Food packages that make choosing better, easy

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MFA Thesis

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19 ***Do you not know that your bodies are temples of the Holy Spirit, who is in you, whom you have received from God? You are not your own;*** *20* ***you were bought at a price. Therefore honor God with your bodies.***

- Corinthians 6:19-20

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Abstract

The following thesis investigates food packaging design, focusing on the problem of conveying healthy choices through graphic imagery. Targeted towards females, ages 20-55, who are the primary food purchasers for their families, the thesis affirms stakeholder viewpoints and customer experience about food package design related to health. It suggests visual solutions exemplifying respondent preferences. The solutions highlight the essential elements of customer experience, including color, shape, material, scale, transparency, and overall design elements to convey health at the point of purchase. Scholarly research employs primary and secondary research methods.

Chapter 1
Introduction

Food packaging with persuasive design components and bursts of information can help us make better food buying decisions when it matters most- as we are scanning the grocery aisle. The correct packaging design could make it easy for consumers to determine a healthy choice from a lesser option and be attractive enough to sway decision making, thus leading to a healthier public.

Even with today's information rich environment, it is still difficult to make healthy choices in the grocery aisle. Could inspired and health-focused package designs lead a habitual revolution and influence the buying behaviors of consumers? Package design centered on consumer information, health, visual stimulus, design theory, and honesty could change the way we perceive and consume healthy products.

The goal of this study is to illustrate how packaging design can influence consumer decisions in a beneficial way related to purchasing healthy products. Research has been produced in many categories that relates to the dynamics of packaging design and its impact on buying and consumer response. However, no one study seems to bring together the most common elements that influence "healthy" choices at the point of purchase in the grocery store aisle via package design. This study seeks to bring together proven elements of packaging design that could best create an inspired and health-focused consumer choice leading to a habitual revolution in the buying behaviors of consumers toward healthier food choices.

Observed Problem

It is difficult for consumers to make healthy choices at the point of purchase in the grocery store aisle. A conscious choice of package design focused on communicating health through visual conventions and attractiveness to consumers could lead a revolution in buying behaviors, thus creating a healthier public. This study seeks to address this problem and offer a visual solution showcasing the key elements to convey healthiness to consumers.

Personal Insight & Mission

This study has personal impact on me as a graphic artist, a consumer, a woman, a caregiver, and someone who has struggled with weight and healthy choices my entire life. For decades I have had difficulty in making healthy choices and have sought many tactics and solutions to help me when I am often at my weakest... at the point of purchase. For me, grocery store aisles give hundreds of choices in each product category. A decision is often based on what a package looks like, versus how healthy or economical it is. It is my mission to decode the conventions of the visual language of food package design. This knowledge and understanding will allow me to create a visual solution showcasing design elements that promote health and are persuasive enough to influence the choice of consumers like me. I hope to create visual motivation through design to choose the most healthful product on the shelf.

Chapter 2
Research

Archival Research

The secondary/archival research was very impactful in framing the parameters of this project. It offered a broad view across segments of research and defined the different industries and aspects involved in the scope of this project. This particular study looks at trend data as part of the frame of reference in both the archival and primary research. To accurately obtain this information, a very large pool of sample data is needed to understand the true "trend" versus just a correlation in the data. By utilizing archival research, the sample pool is greatly extended beyond what one researcher could obtain within their own primary research work.

Twenty archival sources were reviewed within the scope of this project regarding food package design and consumer response research specifically. Sources are scholarly papers, articles, and case studies appearing in the areas of food quality, food retailing, business research, and consumer behavior. The source material naturally divided itself into two main categories- Packaging Design (Graphics) and information Design (Content). Within these two categories, subsets focused on (1) packaging color, (2) package shape and transparency, and (3) visual cues in the Packaging Design area and (1) labeling (2) Gen der/Age Considerations and (3) Consumer Behavior in the Information/Content Design area.

Packaging Design (Graphics)

A number of sources on packaging design in general were consulted to establish a solid baseline of "good" design in creating and executing the sample images for survey content. They also provided a pool of previous research directly related to how consumers understand and relate visually to food packaging design. Roncarelli's book Packaging Essentials 100 Design Principles for Creating Packages sets a baseline of well-documented package design conventions that are applied to every area of the sample package design components and the final visual solution of this thesis topic. When paired with Black's book Information Design: Research and Practice, which explains design theory and methodology with case studies from professional practice from leading information designers across the world, a firm base of understanding of the neces- sary and most viable visual conventions of food packaging design have been met.

Pulker's study looks more specifically at the marketing of certain unhealthy food products, and exposes the impact that visual design and marketing have on public health. It looks exclusively at processed foods and how they are marketed to consumers and what role health claims on the package may make in the decision-making process. I feel this study gives ample information as to what a large role the package alone can play in making a healthful food choice and what implications certain visual cues, color, etc. has on consumer choice. Pulker states "A large proportion of supermarket purchases are made on impulse and packaging has been shown to play a crucial role"… "Packaging can also influence consumer perceptions of health through use of color and graphical elements such as pictures or symbols" (Pulker, 1). And that "Shoppers typically make these decisions after only a few seconds to consider food labels"… "The front of the package plays a vital role in capturing consumers' attention and influencing food preferences" (Pulker,1).

Color

As far as package color is concerned, the sources reviewed speak to consumer perception of saturated color. Mead and Richerson's study talks about the link in consumer perception of vivid, saturated color with unhealthy foods. Examples given talk about chips, cereals, and other snack products often packaged in bright, bold colors and how they are foods deemed as "unhealthy" by consumers. They go on to say the perception creates a buying bias for many, thus allowing paler, less saturated color to the exact opposite – healthier, cleaner, and lighter food choices found in packaging of this type (10-11). Another study by Mai (et. al) reinforces this concept with similar results. They also found that lighter and pale colors also gave consumers a cue that the food items found in the packages were healthier. However, the study also found a link that the items perceived as healthier (426), might also be perceived as less tasty than items packaged in brighter colors (433-35).

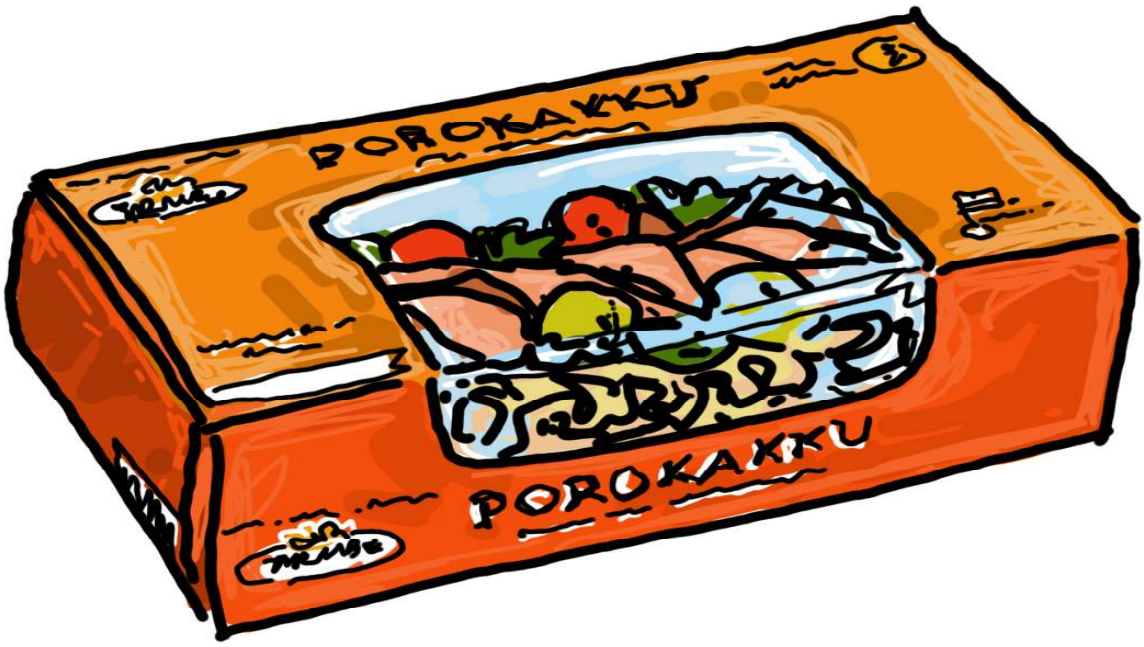
Other sources reviewed in this area touched on sensory aspects and non-verbal symbolic cues found in packaging design. Color was also a part of these studies, but they expounded on other factors such as typeface, “lack of heaviness” visually (Karnal, 107), text content, graphic elements, graphic element placement, and the layers of packaging for different types of products (Aradhna, 43-45). Both studies of this type focused on all the elements that made product packaging visually salient (Aradhna, 45) to consumers. Two of the four studies looked specifically at health-related visual elements and perceptions and the other two looked at consumer trends in general. Overall, the information has great bearing on this thesis project in determining the most important features of package design that helps consumers make a better or health-based food choice in the visual solution portion.

Shape and Transparency

Three additional sources reviewed discussed the impact of transparent packaging on consumers (Simmonds, 341-50) and the implications of package shape on consumer perceptions (Velasco, 17-26). Velasco's study described how consumers associate certain taste perception with package shape. The research showed consumers equate taste with package shape based on past product taste experiences and visual marketing of similar products (Valasco, 17-19). Round shapes were perceived as containing sweeter tastes and more angular shapes were perceived as containing more sour/salty/bitter tastes (Velasco,19-24).

Simmonds looks at the way transparent containers, or windows on containers, influence consumer food choices (Simmonds, 341). This research finds that consumers have more confidence and trust in buying products they can actually see (Simmonds, 341-44). Findings also showed consumers preferred round transparent windows over angular ones (Simmonds, 343-45). Festila's paper expands on how package design influences consumer perception of healthfulness (461). She specifically targets transparency as a visual cue the consumers associate with freshness and healthfulness (Festila, 468).

However, Simmond's study found when it came to healthfulness, that transparent packaging may work against healthy products in overall consumption, cravings, and demand due to the fact that the clear container can show how much has been consumed. The perception was that they had consumed more, even though the product may be more healthful overall. (Simmonds, 345-49).



Other Visual Communication Cues

Rompay's paper focused on the product placement and environment as a factor in perception of healthiness of a product. This paper talks a lot about product placement next to competing similar products, as well as store environment as impacting consumer perception (84). This is attributable to this project since the challenge is getting consumers to act within the grocery store environment, specifically in the stocked aisles.

