increased. Despite the economic downturn in 2022, the domestic market for health products in South Korea reached 600 million Korean won, an increase of 8% compared to previous years. In addition to choosing health products for themselves, parents also purchase corresponding health products for their children. According to a survey conducted by the Korean Health Functional Food Association on 1,947 adults with children, 39.4% of respondents answered that they consume healthy functional food to improve their kids' immune systems, which was the highest response rate. Among these, sales of children's vitamins in 2022 showed the highest growth, nearly an eightfold increase compared to 2021[1].

In today's highly competitive market, product packaging design is an important marketing tool,

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utilizing attractive colors, images, and brand logos to stand out on the shelf. For kids' health products, although parents generally select products based on their kids' health condition and product ingredients, when price and ingredient factors are equal, packaging that appeals to children's preferences can capture the attention of both parents and children and become one of the influencing factors in purchasing decisions[2]. Furthermore, product packaging serves as the primary medium for conveying product information to consumers. Consumers rely on product packaging to understand the product's functionality and usage information. In the case of health supplements, consumers seek information about the nutritional content and ingredients through packaging. Kids in particular are at a stage of growth and development where inappropriate dosage can have adverse effects[3]. Therefore, to avoid misleading parents through inaccurate ingredient information, the proper layout of visual information on packaging for kids' health products becomes crucial. Clear and intuitive conveyance of key information is paramount.

This study aims to explore the visual presentation forms of packaging for health functional products that align with kids' preferences. It seeks to analyze the expression of packaging colors, images, and other aspects that cater to kids' preferences. Additionally, from a designer's perspective, the analysis of the visual designs of the case studies aims to capture popular trends in packaging design for kids' health products in the market, providing a reference for future packaging design. Finally, the study focuses on the reasonable presentation forms of packaging design for children's health products to minimize issues such as misleading information or problems related to "misuse" or "overdose"[4], with the goal of contributing to the standardization of kids' health product packaging design.

2. Theoretical Background

2.1 Definition and Classification of Healthy Function Foods:

2.1.1 Definition of Healthy function Foods

According to the regulations of the Korean Ministry of Food and Drug Safety, "functional health foods" refers to food that is manufactured or processed using ingredients that are beneficial to the human body. Foods that are beneficial to health but do not fall under the category of healthy function foods. "Healthy function foods" are those that have health-enhancing functions. According to the relevant regulations, products can only be used after they have been produced using specific processes and certified as "healthy function foods" by the Ministry of Food and Drug Safety[5].

According to the documents of the US National Institutes of Health, there are differences between terms such as "natural foods," "health foods," "functional foods" and "functional health foods." The characteristic form of functional health foods refers to products made in the form of tablets, capsules, pills, liquid extracts, and so on, to supplementing health[6]. Functional information includes product name, content, manufacturer, instructions for use, ingredients, and other information.

2.1.2 Classification of Healthy function Foods

According to the functions of health supplements, the Ministry of Food and Drug Safety categorizes them into three main types: nutritional functions, physiological activities, and reduction of disease risk. Among these, only a few ingredients have obtained recognition from the Ministry of Food and Drug Safety, such as vitamin D and calcium for reducing the risk of osteoporosis, as well as xylitol for reducing the risk of dental caries. There are a total of 31 categories for physiological activity certification[7]. All the health supplements we purchase are classified according to their physiological activity, as shown in the figure below.

N O.	Functions	NO	Functions	N O.	Functions
1	liver health	12	promoting child growth	23	dental health
2	men's health during andropause	13	women's vaginal health	24	promoting calcium absorption
3	women's health during menopause	14	relieving premenstrual symptoms	25	improving fatigue
4	improving sensitive skin condition	15	stomach/digestive health	26	skin health
5	bone health	16	urinary tract health	27	Antioxidant
6	enhancing memory	17	improving exercise performance	28	blood glucose control
7	stress relief	18	enhancing cognitive abilities	29	improving blood lipid levels
8	eye health	19	gut health	30	improving blood cholesterol levels
9	Improving immune function	20	prostate health	31	improving blood circulation
10	improving urinary function	21	improving sperm motility		
11	improving sleep quality	22	reducing body fat		

