

Process Book:

Food Choices,
Motivation
& Well-Being

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BFA Thesis Project: Process Book

September 2019 to May 2020

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PROJECT DESCRIPTION

PROJECT DESCRIPTION

OVERVIEW

Throughout history, food has been thought of as a type of medicine. However, due to the addition of fast-food restaurants, chemical additives and preservatives, and artificial flavors within the last 100 years or so, many foods are causing us more harm than good. Recent research in this area has focused on finding ways we can use food to supplement our health and ways we can use it to prevent, treat, and even cure many different ailments.

GOAL

The goal of this project was to create a research study focused on the food choices, motivational factors to eat healthy, and overall well-being of young adults, ages 18 to 30. Many individuals experience different life transitions, environment and situational changes, and unique circumstances that all inevitably influence eating habits in different ways over the course of early adulthood.

The results from the survey are displayed visually with accompanying explanations to analyze these findings and share information from previous research on similar topics.

MOTIVATION

I was motivated to complete this project because of my own interests in nutrition, health, and wellness, and I wanted to learn more about the behaviors of other young adults in these areas. Also, my coursework in psychology and exposure to research studies and data sparked interest to go through the process to create my own small-scale survey, collect raw data, make sense of it, and represent it visually.

THESIS I

August 2019 to December 2019

- 7 P's & Early Questions
- Thesis Statement
- Early Research
- Visual Exploration
- Initial Drafts & Ideas
- Survey Development
- Pecha Kucha
- Design Inspiration
- Outreach & Feedback
- Thesis I Final Review

THESIS I

INITIAL IDEAS

I came into Thesis I with a general idea of what I wanted to focus on. I knew I wanted to do something about health & wellness, nutrition, cooking, food accessibility, or a topic related to these areas of interest. Originally, my main focus and idea was to create an illustrated cookbook, but as the semester went on and I narrowed my focus, that idea shifted to a research study in order to collect data that I could create data visualizations out of.

THESIS I IDEAS

I spent the beginning of Thesis I reading about food, nutrition, the way our bodies are affected by what we eat, and published research related to these topics. I watched beautifully designed motion graphics videos on related topics from TED-Ed, learned about food deserts and the ways that many people struggle to access healthy foods, and the role different foods can have in promoting physical and mental health.

As I was exposing myself to all of this information, my mind went in a million different directions. There were so many interesting topics that I could focus in on, but it took me a few months to lay out a clear plan for myself.

EARLY IDEAS: 7 P'S

PURPOSE:

Why am I proposing this project?

This is a topic that has become extremely important to my every day life. Learning about the different properties and benefits of various foods, herbs, teas, etc. has completely changed the way I eat and live. When I began thinking of food as medicine and fuel for my body, my relationship with food, cooking, and eating changed in really healthy ways. I became so interested in how we can use food to help our bodies, rather than hurt them.

There is so much information out in the world today about health-related topics, and it can be difficult to navigate through it all. It's so important to be more aware of what we put in our bodies every day, and I want to share helpful information on this topic with people in a straight-forward way.

PRODUCT:

What specific artifacts will you produce?

I am hoping to produce a book of information, illustrations, and photographs on different foods & their medicinal properties combined with various recipes for healthy soups, desserts, meals, snacks, etc. Throughout the recipe section, I can point out different ingredients that contain certain vitamins or known medicinal properties and highlight these aspects. I also would like to include some information of the different systems of the body, what vitamins and minerals target specific issues, and some simple information on antioxidants, free radicals, etc. I also would like to produce a smaller piece to this, visualizing data from some psychology research on eating habits, importance of eating healthy, awareness and knowledge on the topics, in addition to information on how food can affect mood. This might be interesting to show in a smaller, more informal zine-like form.

PEOPLE:

Who will help you with this project, and what role will they play?

For the psychology research aspect, Professor Winograd will help me a bit. I spoke with her briefly last week about the potential for research. She explained that the research we will be doing in our Psychological Research Methods class will be on a smaller scale, and will likely not be enough for what I want to accomplish. But, she said she would be willing to help me go through the HREB process so that I can gain information from a wider audience. I have to speak with her more in depth to figure out specifics. I am also hoping to also speak with a nutritionist, dietitian, or someone else involved in this field to make sure that my information is accurate and correct.