Information Design

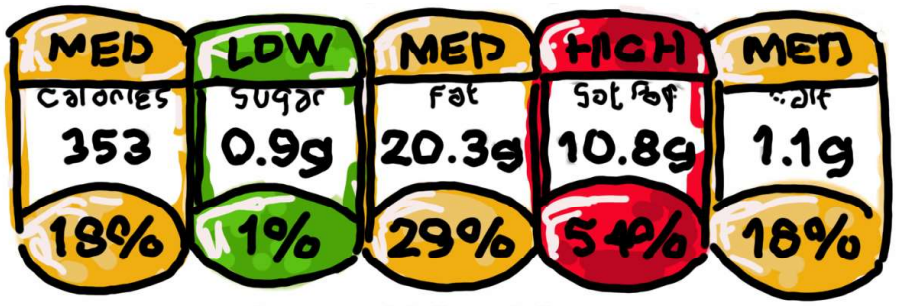
Almost half of the sources reviewed thus far did not focus on the visual designer's role in choice, but on information and content that influenced user/consumer experience. Some of these sources also mention visual design conventions, but they focus more on text content such as labeling, as well as age, gender, and consumer behavior. All of these components must be aligned to create a visual solution to the research problem presented in this project.

Labeling

Additional sources reviewed concentrated on visual cues for consumers related to nutritional labels. Moskowitz's book, Packing Research in Food Product Design and Development, talks specifically about the impacts of nutritional labeling for consumers in chapters 13-14. The findings illustrate that even though a label is present, it might not be the ultimate visual determinate of consumer choice. Orquin's study also makes the assertion that "judgment process based on nutrition label information is not very likely to happen and that health judgments may be based on less demanding heuristics" (271). Vissicher's study investigates consumers' visual attention to nutrition information on food products. Each of these studies uses eye tracking research based on package content to substantiate their claims of what consumers are being most influenced by.

Zhang and Roberto's studies specifically look at consumer understanding and interpretation of nutritional food labels. Zhang's study focuses on the confusion consumers feel when reading and interpreting nutritional labeling. It shows the frustration of consumers related to understanding and making an informed choice about what they are purchasing. This study also uncovers some advertising and labeling tactics that perhaps intentionally mislead consumers about the nutritional or health value of the products. Roberto's study finds nutrition labeling should focus on ways to improve the labels' ability to capture consumer attention, reduce label complexity and convey numeric nutrition information in simple and more meaningful way. "Across studies, approximately half of American adults report using the NFP when making food-purchasing decisions… 53% reported always or almost always using the NFP…but one study actually found only 9% viewed the NFP calorie content during a food purchasing task…" (Roberto, 526).

Aschemann-Witzel explores a similar area when looking at the influence of 'soft' versus 'scientific' health information on food supplement labels. It is a requirement that health claims be scientifically founded. However, their phrasing is criticized for being unappealing and cumbersome to communicate to consumers. This study confirmed those perceptions finding that consumers respond favorably to non-scientifically phrased 'soft' health information. These findings underline the crucial role of the informational context on packaging. This source gives excellent informational findings on how consumers respond to specific phrasing of health information and could shape the direction of wording on visual solutions for this thesis project.



Gender/Age Considerations

Torben and Arrua look into how gender and age play into informational content found on food packaging. Torben looks at the role involvement, competency, and gender play into food health information seeking by consumers. The study demonstrates how gender may influence how users/consumers seek out, process, and interpret package information. It also looks into how each gender seeks out health information related to foods. "Health information seeking may not always take place in a market environment" (Torben, 388). "The results also revealed that more women than men are food health involved. This has implications for food authorities seeking to change consumers' foods behavior by information campaigns and the like" (Torben, 397).

Arrua's research explains the relative influence of package features on children's perception of food products. The aim of the work was to evaluate the relative influence of two front-of-pack (FOP) nutrition labeling schemes and label design on children's choice of two popular snack foods. Children are often catalysts to buying decisions. Their understanding of health information could make a large impact on purchase. "Given the impact of package design on children's perception of food products, its regulation has been identified as one of the possible strategies to discourage consumption of unhealthy products" (Arrua, 140).

"Information about the healthy and unhealthy qualities of products can have a great influence on consumer behavior" (Van 't Riet, 8). Van 't Riet's study conveys that information about healthy and unhealthy nutrients is increasingly conveyed at the point of purchase for many food products. Many studies have investigated the effects of product health information based on attitudes and intentions, but the empirical evidence becomes vaguer when the focus of research is actual purchase behavior. This paper provides an overview of empirical evidence on the effectiveness of product health information for food products at the point of purchase in the aisle. This particular paper speaks to consumer behavior and what might influence the spur of the moment choice at the point of purchase.

Primary Research

The primary research for this project is based on an electronically delivered survey with 48 questions related to the archival research premises. The survey would determine if the current consumers in the target audience had responses consistent with the archival research, added insight into those assumptions, as well as gain responses to visual representations of those principles presented as sample packaging design prototypes. A final visual solution would be presented as a group of package designs and a style guide that showcase the final research analysis.

Research Target Audience & Benefit

The primary research survey focuses on women, ages 20-55, who are the primary food purchasers in their families. This group was selected in relation to several of the archival research resources that pointed to females as the primary consumers of food and respondents to food packaging design at the point of purchase. Females also hold a dominant place in US society as being caregivers of children and families, so they would also be concerned with the health and well-being of the family unit. The benefit of this study could be great. If a viable or effective solution could be found through this research, the impact could be huge if applied on a mass scale. Any healthy choice could lead to a healthy habit. Healthy habits change overall behavior over time and induces lifestyle changes. It might not be a quick solution, but it could have serious implications on consumers making healthier choices and send a strong message to food producers and marketers. It could even have the ability to change the landscape of grocery store shelves and mitigate unhealthy products over time. This research and visual solution prototypes could benefit consumers of all ages, races, and social status across the US.

Survey Research Design

Core survey activities facilitate the capture and identification of current codes and conventions of packaging design that communicate with the users/consumers of the target audience. The primary research data collected will be compared to the archival research assumptions to see if there is alignment or deviation from previous studies. The participant input specifically provides an exploration of buying history, perception, existing packaging trends and elements, and packaging mock-ups with associated questions to gauge which individual elements of the design resonate with them and why.

The electronic survey was administered through a third-party company, Survey Monkey. This choice had many benefits to the study. It allowed an easy way to format and administer the survey questions via the internet and kept the content consistently available and delivered in a streamlined, well-tested platform. It worked well on multiple devices such as computer, tablet, and smartphone.

The use of Survey Monkey also offered an additional layer of protection for participants in keeping their uniquely identifiable information anonymous to the researcher. The survey had three requirement questions to make sure the target audience met the age and gender criteria, as well as gave informed consent, prior to having access to the survey questions. Other than the qualifying questions, no other identifiable information was collected or retained by the researcher. It allowed the data collected to be stored on a secured non-local server only accessible by a password protected account by the researcher.

Once qualified, the participants had access to a battery of 24 written questions based on archival research and 24 additional questions based on sample visual representations of packaging designs across four formats. The survey reached participants via online link through social media and email. Overall, sixty-seven unique participants completed the survey completely. More participants started the study, but any surveys that were not 100% complete were eliminated from the data pool.

Chapter 3
Process

Survey Results

The first 24 written questions were a combination of multiple choice and open-ended written response. The questions were drawn directly from the assumptions put forth in the archival research. Most questions have 67 responses, but some of the open-ended fill-in questions yielded several multi-word responses with up to 75 uniquely identified descriptors. The last 24 questions were related to four categories of packaging design prototypes. Formats presented were a can, a box, a bag, and a bottle featuring one food product each with four varying designs each. Respondents were asked to answer which design they felt conveyed "healthfulness" of the four given, how important the color was, how important the physical material of the package was, how important the words and visual messaging elements were, would the design appeal to you at the point of purchase at the grocery store, and what do you find most visually appealing about your selected design? The results from the survey in its entirety justified the final visual solution designs presented in this research.

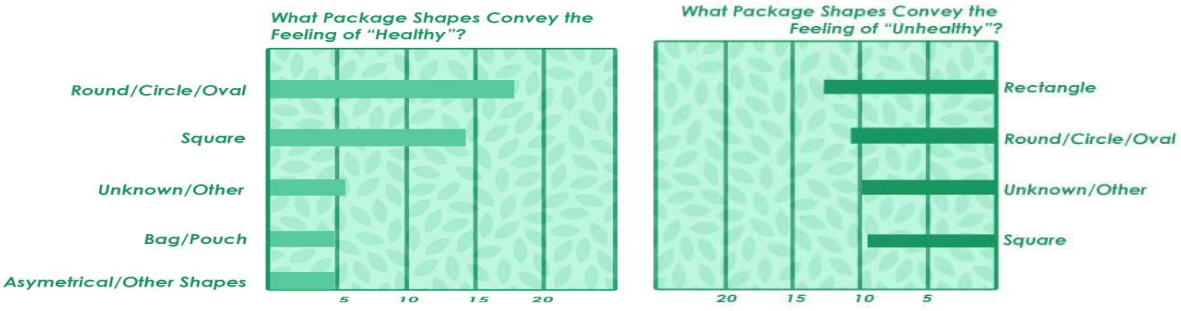
Packaging Design (Graphics) Written Question Responses

Color

Questions 1 and 2 focused on package color. Respondents were asked about what colors conveyed the feeling of "health" in question 1 and the feeling of "unhealthy" in question 2. These questions directly related to the research presented by Mead and Richerson's study (10-11) as well as by Mai (et. al) (426) describing consumers to perceive lighter colors as being associated with health and more saturated colors to convey the opposite. Respondents in this study's survey aligned with the archival research with the top two responses in color that conveys "health" to be green (29 responses) or a combination of green and other light colors (17 responses). Question two also gave a consistent response in giving red, with 19 responses, and brown or combinations of brown and other warm colors, with 5 responses, as being perceived as "unhealthy".

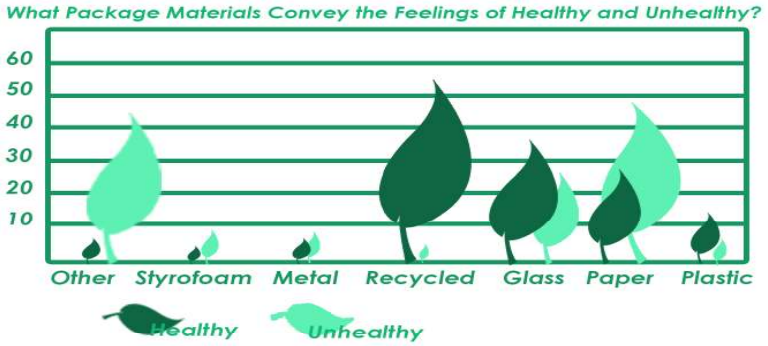
Shape

Questions 3 and 4 focused on the shape of product packaging. In Velasco's study, it was described how consumers associate certain taste perception with package shape. The research showed consumers equate taste with package shape based on past product taste experiences and visual marketing of similar products (Valasco, 17-19). This research pointed to certain exact tastes being related to shape. However, survey results in the primary research did not specify taste association, but perceived healthiness of the product contained in the package. Question 3 asked what package shape conveyed the feeling of "health". The highest response was round/circle/oval with 17 responses. The second highest result was square with 14 results. Question 4 continues the line of questioning with asking respondents what package shapes convey the feeling of "unhealthy". Rectangular was the highest response with 13 responses. Circle/round/oval was second with 11 responses. No direct conclusion can be drawn to Velasco's Study. However, the responses can be used as additional input to the final visual solutions.