[Table 1] Categories for Physiological Activity Certification

2.2 The Concept and Role of Packaging Design

Packaging design is the design that aims to promote the functional features of a product to consumers, increasing their desire to purchase, and providing protection for the product during display and transportation. With economic development, the role of packaging design in improving economic and social benefits has become increasingly significant. Firstly, packaging serves the function of protecting the product. During transportation and sales display, packaging plays a crucial role in protecting the product and preventing it from being damaged, which could lead to a decrease in its value. Secondly, packaging has become an aspect of product marketing[8]. In the market, packaging that has an attractive design, strong visual impact, and exquisite patterns tends to capture consumers' attention more easily[9]. In today's development of cultural diversity, consumers have new aesthetic requirements for packaging. For product packaging design, its most important value lies in influencing consumers' psychology, leading to their identification and positive perception of the brand's values and corporate image[10]. This, in turn, promotes product sales and company growth.

2.3 The Visual Elements of Packaging Design

The visual elements of packaging composition vary in their presentation methods depending on the purpose, but they can generally be divided into layout, image, color, and typography elements. In general, the visual elements of packaging include product information, product imagery, brand name or title, date, content, and their respective placements, as shown in the diagram below. Based on previous research, the composition elements of packaging can be summarized as layout, typography, color, and image. The theoretical content is organized as follows.

Researcher	Subject	Visual element of packaging design
Ning Jie, Cho Joung Hyung	A Study on the Visual Elements of Canned Aquatic Products Packaging Design- Take Red Dot Award and Pentawards Award-Winning Works as Research Objects -	Image,Color,Font,Layout

[Table 2] Previous Research on Visual Elements of Packaging Design

Yuan Rui Fen	Brand Correlation of Expression Elements of Sugar-Free Tea Beverage Package Design-A Study on the Package Design Analysis of Sugar-Free Tea Beverage in China	Typography,Color,Illustration,Layout
Alaeddin Mohammad K. Ahmad	Factors Influence on Packaging Design in an Impulse Consumer Purchasing Behavior: A Case Study of Doritos Pack (2015)	Layout,Colour,Illustration,Typography
Chen Ran	A Study on the Use of Symbolic Elements in the Coffee Packaging Design between Korea and China	Layout, Text, Graphic, Color
Liu, Yuan Oh Yong Kyun	Research on the Influence of Packaging Visual Elements on the Consumers' Taste Image Judgment -Take the colors and patterns of canned beer as an Example- (2021)	Color, Pattern

2.3.1 Color

Color is one of the first visual elements to be recognized in packaging design and plays a crucial role. It has the ability to evoke emotional resonance and desire to purchase in consumers within a short period of time[11]. Compared to other visual elements, color has a wider display area on the packaging, stronger visual stimulation, and a greater impact on consumer psychology[12]. Colors can be broadly categorized into achromatic and chromatic. Achromatic colors include white, gray, and black, with shades of gray were arranged in order from white to black, distinguished by differences in brightness levels. Chromatic colors possess the three properties of color, brightness, and saturation, while achromatic colors consist only of brightness[13]. Children-related products often use high-purity and high-brightness colors. This is because such colors align with children's visual preferences and create a more visually engaging effect, thereby stimulating consumption. Color is an important visual element in packaging design.

2.3.2 Layout

In packaging design, layout refers to the process and plan of effectively arranging various visual elements such as text information, images, and photographs in a limited space. It involves the appropriate arrangement and organization of visual elements. In the packaging of kids' health products, the layout is particularly important because the packaging needs to convey a large amount of product-related information such as ingredients, dosage, and usage to the product users[14]. The layout is the rational arrangement of product information, images, and text elements. The characteristics of the layout include attention, legibility, brightness, form, and creativity. Considering the layout of visual elements in healthy function foods product packaging is crucial to ensure that consumers can easily understand the product information through its structure.