PROCESS:

How will you engage audiences with this project?

When I started becoming more aware of the benefits of various foods, it became a part of my every day life. Through some recent, personal experiences with minor health issues and somewhat unhelpful doctors, I took matters into my own hands to do my own research and see what I could do on my own, in a natural way, to boost my health on my own. I want people to just be aware that there is so much they can be doing everyday, in really simple ways, to help prevent and to some extent even treat a wide range of health issues through the types of foods they consume. I hope to present information in a clear way so that people are not overwhelmed or confused about complicated topics, and so that they can easily integrate it into their lives too.

PITFALLS:

What are the risks in this project, and how will you address them?

One of my concerns is the research aspect of this project and the timing of it. It seems like it will be a huge process and I hope that I'll be able to secure everything with it. I also am worried that I will try to cram too much into the book aspect and not have time to finish it all. I want the book to be visually appealing of course, and I also worry that I will have a hard time with illustrations.

PREP:

What would be useful to do in advance of executing the project?

It will be important to realistically see what I will be able to get done over the course of the year and plan out a timeline, especially with the research aspect. Making sure everything is feasible will help prevent frustrations later on. I have to make sure not to overextend myself.

PRACTICAL CONCERNS:

What are some of the logistics you need to address?

I need to speak more in depth with Professor Winograd on the logistics of getting research approved through the SUNY New Paltz HREB board. Once I have a clear timeline and idea of what this task will entail, I can start work on it. I will need to make sure that the research is carried out and data is collected with enough time to complete the design aspects of it.

EARLY QUESTIONS

HOW AM I THE AUTHOR OF MY THESIS?

I am the author of my thesis because I am collecting, researching, and compiling information on a variety of subjects. Though a lot of the information will be from other sources, an author still has the responsibility of putting information together in an original way to create something new and interesting.

HOW AM I THE DIRECTOR?

The director visualizes the artistic aspects and plays a large role in the creative aspects. Once the information is researched and gathered, it will have to be displayed in a visually appealing way.

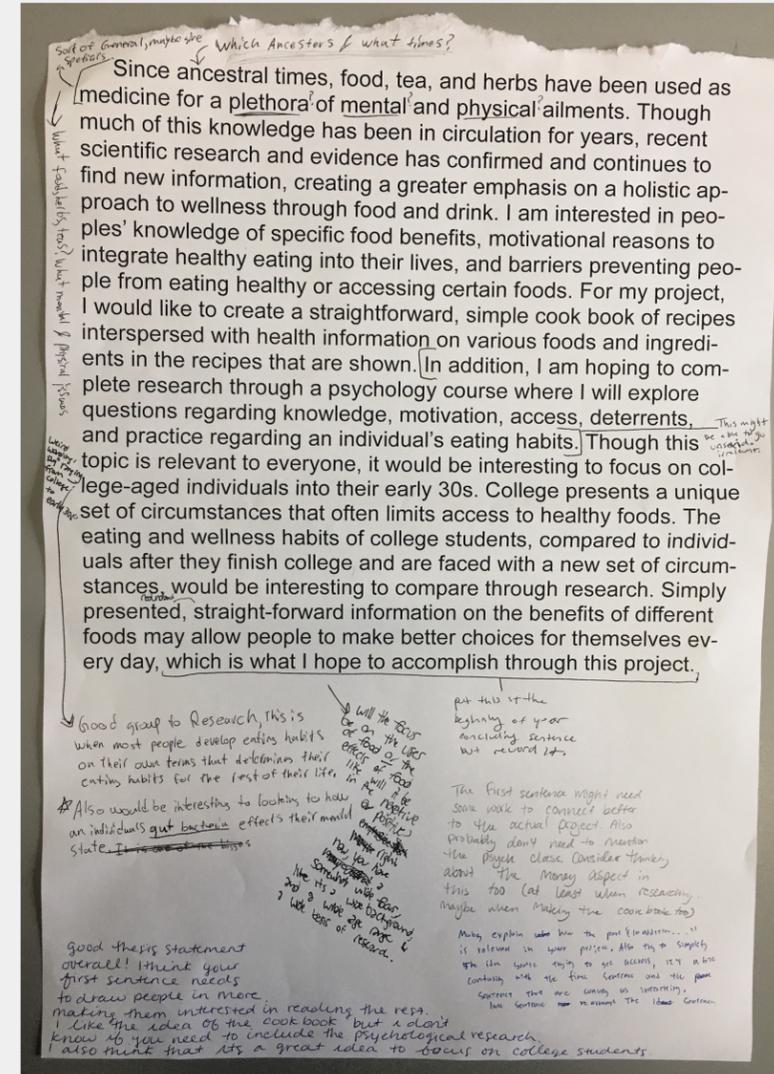
HOW AM I THE PRODUCER?