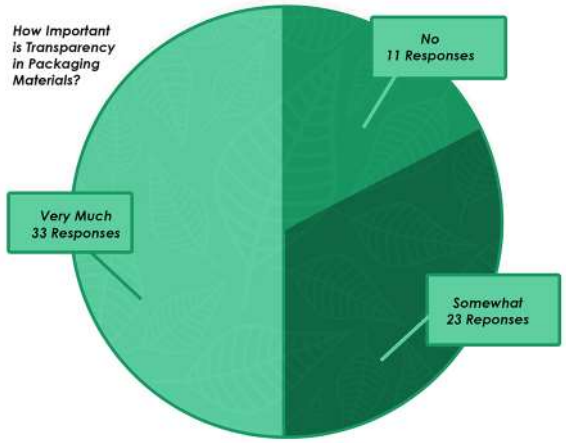
Package Materials

Several studies in the archival research touch on packaging materials, but none directly correlate to an exact quantifiable question. However, it seemed important based on overall package design concepts for the final visual solution and overall perception of packaging. Questions 10 and 11 asked respondents to select from seven choices what materials they associated with the packaging materials of a "healthy" product versus an "unhealthy" product.



Transparency

Question 16 asks respondents about seeing the actual product through the package, as in transparency of the packaging material. Simmonds' research looks at the way transparent containers, or windows on containers, influence consumer food choices (Simmonds, 341). His research finds that consumers have more confidence and trust in buying products they can actually see (Simmonds, 341-44). Festila also looks at transparency in her study. She specifically targets transparency as a visual cue the consumers associate with freshness and healthfulness (Festila, 468). The respondents to question 16 directly correlate with the archival research with 33 responding with "very much" in the amount of influence transparency has in their potential purchase of a product. 23 more responded with "somewhat" and only 11 responded with "no".



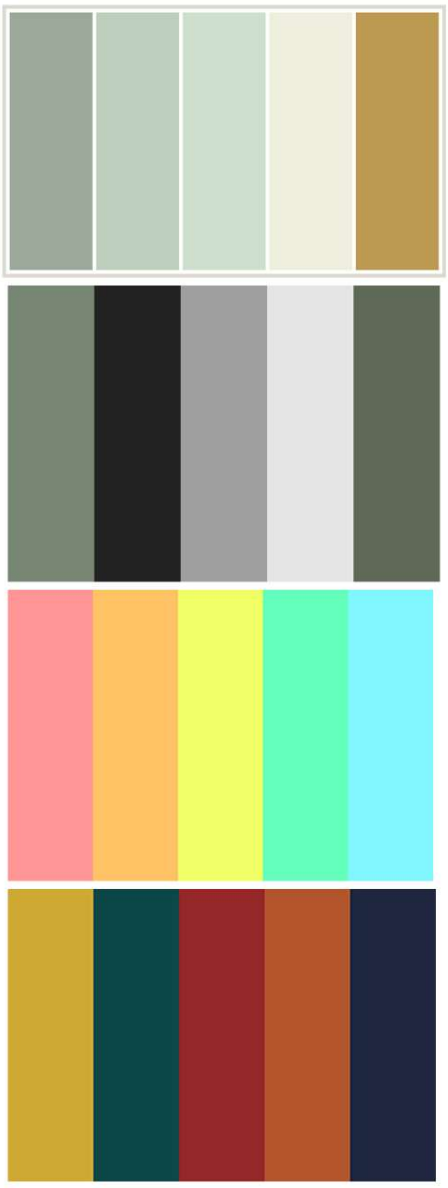
Sample Design Prototype Responses

The last half of the survey questions focus on four groups of package design prototypes. In the archival research, Pulker states, “Packaging can also influence consumer perceptions of health through use of color and graphical elements such as pictures or symbols” (Pulker, 1). And that “Shoppers typically make these decisions after only a few seconds to consider food labels”… “The front of the package plays a vital role in capturing consumers’ attention and influencing food preferences” (1). This defined that the design prototypes would be shown from a primarily front-facing view in this study. It also defined the first respondent question since color is large factor in the front-facing design and overall graphic scheme of the graphic design.

The prototype designs were made into four groups. Group one had bag images, group two had can images, group three had box images, and group four had bottle images. Each group contained four design prototypes with varying color schemes, fonts, scale, and overall graphic design approaches based on the archival research.

Six questions were asked about each group of images to determine overall appeal, what image conveyed “healthy” best, importance of color, importance if package materials, wording, design elements, and if the image would appeal to the respondent at the point of purchase. Another open-ended question allowed for responses about what was most appealing about the design.

Each group of images were based around four color schemes (see right). These were selected based on the color theory presented in the archival research. Color scheme one (top) was “natural”, color scheme two was “greens”, color scheme three was “bright” and color scheme four was “saturated”.



Prototype 1 -Bags

Four designs were presented for consideration. The survey results found image 1 to be ranked first in conveying the concept of “healthful ness” with 46 respondents. Image 3 has 11 respondents, image 2 had 8 respondents, and image 4 had 2 respondents.

When asked about the importance of color in the choice of this design respondents rated it as “very important” with 22 responses. Another 21 respon dents rated color as “important” with 21 responses. The physical material of the package was also rated as “important” with 22 re sponses and “very important” by an additional 17 responses.

When asked about the words and visual message of the package design, respondents rated them as “very important” with 23 responses, “important” with 19 responses, and “neutral” with 19 responses.

Respondents were asked if this design would appeal to them at the point of purchase . 42 respondents, 63% of the total gathered, replied with a “yes”. Components of the design ranked most visually appeal ing were “overall graphic presenta tion” (20 responses), “simple/fresh appearance” (11 responses), and “color” (13 responses).

Prototype 2 - Cans

Again, four designs were presented based on the archival findings of previous studies. The survey results found image 1 to be ranked first in conveying the concept of “healthfulness” with 31 responses. Image 2 was also ranked highly with 23 responses.

Color of the design was ranked “very important” by 23 respondents and “important” by an additional 23. The physical material of the package was rated less important in this category with 23 respondents finding it “important” and 20 finding it “neutral”.

Words and visual messaging of the overall design was rated “important” by 26 respondents and “very important” by 19. 15 reported a “neutral” response for this group of images. 41 respondents, 61% of the total, said the package design would be appealing to them at point of purchase in a grocery store setting.

When asked about the design elements that made choice 1 most appealing in conveying “healthfulness”, respondents rated “color” the highest with 20 responses, “simple/minimal/clean design” with 16 responses, and “natural fruit/vegetable image” with 16 responses.

Prototype 3 - Boxes

In group 3, image 1 was ranked best in conveying “healthfulness” with 40 responses. Image 2 had 23 responses, image 3, 2 responses and image 4, 2 responses.

When asked about the importance of color in the choice of this design, respondents rated it as “important” with 22 responses. Another 20 respondents rated color as “very important”. 21 responses ranked the physical material of the package as “important”. 19 responses ranked material as “very important” and 18 responses ranked material choice as “neutral”.

When asked about the words and visual messaging of the package design, respondents rated them as “important” with 26 responses, “very important” with 19 responses, and “neutral” with 13 responses.

Respondents were asked if this design would appeal to them at the point of purchase. 45, 71% of the total responses gathered, replied with a “yes”. Components of the design ranked most visually appealing were “image” (21 responses), “actual product visible” (13 responses), and “graphic design of package” (10 responses).

Prototype 4- Bottles

In group 4, the survey results found image 1 to be ranked first in conveying the concept of "healthfulness" with 47 responses. Image 2 was also ranked highly with 11 responses.

Color of the design was ranked "very important" by 27 respondents and "important" by an additional 18. The physical material of the package was rated less important in this category with 20 respondents finding it both "very important" and "neutral". 18 considered it "important".

Words and visual messaging was rated equally with 20 respondents deeming it as "very important" and "neutral". 18 respondents reported an "important" response. 43 respondents, 64%, said the package design would be appealing to them at point of purchase in a grocery store setting.

When asked about the design elements making choice 1 most appealing in conveying "healthfulness", respondents rated "graphic design" the highest with 21 responses, "simple/natural/clean/fresh" with 20 responses, and "image" with 11 responses.

Information Design Written Question Responses

Key Words

Survey respondents were asked a series of questions about key word associations. Question five asked what key words the respondent associated with the feeling of “healthy”. Top responses included “Organic” with 24 responses, “fresh” with 7 responses, and “natural” with 7 responses. The next question asked them to identify words that convey the feeling of “unhealthy”. Highest scoring word groups were “sweet/sugar/candy/high fructose/corn syrup” with 19 responses, “processed/pre-packaged” with 8 responses, and “unknown” with an additional 8 responses.

Question seven asked explicitly about the words “light”, “organic” and “natural” since they were tied strongly to the archival research. When asked how these three words influenced thoughts about products being healthier, 36 respondents ranked them as influencing their connotation “very much”. When asked if there were any negative connotations to these words, 37 respondents replied with “no”, 28 with “somewhat”, and 2 with “very much”. When asked if the same words influenced their overall purchasing of food products, 36 responded “some what”, 19 with “very much”, and 12 with “no”.

Brand Trust & Authenticity

Respondents were asked about their perception of the importance of packaging conveying authenticity and brand trust. Out of 67 responses, 35 considered it “very important” that the packaging convey brand authenticity. 26 responded with “somewhat” and 6 with “no”. When asked if they valued honesty and realism in package messaging and design, similar responses were gathered with 35 considering it “very important”, 23 as “somewhat” and 8 with “no”. When asked about their feelings when a product is not shown as messaged on the exterior packaging, respondents associated the feelings of “disappointed” with 17 responses, “deceived/dishonest” with 11 responses, and “angry/horrible/upset” with 10 responses.

The survey also asked respondents about their expectation of health-branded products and their buying habits. In question 17 of the survey, respondents were asked what their expectations were when purchasing a health-branded product. 13 responded with “nutritious option”, 12 responded with “natural/not processed”, 9 with “unknown/other”, and 8 with “honest/authentic/truth in advertising”. When asked if they focused their purchasing on health or other factors, 39 responded with health, and 28 with other.

Buying Habits

Respondents were asked several questions about their buying habits and last trip to the grocery store. Question 20 asked respondents “during their last trip to the grocery store, did package design influence their choice of brand of product”. 31 responded with “somewhat”, 27 with “no”, and 9 with “very much”. When asked what would influence them to try health-branded product based on its exterior packaging alone, they responded with “graphic design/package design” (16 responses), “ingredient list/nutritional label/health claim” (14 responses), “unknown/don’t know” (12 responses), and “image of food” (11 responses).

Survey respondents were also asked if during the last trip to the grocery store they purchased a product they had never bought or tasted before. 34 responded with “no”, 20 with “somewhat” and 13 with “very much”. A follow up question inquired if package design influenced the choice over a competing similar product. 34 responded with “no”, 24 with “somewhat” and 9 with “very much”.

When questioned if colors, shapes, key words and/or package design influenced their choice of a product they had no taste knowledge of, they responded with “somewhat” (31 responses), “no” (20 responses), and “very much” (16 responses). They were also asked if relative healthfulness compared to similar products influenced their choice. 30 responded with “no”, 28 with “somewhat” and 9 with “no”.