2.3.3 Image

In the modern multimedia era, visual elements such as images are more appealing to audiences than text. This is an important factor that has changed the attitude towards information delivery, as it can be easily and quickly consumed and has the potential to maximize the impact of information[15]. Images serve as a medium to convey information in a visually-centered environment, either replacing text or merging with text. The presentation of images includes photographs and illustrations. Photographs capture real objects or scenes through the process of photography and can be categorized as color photographs or black-and-white photographs. Illustrations, on the other hand, derive inspiration from visual subjects and portray objectivity or abstraction through simplified or exaggerated forms, showcasing individual creativity[16]. In the context of children's health products, photographs are often used to showcase flat images of real objects captured through photography, while illustrations take on various forms, including characters, cartoon figures, and other colorful depictions that resonate with children.

2.3.4 Typography

Text is a tool for conveying ideas, expressing emotions, and providing product information. Unlike visual elements such as graphics and colors, the text is the most precise element for communicating information. Fonts refer to a set of specific styles and sizes of printable or displayable typefaces used in typography and digital text. In the context of packaging design for health products, text information consists of English fonts and Korean fonts. English fonts are generally divided into three categories: serif, sans-serif, and handwritten styles. Korean fonts are categorized into nine types based on the Korean Font Development Classification System[17]. In packaging design, text is used to communicate product information effectively.

Typeface	Serif	Sans-serif	Handwriting
Styles	Serif	Sans Serif	Script

[Table 3] English Typeface

Typeface	Bataengche (Serif) Style	Dotumche (Sans- serif) Style	Graphic Style	Gulimche (Gothic) Style	Pilsache (Calligraphy) Style
Styles	한	한	한	ਨੇ	한
Typeface	Symbolic Style	Classical Style	Geometric Style	Other Style	
Styles	한	한	한	ট্য	

[Table 4] Korean Typeface

3.Research Method

This study focuses on the visual representation of packaging design for kids' healthy function products. The research methodology and process are as follows:

First, a review of relevant literature, news articles, books, and other sources was conducted to examine the definitions of health products, packaging design, and the visual elements of packaging design. This involved investigating academic research and industry information to understand the background and concepts of kids' health products and packaging design.Second, based on the four visual elements of packaging design (color, layout, graphics, and typography), a case analysis was conducted on the visual representation of packaging for children's health products. This involved analyzing the visual elements of a selection of the top-selling products on major online shopping platforms (G-market), including the frequency of color types, layout types, image types, and typography types. The goal was to uncover current design trends and preferences in the market.Third, the data collected and analyzed were summarized and analyzed to identify the usage patterns of each visual element in packaging design for children's health products. The aim was to summarize the common characteristics of visual representation, such as commonly used color combinations, layout styles, types of graphics, and font combinations.Fourth, in the concluding section, the characteristics of visual representation in packaging design for children's health products were summarized, and the impact and future development trends were explained. This included evaluating design features and discussing their influence on consumer purchasing behavior and brand perception. Additionally, potential future design trends could be speculated upon to assist the design industry and brand manufacturers in making more targeted design decisions.Overall, this study employed a combination of theoretical investigation and empirical case analysis to deeply examine the visual representation of packaging design for kids' health products. It aimed to provide valuable information and recommendations for design practices and marketing in this field.

3.1Research subjects and data collection

This study selected kids' multivitamin products on the renowned South Korean online shopping platform G-market as the research subject. The top ten products based on their sales rankings in 2023 were chosen. The table below provides the product names and monthly sales data:

No	Product Name	MonthlySales(Gmarket)
1	Cenovis Kids Multivitamin Mineral	13,241
2	GNM Nature's Quality Kids Multivitamin Mineral	8,085
3	Sang-A Pharmaceutical Kids Plus Multivitamin	7,952
4	GNC Kids Chewable Multivitamin	7,833
5	Dr. Foi Well-Kicker Kids Multivitamin and Mineral	2,150
6	Bebe Cook Vita Bebe	1,830
7	Jongkundang Health Kids Multivitamin Mineral	1,438
8	Bottu Kids Multivitamin	1.147
9	Galleria Good and Kids Delicious Multivitamin and Mineral (Lemon flavor)	796
10	Boribori/Dereal Elite Kids Multivitamin and Mineral	582