The producer oversees the entire process. This is such a unique process that I've never been through before, where basically every stage and aspect of the project is up to us. We get to decide the subject and information, how to visually convey this information, and we work on every process and step along the way, overseeing our own work.

HOW AM I CONSIDERING OTHERS BEYOND MYSELF IN RELATION TO MY PROJECT?

After giving more thought to how can this project extend to people beyond myself, I am thinking about maybe adding a supplemental section in the book, or making smaller zine-like artifacts that can offer information on affordable, common foods, such as apples or oranges, for example. These are just 2 fruits that are fairly common and very affordable, and maybe if people knew how many benefits they held, they may be more inclined to choose them over something less healthy. Maybe also including some tips on ways to save money on healthier foods, save time by meal prepping, etc. could be an interesting aspect.

THESIS STATEMENT DEVELOPMENT

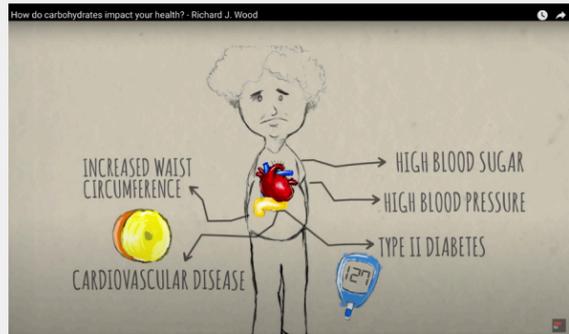
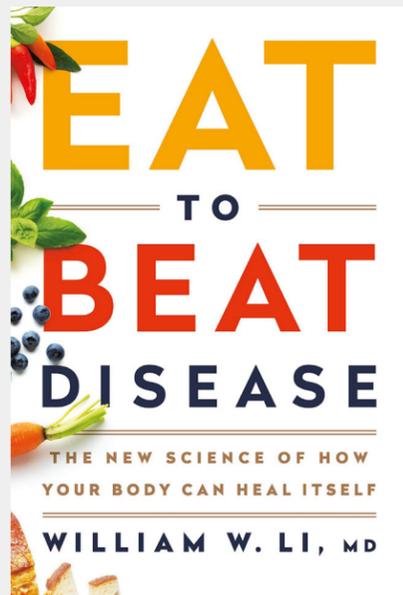


FEEDBACK FROM CLASSMATES

- * The first sentence might need some work to connect better to the actual project.
- * I think your first sentence needs to draw people in more making them more interested on reading the rest. I like the idea of a cookbook but I don't know if you need to include the psychological research. I also think that it's a great idea to focus on college students.
- * Will the focus be on the uses of food or the effects of food. Right now, you have a somewhat wide focus. It's a wide background and, a wide age range, and a wide basis of research.
- * Good group to research. This is when many people develop eating habits on their own terms that determines their eating habits for the rest of their lives.

THESIS I RESEARCH

This is a collection of some of the books I read through and videos I watched related to food and nutrition. I especially enjoyed the Ted-Ed videos. They were straight-forward, easy to understand, and the motion graphics were amazing to watch. The videos were great for getting a solid understanding of the way different foods affect our bodies.



How do carbohydrates impact your health?



What is a food desert?



How does sugar affect the brain?



How do vitamins work?