The final question related to buying habits asked if the use of characters from popular culture on the packaging had any influence in the products they purchased during their last shopping trip. 50 responded with “no”, 9 with “somewhat” and 8 with “very much”.

Chapter 4
Final Visual Solutions

Creating the final visual solutions for this study was a multi-layered process. The concept generation began during the literature review and archival research phase. Previous research and case studies, as well as design attributes for package design resources examined, helped define the survey questions and the shapes, color schemes, and basic elements of the 16 prototype designs presented visually in the primary research survey. Four designs in four categories allowed the respondents to give feedback on what conveyed "health" to them in the packaging design and what was most attractive and influential to them as prospective buyers and consumers. The findings often correlated with the archival research, but also gave an updated perspective as some of the articles and studies were several years old.

The goal of the final visual solution was two-fold. It would bring the research into a visual format based on survey responses by designing a group of packaging that exemplified the dominant survey responses, as well as create a style guide in order to make the research applicable to a wide-variety of products and brands.

In a real-world situation brand identity is very important. 58% said health was an important factor in their purchasing choices. Visual distinction on the shelf, as well as a health-focused look and message would be significant in swaying consumer choice.

Only 3% of the response pool separated whether respondents though the package design ultimately influenced their purchase choices. An attractive look and on-target message are extremely important with such a small margin of influence. However, even though 3% seems small, if a package design shift could influence 3% of consumers across the globe, the impact could be enormous in bettering public health.

Conceptual Package Design Suite

The survey responses listed greens and nature-inspired color schemes as the most popular in conveying health. The color of the package was rated as very important or important by 65% of survey respondents, so greens were selected as the base color for all the final designs. The most liked features in the survey prototypes were "color", "graphic design", "simple/minimal/clean/fresh", and product/ingredient "image". I strived to add as many of these features to each design as possible while still keeping things clean and simple. I could not get every element in every design, but collectively they exemplify the most popular responses.

The four categories selected for the visual solutions were bottle, bag, can, and box. These are common package types within the industry, but all can lend to being sourced from recycled or recyclable materials. 54% of respondents found package material to be influential in their purchasing selection. For this reason, the bottle design was shifted to a glass bottle instead of plastic, and recycle badging was added to all final visual solutions to encourage thought about the package material itself.

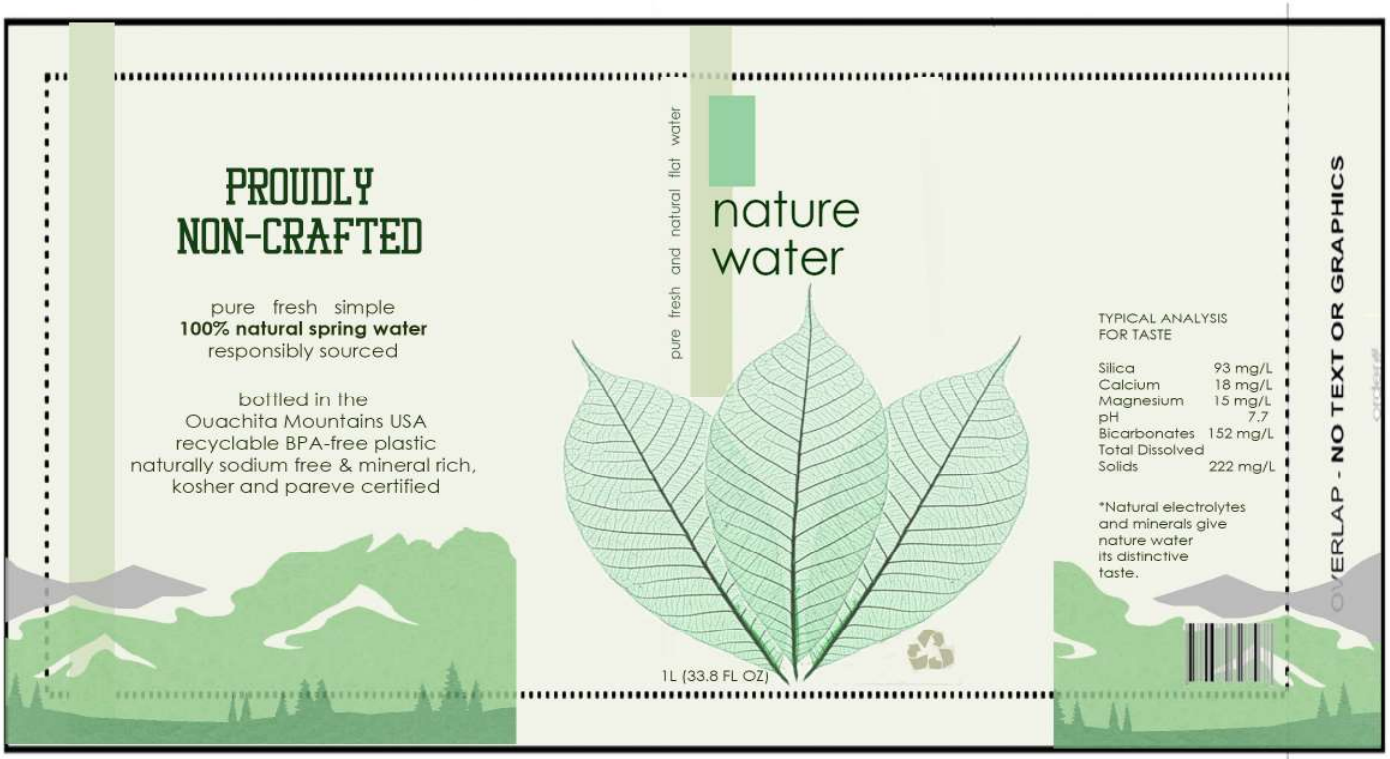
Since these images were not created for an existing brand or brand standard, there is not strong visual messaging related to the key words “organic”, “fresh” or “natural”. These words were very important in the survey results, but I limited the use of them in the final visual solutions because I felt there wasn’t much true substance for use at this point. If these designs were brought into production for a real product, I would recommend adding these words if they were authentic and honest to the product description. 91% of respondents expected that the packaging would be true to the brand’s promise and that messaging would be honest. With that in mind, I did not want to include elements that would compromise that standard.

The image above shows the final conceptual design suite that exemplifies the dominant survey responses. These images were revised from the prototypes shown in the survey based on response. They were enhanced further in the following pre-press views. These show the packages in their entirety with the additional labeling, copywriting, and imagery on all panels.


NO artificial anything!
ingredients:
flour mix (rice, millet, buckwheat), dried cane syrup, palm oil, brown cane sugar, natural flavors, salt, vanilla extract, leavening (cream of tartar, backing soda), xanthan gun, konjac, rosemary extract.
Nutrition Facts
Serving Size 2 Cookies (26g)
Servings Per Container 7
Amount Per Serving
Calories 130 Calories from Fat 60
% Daily Value*
Total Fat 6g 9%
Saturated Fat 3g 15%
Trans Fat 0g
Cholesterol 0mg 0%
Sodium 85mg 4%
Total Carbohydrate 17g 6%
Dietary Fiber 0g 0%
Sugars 9g
Protein 1g
Vitamin A 8% • Vitamin C 0%
Calcium 0% • Iron 2%
Packed Exclusively for:
Tastee Corp.
Oklahoma City, OK
00000
This package made with recycled materials
tastee
simply sugar cookies
ORGANIC & ALL NATURAL
NET WT.6.3 OZ.(179 GRAMS)
milk free
nut free
soy free
gluten free
worry free!
MED Calories 353 18%
LOW Sugar 0.9g 1%
MED Fat 20.3g 29%
HIGH Sat Fat 10.8g 54%
MED Salt 1.1g 18%
savor & trust our handcrafted, wholesome feel-good snacks...
crisp, crunchy texture and delicious taste made from ingredients you can feel good about.
tastee brings you all-natural and organic snacks that are always guilt free.


Simple ingredients allow our amazing foods to shine!
Humble foods is committed to bringing you great taste in certified organic, low calorie natural foods. A good source of vitamin C and fiber,Humble Foods Green Asparagus is a healthy addition to to any diet.
Live humble- visit us at: www.humblefoods.com
PACKED EXCLUSIVELY FOR:
HUMBLE FOODS CORP.
NEW YORK, NY 10001
MED Calories 353 18%
LOW Sugar 0.9g 1%
MED Fat 20.3g 29%
HIGH Sat Fat 10.8g 54%
MED Salt 1.1g 18%
NET WT
15 OZ. (425G)
DR WT. 9 OZ. (255G)
humble asparagus
CERTIFIED ORGANIC
Made With Recycled Materials
Nutrition Facts
Serving Size 2/3 Cup (130g)
Servings Per Container about 3
Amount Per Serving
Calories 30 Calories from Fat 0
% Daily Value*
Total Fat 0g 0%
Saturated Fat 0g 0%
Trans Fat 0g
Cholesterol 0mg 0%
Sodium 360mg 15%
Total Carbohydrate 4g 1%
Dietary Fiber 2g 8%
Sugars 1g
Protein 3g
Vitamin A 20% • Vitamin C 25%
Calcium 2% • Iron 4%
INGREDIENTS: ASPARAGUS, WATER, SALT.
OVERLAP - NO TEXT OR GRAPHICS


Grano
Authentic
All-Wheat
Pasta
DIRECTIONS FOR COOKING PASTA:
Add to salted boiling water. Boil for 10-13 minutes until desired tenderness is achieved.
Store in a cool, dry place
NET WT.
16 O (1 LB) 454g
Grano partners with regional farmers to harvest wheat at the peak of the season. Top quality ingredients go directly from the farm to Grano's kitchen where we create our certified all-organic wheat pastas.
Guaranteed fresh, natural, and perfect everytime. Make meal times easy and delicious with Grano!
Nutrition Facts
About 8 servings per container
Serving size 1 cup (56g)
Amount per serving
Calories 200
% Daily Value*
Total Fat 1g 1%
Saturated Fat 0g 0%
Trans Fat 0g
Polyunsaturated Fat 0g
Monounsaturated Fat 0g
Cholesterol 0mg 0%
Sodium 0mg 0%
Total Carbohydrate 41g 15%
Dietary Fiber 2g 7%
Total Sugars 0g
Includes 0g Added Sugars 0%
Protein 7g
Vitamin D 0mcg 0%
Calcium 0mg 0%
Iron 2mg 10%
Potassium 112mg 2%
Thiamin 0.5mg 40%
Riboflavin 0.2mg 16%
Niacin 3mg 20%
Folate 236mcg DFE (115mcg folic acid) 60%
INGREDIENTS: Semolina (wheat), Durum Flour (wheat), Niacin, Ferrous Sulfate (Iron), Thiamin Mononitrate, Riboflavin, Folic Acid
DISTRIBUTED BY:
Grano Services LLC
Seattle , WA 98109
Manufactured in a facility that uses eggs.