3.2Analysis

[Table 6] Visual Representation of Cenovis Kids Multivitamin Mineral

			Cenov	ris Kids M	Iultivitamin Mineral		
CENTRA IS	Color						
	Layout						
Minerals 멀티비티민 미네랄	Imaga	Illustration		Photograph		Illu	stration+Photograph
	Image	•					
		English		Korean			
State watch a					Bataengche (Serif) Style		
_		Souif			Dotumche (Sans-serif	f) Style	•
_		Sem			Graphic Style		
_					Gulimche (Gothic)	Style	
	Typography	Sans-serif	•		Pilsache (Calligraphy) Style		
	TypoBraphy	Sans-sern	•		Symbolic Style		
					Classical Style		
		Handwriting			Geometric Style	e	
		Tandwitting			Other Style		

Property and an other database	GNM Nature's Quality Kids Multivitamin Mineral								
GNM	Color								
종합비타민 🔆	Layout								
	T	Illustration		Photograph		Illustra	Illustration+Photograph		
	image	•							
		English		Korean					
11 1208		Serif			Bataengche (Serif) Style Dotumche (Sans-serif) Style				
							•		
					Graphic Style				
					Gulimche (Gothic) Style				
	Typography	Sans-serif			Pilsache (Calligraphy) Style				
	rypography				Symbolic Style				
					Classical Styl	e			
		Handwriting			Geometric Sty	rle			
					Other Style				

[Table 7] Visual Representation of GNM Nature's Quality Kids Multivitamin Mineral

[Table 8] Visual Representation of Sang-A Pharmaceutical Kids Plus Multivitamin

	Sang-A Pharmaceutical Kids Plus Multivitamin								
SANG STATE	Color								
👋 ADI 🎯	Layout								
키스들러스 멀티비타민	1	illustration		I	Photograph		Illustration+Photograph		
ZooTopiA	Image	•							
		English		Korean					
					Bataengche (Serif) Style				
		Serif			Dotumche (Sans-serif) Style		\bullet		
					Graphic Style	e	•		
					Gulimche (Gothic)) Style			
	TT 1	1 0 :0			Pilsache (Calligraph	y) Style			
	Typograpny	Sans-senn	•		Symbolic Sty	le			
					Classical Styl	e			
		Handwriting			Geometric Sty	le			
					Other Style				

[Table 9] Visual Representation of GNC Kids Chewable Multivitamin

	GNC Kids Chewable Multivitamin								
	Color								
GNC	Layout								
kids treating	Imaga	illustration			Photograph	Illustrati	ion+Photograph		
키즈 알티비타민	image	•							
		English			Korean				
215272104408					Bataengche (Serif) Style				
		Serif			Dotumche (Sans-serif) Style		•		
					Graphic Style		•		
		Sans-serif			Gulimche (Gothic) S	tyle			
					Pilsache (Calligraphy) Style				
124	Typography	•			Symbolic Style				
					Classical Style				
		Handwriting			Geometric Style				
					Other Style				

Dr. Foi Well-Kicker Kids Multivitamin and Mineral										
Hanmi 🛓 🍅	Color									
(Welkucker) 월키커어린이 열티비타민 & 미네랄	Layout									
	Image	illustration		Photograph	Illustration+Photograph					
Circle Contraction		•								
And Andreas and An		English		Korean						
erendena i 1200 milinoptiti 198 pi	Typography	ypography Serif		Bataengche (Serif) Sty	le					
• 00				Dotumche (Sans-serif) S	tyle					
				Graphic Style	•					
				Gulimche (Gothic) Sty	le					
		Sans-serif	•	Pilsache (Calligraphy) S	tyle					
				Symbolic Style						
		Handwriting		Classical Style						
				Geometric Style						
				Other Style						