How the food you eat affects your brain



How the food you eat affects your gut

THESIS I RESEARCH

EARLY RESEARCH

As the fall semester went on, I still wasn't completely sure of what my exact project would be, but I began looking at more research that has already been done on food, nutrition, physical and mental well-being, how accessibility and motivation affects the types of foods people consume, and how different age groups and demographics are affected in various ways.

I found a lot of literature on the eating habits of college students and the many factors that contribute to their eating patterns, and I wanted to make this a focus of my project as well. Looking at reports on large-scale surveys of eating habits and food behaviors was helpful in getting a general idea of patterns and data that has already been found. It also helped me get an idea of what the most researched topics in this area are.

Brief Reports

Food Environments in University Dorms: 20,000 Calories per Dorm Room and Counting

Melissa C. Nelson, PhD, RD, Mary Story, PhD, RD

Background: Few young adults meet national dietary recommendations. Although home food availability likely has important influences on dietary intake, little research has examined this issue among young adults. The objective of this research was to conduct a detailed, observational assessment of food and beverages available in college-student dormitory rooms.

Methods: Dormitory-residing students (n=100) were recruited from a large, public university. Research staff completed a detailed inventory of food and beverages in the dorm rooms, including nutrient contents and purchasing sources. Data were collected and analyzed in 2008.

Results: The mean number of food and beverage items per participant was 47 (range: 0–208), with 4% of participants not having any food or beverages. More than 70% of students had each of the following types of items: salty snacks, cereal or granola bars, main dishes, desserts or candy, and sugar-sweetened beverages. Fewer students had low-calorie beverages, fruits and vegetables, dairy products, tea/coffee, and 100% fruit/vegetable juice. The average number of calories per dorm room was 22,888. Items purchased by parents had a higher calorie and fat content than items purchased by students.

Conclusions: Findings indicate that students maintain a wide array of food and beverages in their dormitory rooms. Parents purchased a substantial amount of food for their children's dormitory rooms, and these food items were less healthful than the food that students purchased. The foods observed in college students' living spaces may have an important impact on eating habits. Overall, young adult-oriented obesity prevention efforts are needed, and improving the various facets of campus food environments may mark an important component of such strategies. (Am J Prev Med 2009;36(6):523–526) © 2009 American Journal of Preventive Medicine



Disparities and access to healthy food in the United States: A review of food deserts literature

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ABSTRACT

Increasingly, studies are focusing on the role the local food environment plays in residents' ability to purchase affordable, healthy and nutritious foods. In a food desert, an area devoid of a supermarket, access to healthy food is limited. We conducted a systematic review of studies that focused on food access and food desert research in the United States. The 31 studies identified utilized 9 measures to assess food access. Results from these studies can be summarized primarily into four major statements. Findings from other countries offer insight into ways, in which future research, policy development and program implementation in the U.S. may continue to be explored.

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Keywords:
 Food desert
 Food access
 United States
 Socioeconomic status
 Race/ethnicity

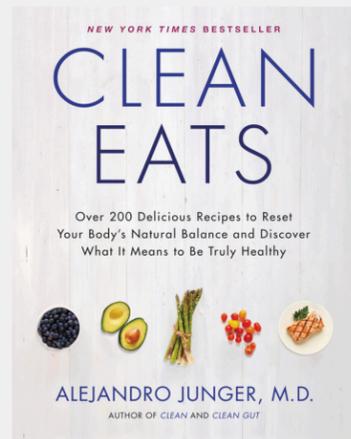
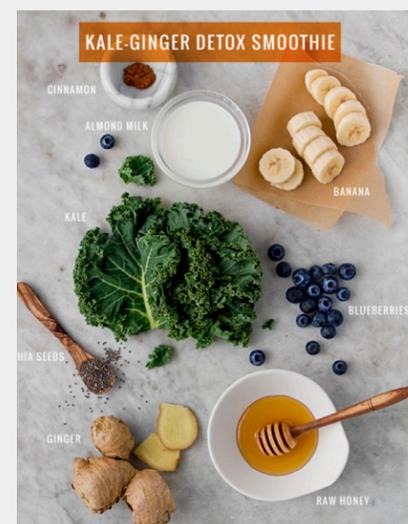
VISUAL EXPLORATION

I also began looking at magazines, cook-books, advertisements, print and digital resources for information about food, nutrition, cooking, and recipes. I wanted to see how things were being visually presented, the types of colors and fonts that were being used, and the way photography, illustration, and text were being combined in different ways. I looked at a wide range of different aesthetics, but many of my favorites used neat grids with real photography.