PROUDLY
NON-CRAFTED
pure fresh simple
100% natural spring water
responsibly sourced
bottled in the
Ouachita Mountains USA
recyclable BPA-free plastic
naturally sodium free & mineral rich,
kosher and pareve certified
pure fresh and natural flat water
nature
water
1L (33.8 FL OZ)
TYPICAL ANALYSIS
FOR TASTE
Silica 93 mg/L
Calcium 18 mg/L
Magnesium 15 mg/L
pH 7.7
Bicarbonates 152 mg/L
Total Dissolved
Solids 222 mg/L
*Natural electrolytes and minerals give nature water its distinctive taste.
OVERLAP - NO TEXT OR GRAPHICS

Style Guide

The style guide is designed to capture the essential survey responses and distill them down to short, application-based bites. The intent is for the style guide to offer guidance to a larger number of brands and products seeking to focus, or refocus, their packaging on health. These key elements identified by the research could be applied to almost any type of food package design. They could be applied as a whole, or in part around existing brand standards to offer flexibility and scalability across the industry.

The style guide has 11 main points: concept, light, natural, muted, transparent, materials, imagery, font, text style, voice, and tone. Most of these points are easily relatable as to how they could be applied to a package design. However, the voice and tone sections touch on the research gathered by respondents related to brand trust. The research made clear that these potential consumers had very strong feelings about authenticity and honesty in both visual and written messaging (52% of respon dents), as well as how they felt when these expectations were not met.

Voice is about creating a copywriting style that builds trust, conveys the health benefits of the product, and tells the brand story. Voice stays consistent over time and campaigns and aligns with the mission and values of the brand itself. It allows consumers to see the brand as part of how they want the world to be.

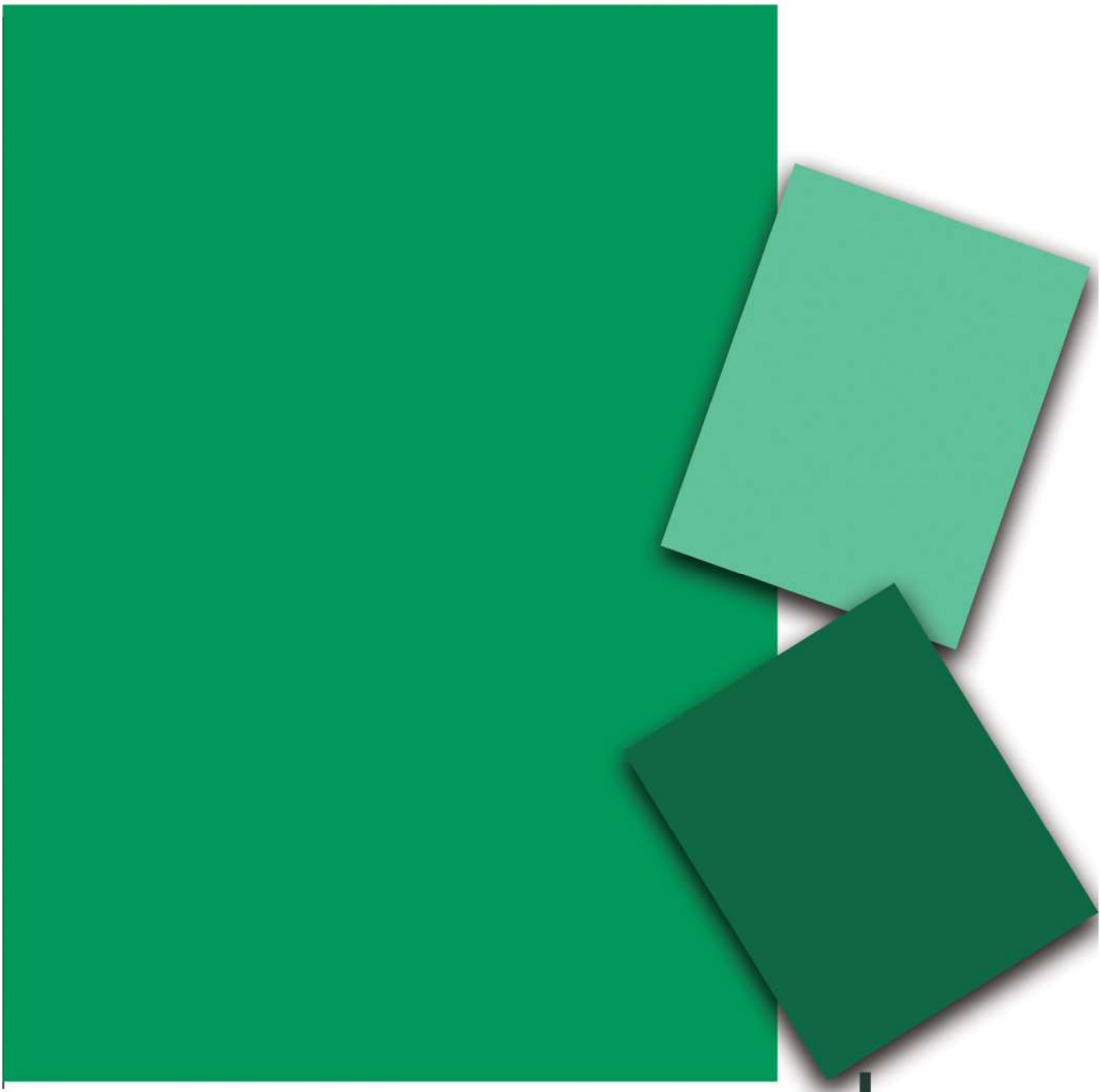
Tone is situational. It is built of the adjectives and descriptors used and relies on the exact moment, intent, or emotion of the communication at hand. It is deeply linked with voice, but tone allows the brand to address different needs through time. Once campaign may call for humor, while another time it may need to shift to being serious or somber.

The style guide gives guidelines how to apply voice and tone based on the survey responses. However, the guidelines are generalized and would need to be looked at closely since they are intimately linked with an individual company, product, etc. These two concepts inspire trust by consumers, so making sure they are aligned with the core values of the company are essential.

Food Packages That
Make Choosing Better, Easy...

style guide

Shelley Tate Garner



concept

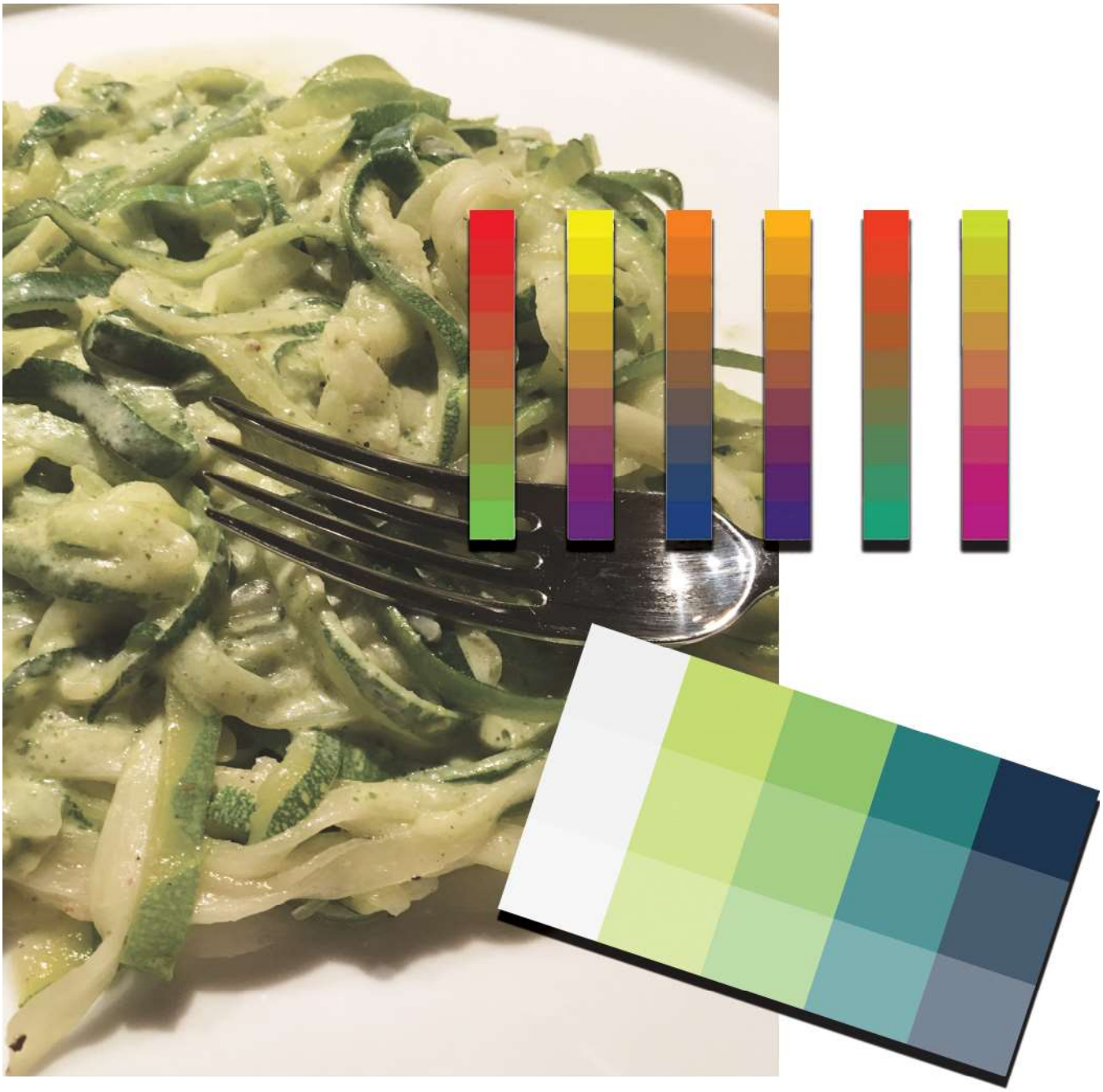
the design concepts of "minimal" and "clean" relate the perception of health

light

paler, less saturated colors indicate
healthier, cleaner, and lighter food choices