[Table 10] Visual Representation of Dr. Foi Well-Kicker Kids Multivitamin and Mineral

[Table 11] Visual Representation of Bebe Cook Vita Bebe

			Bebe	Cook Vita Bebe		
BIRTER RANGE VITAMIN	Color					
HEL-MINI	Layout					
	Image	illustration		Photograph	Illustra	tion+Photograph
AND STORY OF		English		1	Korean	
				Bataengche (Serif) S	tyle	
		Serif		Dotumche (Sans-serif) Style		•
st.	Typography			Graphic Style		•
		G		Gulimche (Gothic) S	tyle	
		Sans-serif	-	Pilsache (Calligraphy) Style		
				Symbolic Style		
		II 1 1		Classical Style		
		Handwriting		Geometric Style		
				Other Style		

[Table 12] Visual Representation of Jongkundang Health Kids Multivitamin Mineral

	Jongkundang Health Kids Multivitamin Mineral								
	Color								
S CONTRACTOR	Layout								
· 키즈 위에이 있었지 해도 한 문 멀티비티민 미네랄	Image	llustration	Photograph	Illustration+Photograph					
Alex Multi Vitamin Mineral 名切利用回用 整新用印刷 印度 位		•							
유비철 건경기능식품 홍 90 g (1정당 1,500 mg x80 ct.)		English	Kore	an					
0 *38.64			Bataengche (Serif) Style						
			Dotumche (Sans-serif) Style	•					

	Typography Serif			Graphic Style	
		Some comif		Gulimche (Gothic) Style	
				Pilsache (Calligraphy) Style	
				Symbolic Style	
		II 1 1		Classical Style	
		nandwinning		Geometric Style	
				Other Style	

[Table 13] Visual Representation of Bottu Kids Multivitamin

	Bottu Kids Multivitamin									
	Color									
아 문 이 중 합 비 타 민 슈 어 볼 16 · · · · · · · · · · · · · · · · ·	Layout									
	Turner	illustrat	ion	Photograph	illustration+Photograph					
Chewable -	Image									
REALIZE OFFICE		Eng	lish	Kore	an					
				Bataengche (Serif) Style						
		Serif		Dotumche (Sans-serif) Style						
				Graphic Style						
				Gulimche (Gothic) Style						
		Sans-serif		Pilsache (Calligraphy) Style						
T	Typography			Symbolic Style						
				Classical Style						
		Handwriting		Geometric Style						
				Other Style						

[Table 14] Visual Representation of Galleria Good and Kids Delicious Multivitamin and Mineral (Lemon flavor)

	Galleria Good and Kids Delicious Multivitamin and Mineral (Lemon flavor)								
	Color								
	Layout								
Good & Kids	Image	illustra	tion	Pho	otograph	illustration+Photograph			
굿앤키즈 마이느	Image								
멀리비라민 ***		English			Korea	n			
맨미니네랄 비타민 8중+미네랄 2종		Serif		Batae	ngche (Serif) Style				
21871848 1,200 mg x 60/8/72 g)				Dotume	he (Sans-serif) Style	•			
				(Graphic Style				
				Gulin	nche (Gothic) Style				
		Sans-serif		Pilsache	e (Calligraphy) Style	•			
	Typography		•	Symbolic Style					
				0	Classical Style				
		Handwriting		G	eometric Style				
				Other Style					

		Boribori/Dereal Elite Kids Multivitamin and Mineral								
	Color									
and in the second second second	Layout									
RLITE KIDS	т	illustr	ration	Photograph	illustration+Photograph					
HE Multi Vitamin # Mineral Plus 115 Plus 115	Image)							
		English		Korean						
Viamin A. C. E. Di. Da. Da. Da Unteri Balani eliziti bititi		Serif		Bataengche (Serif) Style	;					
282/18/48 144g(1,601mg×603)				Dotumche (Sans-serif) Sty	le •					
				Graphic Style						
	Typography			Gulimche (Gothic) Style						
	51 8 1 5	Sans-serif		Pilsache (Calligraphy) Sty	le					
				Symbolic Style						
				Classical Style						
		Handwriting	_	Geometric Style						
				Other Style						

[Table 15] Visual Representation of Boribori/Dereal Elite Kids Multivitamin and Mineral

4. Analysis Result

Based on the theoretical background and the research investigation, the visual elements of the research objects were analyzed. The visual performance analysis was divided into four main categories: color, layout, image, and typography. Firstly, color was classified into three categories: colored color, colorless, and mixed colors. Layout types included top-bottom layout, left-right layout, and center layout. Image types were categorized as illustration, photograph and a combination of illustration and photography. Typography encompassed serif, sans-serif, and handwritten fonts for English text, while Korean text was classified into nine font types. Based on the visual performance analysis mentioned above, the following is a summary of the analysis results.

The results of the research on the use of colors in the research objects show that colored colors account for 60% of the total, which is the highest proportion, while mixed colors account for 40%. There were no cases of colorless colors being used. Among the colored colors, it can be observed that green and orange have the highest usage rates when examining the hue. According to the principles of color symbolism, green represents health, and orange represents vitality, which aligns with the attributes of the kids' health products being studied. In terms of the usage of mixed colors, white (colorless) has the highest area of usage, primarily as a background color. This is because when white is used as a background color, it can better highlight the visual effects of other elements, emphasizing the legibility of product information. Lastly, based on the analysis of the visual elements, there were no instances of using colorless colors alone. This is because the use of colorless colors alone (black and white) cannot ensure the visual competitiveness of the products, and colored products are more effective in highlighting their visual effects.

The research results revealed that the top-down layout style was predominantly used in the packaging of the research objects, accounting for 90% of the cases, followed by the left-right layout style at 10%. However, there were no instances of the center-oriented layout style observed. The preference for the top-down layout can be attributed to its alignment with the reading habits of the general public and its effectiveness in organizing the complex information elements commonly found in health product packaging. The limited usage of the left-right layout suggests that it may not be as suitable for conveying the necessary information. The absence of the a center-oriented layout indicates that it may not be a

preferred choice for the products studied.

[Table 16] Analysis Results of Colors

project	colored colors	colorless	mixed colors	colored
unit	%	%	%	colors
Statistic	60%	0%	40%	mixed colors

[Table 17] Analysis Results of Layout

project	Top-down layout	horizontal orientation	Central orientation	top-dowm layout
unit	%	%	%	left-right layout
Statistic	90%	0	10%	center-orientation layout

The results of the on the use of images in the researched objects showed that all of them used illustrations as their visual representation. Further investigation into the use of illustrations revealed that cartoon-style images were exclusively utilized. This choice can be attributed to the preference of children for cartoon characters. While photographs might offer a more realistic depiction of the product, the fact the target audience being children led to the decision of using friendly and appealing cartoon illustrations.

[Table 18]] Analysis	Results	of Image
------------	------------	---------	----------

project	illustration	Photograph	illustration+Photograph	illustration
unit	%	%	%	photograph
Statistic	100%	0	0%	illustration+photograph

The results regarding the use of fonts in the research objects showed that in the case of English fonts, sans-serif fonts accounted for 80%, the highest proportion, while handwritten fonts accounted for 20%. There were no cases where serif fonts were used. Firstly, sans-serif fonts are known for their simplicity and easy legibility, which explains their prevalence in packaging design. Secondly, handwritten fonts add a sense of friendliness, which leads to their use in combination with sans-serif fonts. Lastly, the absence of serif fonts can be attributed to their decorative nature, which can compromise legibility in this context.

project	Serif	Sans-serif	Handwriting	serif
unit	%	%	%	sans-serif
Statistic	0%	100%	20%	handwriting