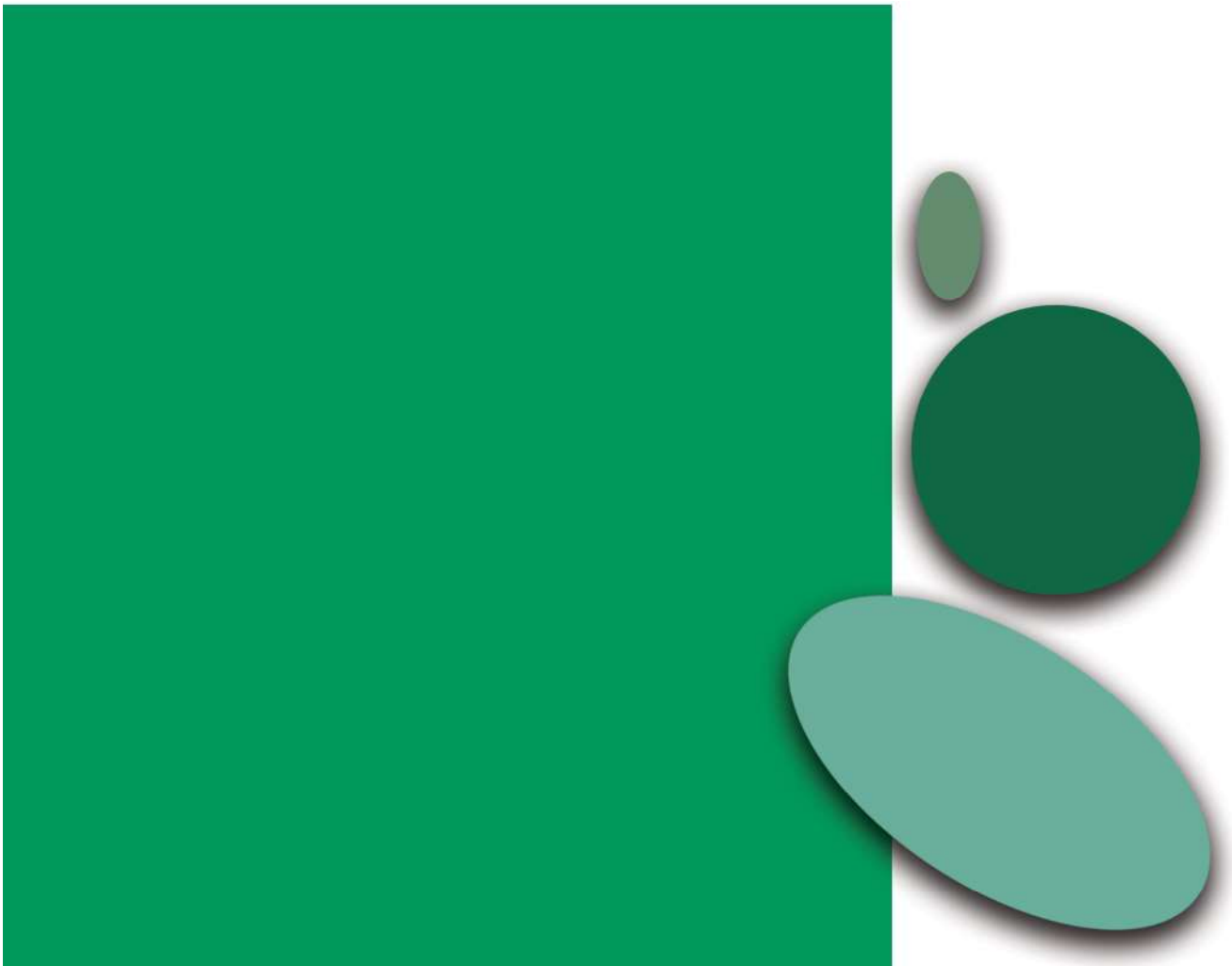
natural

"light", "green", and
"natural" color schemes are
the top survey results representing health.



muted

muted, less saturated colors convey
health moreso that intense, saturated colors.

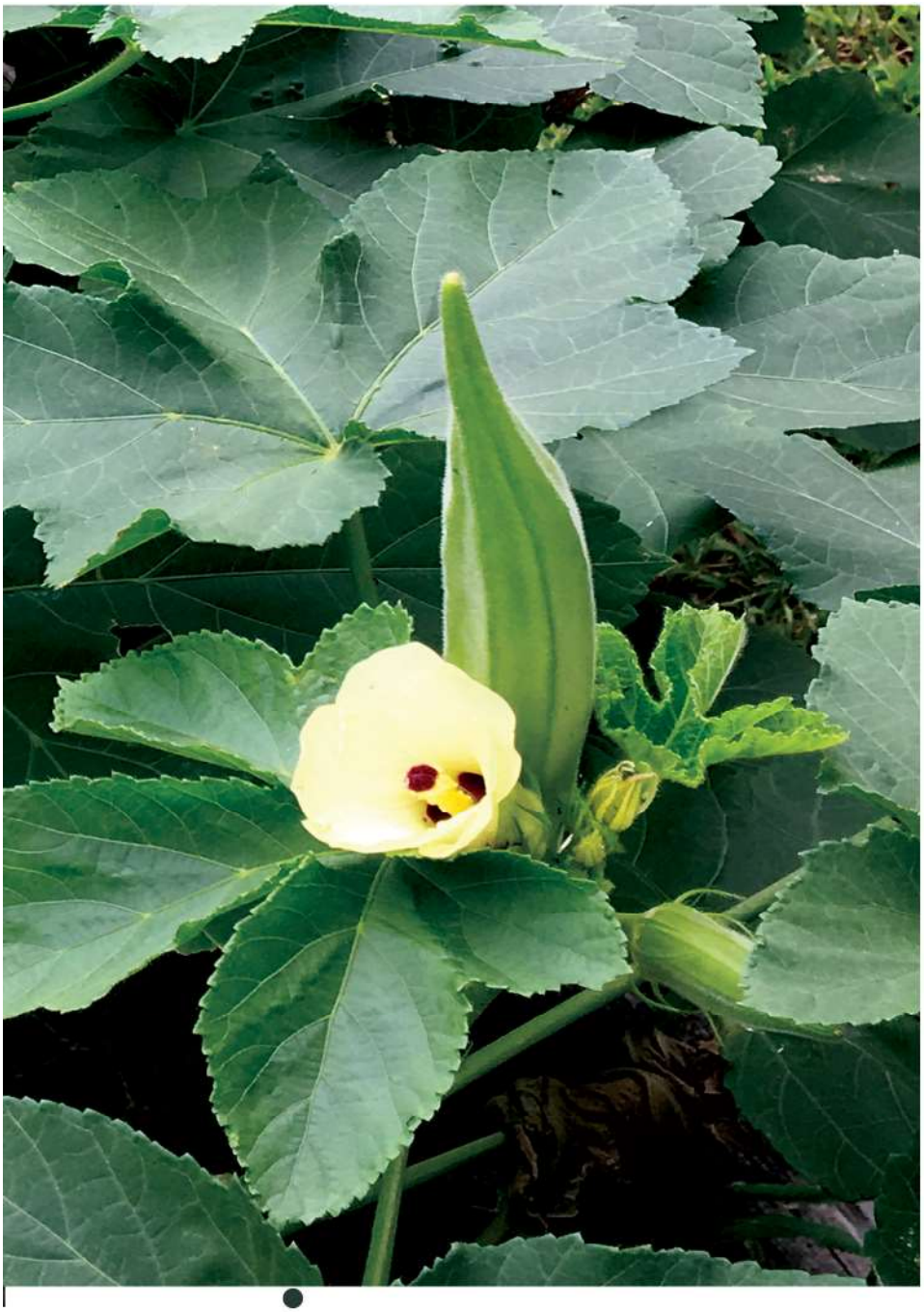


shape

round,circlular, and oval shapes are perceived as the most healthy

transparent

consumer confidence and trust is boosted by being able to see the actual product inside the package.



imagery

consumers felt imagery directly related to, or of the actual product, made the package design appealing at the point of purchase.

material

recycled materials, paper, and glass are the top three mateirals named in the survey results as "healthy".

fonts

clean, minimal sans-serif fonts align with the concepts found in the research. Secondary fonts could include a simple serif and a hand-writing style for variety

text style

alignment of text should be left, block style with lowercase in all headlines and subtitle lines. Caps can be used in body copy for ease of reading

the voice of copywriting expresses the point of view of the brand. It is the consistent expression of brand values using simple words, is to the point, honest, and human. It highlights health and nature, but most of all, it reassures customers that they are not being mis-led. It builds trust and helps consumers see that the product can help them build the type of world they seek.

voice

tone is the emotional inflection to the message on any given package design. It is deeply related to and meshed with voice, but is situational based on the communication at hand. Descriptors should be authentic, accurate, and honest. Message and approach should be personalized when possible, conversational, and in everyday language. Humor is a plus, but the underlying message, should inspire trust in the brand promise.

tone

Food Packages That
Make Choosing Better, Easy...

samples

visual imagery on how to apply
style guide concepts

These Images Have Been Removed to Comply With Copyright

In this sample mock up, the top image is similar to a current national brand in overall look and feel. The bottom image applies the concepts from the style guide of:

- Minimalism/Clean Design
-Light Color Scheme
-Image of Food Product Inside
- Nature Imagery
-Suggested Fonts
-Key Word Application /Voice

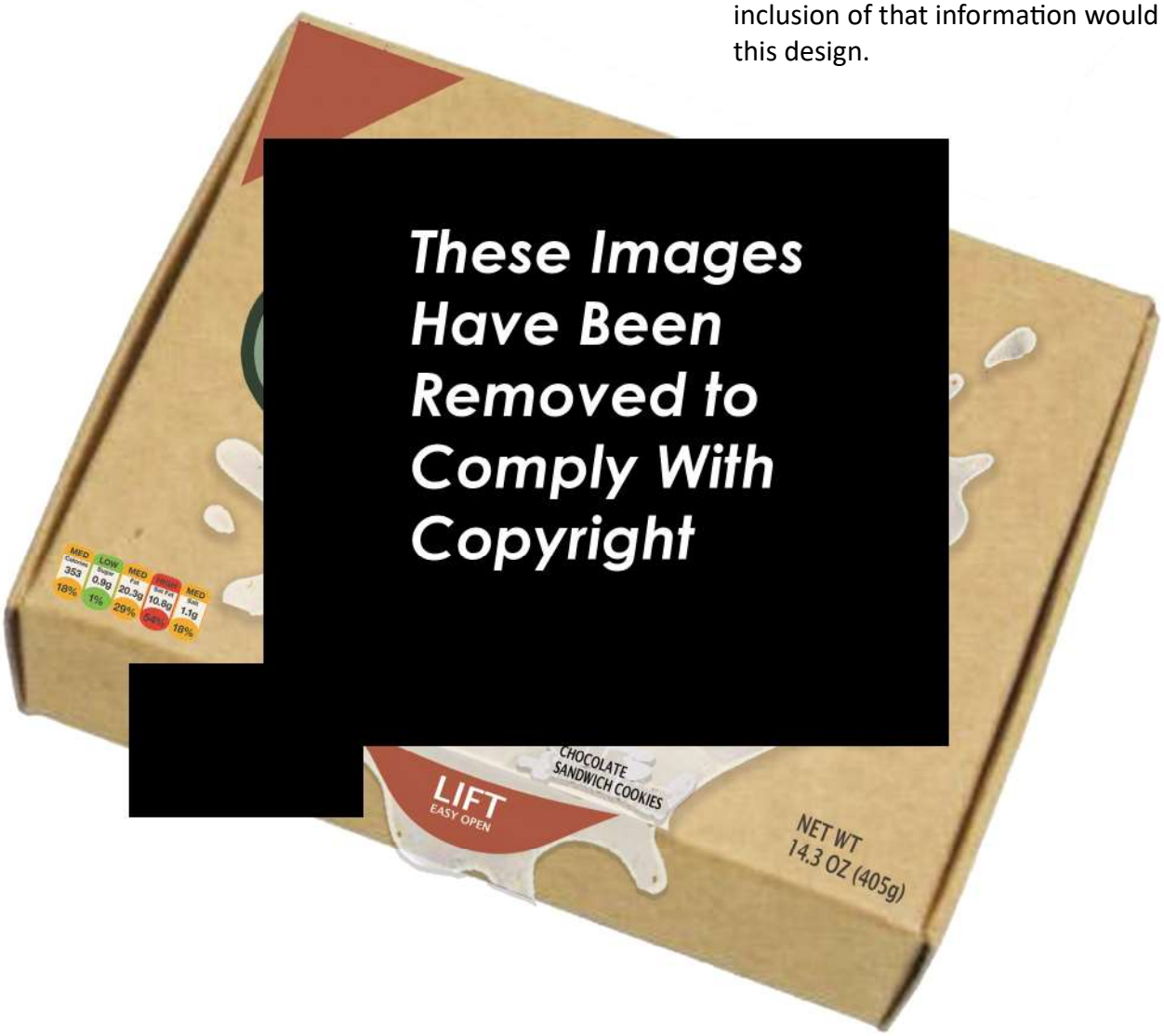
This shows application of many concepts found in the style guide, but the existing logo and brand color scheme is maintained.