[Table 19] Analysis Results of English Typeface

In the case of Korean fonts, the usage of "Dotumche (Sans-serif) Style" accounted for 100%, while "Graphic Style" accounted for 20%. There were no instances of other fonts being used. Particularly, the usage of "Graphic Style" was found to be in combination with "Dotumche (Sans-serif) Style". Firstly, the prevalence of "Dotumche (Sans-serif) Style" can be attributed to its legibility and its suitability for information recognition in packaging design. Secondly, "Graphic Style" fonts are known for their artistic qualities, and based on the previous analysis of visual elements, they were observed in the usage of product titles.

project	Bataengche (Serif) Style	Dotumche (Sans- serif) Style	Graphic Style	Gulimche (Gothic) Style	Pilsache (Calligraphy) Style	Symbolic Style	Classical Style	Geometric Style	Other Style
unit	%	%	%	%	%	%	%	%	%
Statistic	0%	100%	20%	0	0	0	0	0	0
			Oth Geometric Style Classical Style	Bataeng ar Style Symbolic Style	phe Dotumche Graphic t Gulimche St Pilsache Style	Sty			

[Table 20] Analysis Results of Korean Typeface

5.Conclusion

Considering the diverse and numerous product information elements in health product packaging, the visual presentation of kids' healthy function foods product packaging deserves research attention. In this study, analysis and research were conducted on the visual elements of the top ten best-selling products on a large online shopping platform. The conclusions are as follows:

Firstly, an analysis was conducted on the color types used in kids' healthy function foods product packaging design. The highest frequency of color usage was observed for colors, as they have strong visual effects and can enhance the visual impact of products within the limited display area of packaging design. Upon comparing different color types, it was found that green and orange had the highest usage frequency. Green symbolizes "health" and orange represents "vitality," aligning with the product concept of kids' healthy function foods. Therefore, these colors were used in kids' healthy function foods packaging to convey the product's functionality.

Secondly, an analysis was conducted on layout types, revealing that the top-down layout had the highest frequency of usage, while the left-right layout had the lowest frequency. The top-down layout is more aligned with consumer reading habits, providing stability and higher attention. Considering the movement of consumers' gaze, the top-down layout allows for quick and efficient reading of product information.

Thirdly, an analysis of the usw of images in packaging design was conducted and it was found that all kids' healthy function foods packaging utilized illustrations. This is because illustrations have an affinity with children and can alleviate their fear of unknown substances in health products. Compared to photographs, illustrations with characters can establish a closer connection with children and better cater to their preferences.

Fourthly, an analysis was conducted on the types of fonts used in kids' healthy function foods packaging. In the case of English fonts, sans-serif fonts had the highest usage frequency, as they are concise and easily recognizable, making them suitable for conveying information in packaging design. Additionally, a combination of handwritten fonts and sans-serif fonts was observed, as handwritten fonts have an artistic quality but lower legibility. Combined them with sans-serif fonts, both the conveyance of product information and visual effects can be achieved. In the case of Korean fonts, the usage frequency of Dotumche (Sans-serif) was the highest. This choice is based on the need for legibility in conveying product information. Furthermore, the combination of graphic fonts and Dotumche (Sans-serif) was used to enhance the artistic effect and align with the role illustration in the background. In summary, fonts in kids' healthy function foods packaging primarily serve the purpose of conveying information, with handwritten and graphic fonts used to strengthen the visual effects.

Finally, as mentioned above, excellent packaging comprehensively embodies visual communication, including shape, color, graphics, and fonts. Nowadays, the visual presentation of the packaging has become even more important than the product itself, becoming a significant decision factor. This study focused on kids' healthy function foods product packaging and analyzed its visual presentation based on the four key elements of packaging design. The analysis provides useful information for developing visual presentation strategies for kids' healthy function foods packaging, aiming to offer new perspectives to the design industry and product manufacturers. However, it is important to note that this study only analyzed the visual design aspects of packaging and has limitations in discussing factors such as the ingredient content of the products. Conducting empirical analysis in the future to examine whether the layout of information elements in kids' healthy function food packaging affects decision-making would be a meaningful research endeavor.

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