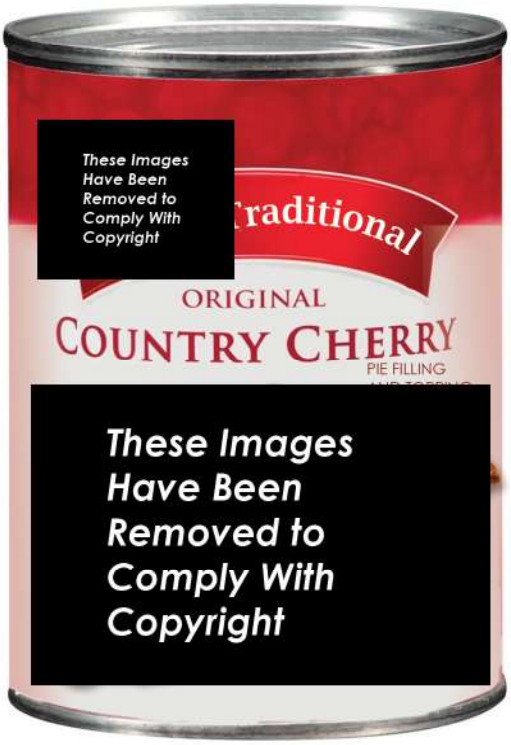
In this sample mock up, the top image is similar to a current national brand in overall look and feel. The bottom image applies the concepts from the style guide of:

- Natural/Recycled Packaging Materials
- Muted Color Scheme
- Natural Color Scheme
- Package Shape (made more square)
- Nutritional Label on Front

This shows the application of just a few concepts fromthe style guide, but allows the look and feel of the main graphic elements of the brand to stay in place and relatively unchanged.

If this brand modified its process or ingredients to have a substanciated health benefit, inclusion of that information would enhance this design.

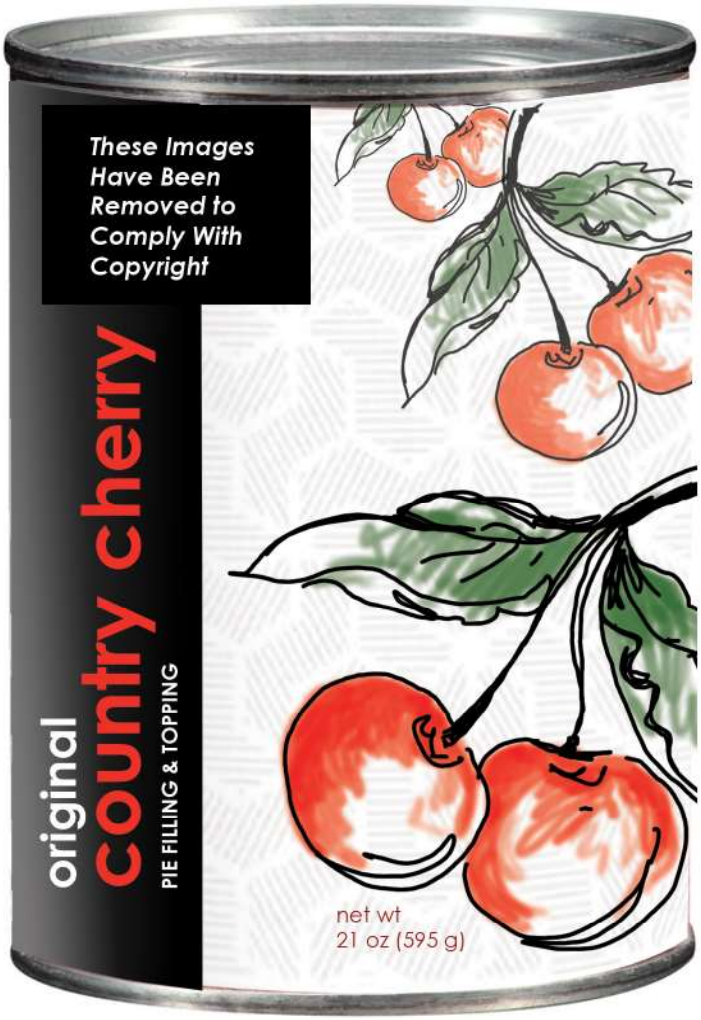




In this sample mock up, the top image is similar to a current national brand in overall look and feel. The bottom image applies the concepts from the style guide of:

-Minimal/Clean Design
- Light Color Scheme
- Sans-serif Fonts
- Text Style/Alignment
- Imagery Related to Product/Nature

This example only keeps the existing logo from the original image. The remiander of the package design has been modified to fit the concepts put forward in the style guide. This could be applied to any fruit or vegetable product in a similar fashion.



style guide
image credits

These 2 items have been removed visually for copyright:

Milinski, Paul. "Pie PNG Cherry"ClipArtKey. Found August 9, 2020 at https://www.clipartkey.com/view/JRhiRx_download-pie-png-cherry-picture-for-free-happy/

Onyxprj. Vector Stock/20384747. Found July 26, 2020 at: https://www.vectorstock.com/royalty-free-vector/empty-food-packages-white-boxes-and-containers-vector-20384747

All other images are the property of Shelley Tate Garner.

Chapter 5
Conclusions

The survey presented to respondents in this study was comprised of 48 questions. 17 questions were specific to information design and 31 questions to graphic design. The information design questions focused on key word associations, taste knowledge, brand authenticity, and buying habits. The graphic design portion gave a range of questions dealing with color, shape, package materials, transparency of packaging, and 24 questions related to 16 design prototypes visually presented to participants. All questions presented were in the context of "health" being represented in packaging design and the influence of these elements on consumer choice of product at the point of purchase.

The goal of this research was to define a graphically represented visual solution of food packaging design that, based on research, could influence consumers to make healthier food choices at the point of purchase.

Archival research gave many insights as to factors that could infer health and package design's influence on consumer choice of food products. The archival research informed the line of questioning for the primary research survey and the visual prototypes presented within it. Overall results of the survey were in line with the findings of the archival research, but the resulting results also gave current and updated response trends and brought together the elements of both information and graphic design, as well as some buying trend/consumer retail response information.

Graphic Design

In the battery of graphic design questions, respondents were asked about color's association with health in questions 1 and 2. The highest level of response as to colors that conveyed a feeling of "health" were "green" and "green color combinations" gathering 69% of total responses. Colors conveying the concept of "unhealthy" were "red" and "yellow" gathering 28% and 11% respectively.

Package shape was explored in questions 3 and 4. A wide variety of responses were received as respondents could type in their answer(s) instead of choosing from a list of pre-determined shapes. The package shapes respondents felt most conveyed the idea of "health" were "round/circle/oval" with 24% of the total responses and "square" with an additional 20% of responses. When asked about "unhealthy" package shapes, the top response was "rectangle" with 18% and "circle/round" with 15%. With round shapes appearing as results in both questions, it does seem the trend was that those shapes were considered "healthy" by more respondents than "unhealthy".

Package materials were discussed in questions 10 and 11 of the survey. Respondents had the options of "Other, Styrofoam, Metal, Recycled Materials, Glass, Paper, and Plastics" for both questions. In conveying the feeling of "health" respondents selected "recycled materials" (37%), "paper" (20%), and "glass" (25%). In conveying the feeling of "unhealthy" respondents chose "Styrofoam" (17%), "plastics" (17%), and "metal" (9%).

Package transparency was also considered in question 16. When asked if seeing the actual product through the package influenced interest to purchase, respondents responded favorably with 49% saying “very much” and 34% saying “somewhat”.

The design prototype section of the survey contained 6 questions about each of the 4 design categories. Across all 4 prototypes, the importance of package color ranked as either “very important” (34%) or “important” (31%) by a majority. The physical material of the package was considered “very important” by 23% and “important by 31%. A “neutral” response was indicated by 30% making the margin between response much narrower on this question. Words and visual messaging elements relating to the concept of health were considered either “very important” (30%) or “important” (33%) by most respondents across all prototypes. “Neutral” also scored 25% of the overall response on this question.

Of the top ranked prototype design in each category, respondents were asked if the design would appeal to them at the point of purchase. 64% responded with yes. When asked what they found most appeal about the design, the overall top responses were “color” with 15%, “graphic design” with 15%, “simple/minimal/clean/Fresh” with 11%, and “image” with 19%.

Information Design

In the information design portion of the survey, several questions were posed related to key words, messaging, buying habits, and the last trip to the grocery store. One of the most pointed questions in this section of the survey asked if package design influenced product choice during the last trip to the grocery store. 43% of respondents said “somewhat” and 40% said “no”. This was one of the closest margins between response from the entire survey despite the large number of varied responses received across other lines of questioning.

Respondents were asked about “healthy” key words. Overall, the top key words provided in the type-in response were: “organic” with 36%, “fresh” and “natural” with 1%. All other responses scored as less than 1% of the total but included no GMOs, whole grain, no added…, low sodium, fruits, vegetable, healthy, and nutritious. When asked about “unhealthy” key words respondents replied at 28% “sweet/sugar/candy/high fructose/corn syrup”. “processed/pre-packaged” received 1% and “unknown also received 1%. Other responses gather less than 1% each included: preservatives, artificial, plastic, out of date, added flavor, high fat/saturated fat, gluten, fast, cheese, family size, indulgent, rich, loaded, and creamy.

Considering the high response rate found in the archival research to the words “light”, “organic” and “natural”, two additional questions were asked about these words specifically. When asked if the words “light”, “organic” and “natural” influenced respondents’ thoughts on if a product was healthier than a competing product, 54% said “yes” and an additional 39% said “somewhat”. When asked if these same words influence their actual purchase of a product, 54% said somewhat. When asked if the words “light”, “organic” and ‘natural” had any negative connotations, 55% reported “no”, 42% said “somewhat” and only 3% said “very much”.

When asked about brand authenticity, honesty, and realism, 52% responded that it was “very” important. 39% considered it “somewhat” important and 8% did not feel it was important at all. Respondents were asked if they valued honesty and realism in the food package message and imagery in question 14. 54% responded with “very much”, 34% with “somewhat” and 12% with “no”. When asked how they felt if a product they purchased was not shown or messaged as shown on the exterior packaging top responses were “disappointed” (25%), “deceived/dishonest” (16%), “angry/horrible/upset” (15%), and “frustrated” (9%). Along the same line of questioning, respondents were asked what their expectation was of a health branded product. The fill-in response with the highest totals were “better for me/nutritious” (19%), “natural/not processed” (18%), and “honest/authentic/truth in advertising” (12%).

Questions 12, 21, and 22 asked about buying habits related to product taste. When asked if colors, shapes, key words, or package materials influence product choice if you have no previous taste knowledge of it, 46% respondents replied with “somewhat”. The responses between “very much” and “no” only varied by 4 responses. Question 21 asked “during the last trip to the grocery store, did you purchase a product you had never bought or tasted before?” 51% responded with “no”, 30% with “somewhat, and 19% with “very much”. Question 22 follows up with” if so, did the package design influence your choice?” 51% reported “no”, 36% reported “somewhat” and 13% reported “very much”. Ad question 23 concludes the taste portion in asking if the respondent chose the unfamiliar product based on its healthfulness compared to other competing products. The response was very evenly divided with 45% responding “no” and 42% responding “somewhat”.

Respondents were asked if health was the focus of their purchasing habits, 58% responded with yes and 42% said other factors were more important to them currently. When asked what would influence them to try a health-branded product based on the exterior packaging, top three responses were “graphic design/package design” (21%), “ingredient list/ health claim/nutritional label” (19%), “image of food” (15%).

The target demographic for this survey is women ages 20-55, however they often purchase food items for children and other family members. It was deemed important to ask if use of characters from popular culture on the package influenced their choice of purchased products. A strong 77% reported “no”. It was deemed important to segregate the use of pop culture as it related to perceived healthfulness in the design of this research as it relates to the final visual solutions proposed.

In conclusion, the respondents of the survey in this study had strong feelings about what conveyed “healthfulness” in package design. Green or nature-inspired color pallets, simple clean design formats, round and square shapes, and emphasis on natural or recycled materials all scored very highly on survey results. Images of the product, transparent windows showing the actual product, or images of key ingredients of the product influence consumer choice as well.

However, buying habits, especially unfamiliarity with product taste, could have negative ramification on whether a package design could sway them to try a new product. Authenticity and honesty in the packaging was also very important to consumers.

The final visual solution package concept suite presented in the previous chapter brings together the highest scoring components from the research. These visual samples exemplify what respondents described as being most influential in a “healthy” package design. The style guide refined the information into key points so they could be applied across a spectrum of many products in whole or in part. It is the hope that this research could be applied to ultimately better society and create a healthier public.

12 I appeal to you therefore, brothers, by the mercies of God, to present your bodies as a living sacrifice, holy and acceptable to God, which is your spiritual worship.

- Romans 12:1

Appendix 1
Online Survey Questions

Food Packages That Make Choosing Healthy, Easy
Thank you for participating in this research survey for the MFA thesis project of Shelley Garner.

CONSENT FORM
Food Packages That Make Choosing Healthy, Easy
Shelley Tate Garner
Liberty University
School of Visual and Performing Arts

You are invited to be in a research study of food packaging design. You were selected as a possible participant because you meet the target audience criteria of being female, aged 25-50 and the primary food purchaser for yourself and your family. Please read this form and ask any questions you may have before agreeing to be in the study.

Shelley Tate Garner, a Master of Fine Arts candidate in the School of Visual and Performing Arts at Liberty University, is conducting this study.

Background Information: The purpose of this study is to evaluate food packaging design and attitudes toward what elements of package design promote healthy choices at the point of purchase.

Procedures: If you agree to be in this study, I would ask you to do the following things:
1. Participate in an anonymous, on-line survey regarding food packing design elements.
The estimated time to complete the first portion of the research is approximately 20 minutes or less.

2. As part of the survey, you will be asked to visually evaluate four groups of package design samples, 16 total, and give feedback based on which in each category best personifies “healthy” in a visual sense, as well as general feedback on the overall designs via multiple choice questions in an on-line format. The estimated time to complete the second portion of the research is approximately 20 minutes or less.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.
The results of this study may help to improve the health of society at large when applied within the food packaging industry.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If
you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please close out the on-line survey browser window prior to submitting the completed survey. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Shelley Tate Garner. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at sgarner9@liberty.edu. You may also contact the researcher's faculty chair, Monica Bruenjes, at mabruenjes@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Please Enter the date in the field below as your informed consent to participate in the study :

_____

The first 3 questions will determine if you meet the target demographic for the research. By answering the first three questions and continuing to complete the survey, you give your informed consent to participate in this research project. There is no compensation for completing this survey. All information gathered is for research purposes only. For questions about the research, please contact sgarner9@liberty.edu .

*1. Are you female?
Yes
No

2. Are you between the ages of 25 and 50 years of age?
*Yes
No

*3. Are you the primary person making food purchasing decisions at the grocery store for yourself and/or your family?
Yes
No

_____

*4. Which colors convey the feeling of “healthy” in the food product packaging of products you purchase or view at the grocery store?

*5. Which colors convey the feeling of “unhealthy” in the food product packaging of products you purchase or view at the grocery store?

*6. Which package shapes convey the feeling of “healthy” in the food product packaging of products you purchase or view at the grocery store?

*7. Which package shapes convey the feeling of “unhealthy” in the food product packaging of products you purchase or view at the grocery store?

*8. Which key words convey the feeling of “healthy” in the food product packaging of products you purchase or view at the grocery store?

*9. Which key words convey the feeling of “unhealthy” in the food product packaging of products you purchase or view at the grocery store?

*10. Do the words “light”, “organic” or “natural” influence your thoughts about products being healthier?
Very Much
Somewhat
No

*11. Do the words “light”, “organic” or “natural” influence your overall purchasing of food products?
Very Much
Somewhat
No

*12. Are there any negative connotations to you about the words “light”, “organic” or “natural” in product packaging?
Very Much
Somewhat
No

*13. Which package materials convey the feeling of “healthy” in the food product packaging of products you purchase or view at the grocery store? Please select all choices that apply.
Plastics
Paper
Glass
“Recycled” Materials
Metal
Styrofoam
Other

*14. Which package materials convey the feeling of “unhealthy” in the food product packaging of products you purchase or view at the grocery store? Please select all choices that apply.
Plastics
Paper
Glass
“Recycled” Materials
Metal
Styrofoam
Other

*15. Do colors, shapes, key words, and/or package materials influence your choice in product if you do not have any previous taste knowledge of it?
Very Much
Somewhat
No

*16. How important do you feel it is that a product’s packaging convey the popular understanding of a brand’s image and trustworthiness of the brand as promoted to users?
Very Much
Somewhat
No

*17. Do you place value on honesty and realism in package messaging and imagery?
Very Much
Somewhat
No

*18. How do you feel when you purchase a product and it is not as shown or messaged on its exterior packaging?

19. Does seeing the actual product through the packaging (transparency) make you more or less interested in purchasing it?
Very Much
Somewhat
No

*20. What are your expectations of health-branded food products?

*21. Do you focus your purchasing on health, or are other factors more important?
Health
Other Factors

*22. What would influence you to try a health-branded product based on its exterior packaging alone?

*23. During your last trip to the grocery store, to what degree did a package design influence your choice of brand or product?
Very Much
Somewhat
None

*24. During your last trip to the grocery store, did you purchase any products you have never bought or tasted before?
Many
A Few
None

*25. If you answered yes to question #24, did the package design influence your choice over a competing similar product?
Yes
Somewhat
No

*26. If you answered yes to question # 24, did you choose this product based on healthfulness compared to competing similar products?
Very Much
Somewhat
No

*27. Did the use of known characters from popular culture influence your choice of products during your last shopping trip?
Yes
Somewhat
No

Which bottle design do you feel best conveys “healthfulness” of the product inside?

In relation to your choice of design above, please rank how important the color of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the physical material of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the words and visual messaging elements of the package are in relating the concept of health.

Would this design appeal to you as a consumer at the point of purchase in the grocery store?

What do you find most visually appealing about this design?

Other comments about the design(s) above:

Which bag design do you feel best conveys “healthfulness” of the product inside?

In relation to your choice of design above, please rank how important the color of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the physical material of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the words and visual messaging elements of the package are in relating the concept of health.

Would this design appeal to you as a consumer at the point of purchase in the grocery store?

What do you find most visually appealing about this design?

Other comments about the design(s) above:

Which can design do you feel best conveys “healthfulness” of the product inside?

In relation to your choice of design above, please rank how important the color of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the physical material of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the words and visual messaging elements of the package are in relating the concept of health.

Would this design appeal to you as a consumer at the point of purchase in the grocery store?

What do you find most visually appealing about this design?

Other comments about the design(s) above:

Which box design do you feel best conveys “healthfulness” of the product inside?

In relation to your choice of design above, please rank how important the color of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the physical material of the package is in relating the concept of health.

In relation to your choice of design above, please rank how important the words and visual messaging elements of the package are in relating the concept of health.

Would this design appeal to you as a consumer at the point of purchase in the grocery store?

What do you find most visually appealing about this design?

Other comments about the design(s) above:

Appendix 2

IRB Documents

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

February 7, 2020

Shelley Garner
IRB Exemption 4126.020720: Food Packages that Make Choosing Better, Easy

Dear Shelley Garner,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

> (2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if…the following criteria is met:
>
> > (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

[redacted]

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

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IRB Exemption 4126.020720: Food Packages that Make Choosing Better, Easy

IRB, IRB <IRB@liberty.edu>
Fri 2/7/2020 7:30 AM

To: Garner, Shelley <sgarner9@liberty.edu>
Cc: Bruenjes, Monica A (Studio and Digital Arts) <mabruenjes@liberty.edu>; IRB, IRB <IRB@liberty.edu>

3 attachments (373 KB)
Change in Protocol_Template.docx; Garner_4126Exemption_02_20.pdf; Garner_4126StampedConsent.pdf;

Dear Shelley Garner,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

> (2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if…the following criteria is met:
>
> > (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Please retain this letter for your records. Also, if you are conducting research as part of the requirements for a master's thesis or doctoral dissertation, this approval letter should be included as an appendix to your completed thesis or dissertation.

Your IRB-approved, stamped consent form is also attached. This form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix 3
Style Guide Image Credits

Milinski, Paul. “Pie PNG Cherry”ClipArtKey. Found August 9, 2020 at https://www.clipartkey.com/view/JRhiRx_download-pie-png-cherry-picture-for-free-happy/

Onyxprj. Vector Stock/20384747. Found July 26, 2020 at: https://www.vectorstock.com/royalty-free-vector/empty-food-packages-white-boxes-and-containers-vector-20384747

** These two images have been removed to comply with copyright.

All other images are the property of Shelley Tate Garner.

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