VISUAL EXPLORATION

I visited my grandparents early in September, and my grandmother's thriving garden provided the perfect opportunity to gather photographs of a wide range of healthy vegetables. Although I still didn't know exactly what my project was going to be at that time, I wanted to gather as many references as I could in case I could use them later on in the semester.



INITIAL IDEAS & DRAFTS

Throughout September and early October, I continued looking at different design references for cookbooks and health & nutrition magazines. I began drafting some layout, font, and color palette ideas for cookbooks and zines. I gathered many of my own recipes and content and worked with this.

I still wasn't completely sure what direction my project was going to go in, but this was a period of exploration with design, and I wanted to see how the process of gathering content, illustrating, and setting typography would go if this were to be the route that I ended up pursuing.

<h3>PUMPKIN CRANBERRY BREAD</h3> <p>Whisk 1 cup each whole wheat and all-purpose flours. 2 tsp baking powder, 1 tsp pumpkin pie spice, 1/2 tsp salt, and 1/4 tsp baking soda in a bowl. Stir in 1 cup dried cranberries. Whisk 1 cup pumpkin puree, 2 large beaten eggs, 1/2 cup light brown sugar, and 1/4 cup each pure maple syrup, vegetable oil, and orange juice in another bowl. Stir flour mixture into pumpkin mixture until just combined. Spoon into a 9x5 inch loaf pan coated with cooking spray. Bake at 350 degrees F until wooden pick comes out with crumbs adhering, about 1 hour. Cool in a pan 15 minutes. Remove from pan and cool on rack before slicing. Serves 8.</p>	<p>Food Benefits:</p> <p>Small illustration of specific ingredient description & info</p> <p>Small illustration of specific ingredient description & info</p> <p>Small illustration of specific ingredient description & info</p>	<h3>CHESTNUT MUSHROOM SOUP</h3> <p>Roast 1 pound chestnuts, remove and discard shells, chop them. Roast at 350 about 35 minutes. Chop and chop it in 2 medium mushrooms and 2 oz. shiitake mushrooms. Heat 1 tablespoon butter and 1 tablespoon olive oil in a stock pot over medium-high heat. Add chopped mushrooms & season with salt and pepper. Cook until they start to brown, about 5 minutes. Add 1 small chopped onion, 1 clove garlic, and 8 sprigs fresh thyme. Reduce heat to medium-low and cook until onions are translucent, about 8 minutes. Add chestnuts and cook for 5 minutes. (Or 25 minutes if only roasted chestnuts 5-10 minutes.) Add 6 cups low sodium chicken stock and 2 cups water. Place heat to high and bring to a boil. Reduce heat and simmer until chestnuts are falling apart and tender about 1 hour. Remove thyme sprigs, let cool and puree. Season with salt and pepper, and 1/2 cup cream, heat before serving. Can freeze and thaw overnight.</p>	<p>Food Benefits:</p> <p>Small illustration of specific ingredient description & info</p> <p>Small illustration of specific ingredient description & info</p> <p>Small illustration of specific ingredient description & info</p>
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<h3>PUMPKIN SOUP</h3> <p>INGREDIENTS</p> <ul style="list-style-type: none"> 1 large minced onion 2 cups chicken stock 1 1/2 cups parmed cooked pumpkin 1/2 teaspoon dried oregano 1/4 teaspoon hot pepper sauce 1/4 cup toasted pumpkin seeds <p>DIRECTIONS</p> <ol style="list-style-type: none"> In a 2 quart saucepan, cook the onion in 2 tablespoons of the stock until limp. Add the remaining stock, pumpkin, oregano, and hot pepper sauce. Simmer for 15 minutes. Some sprinkled with pumpkin seeds (optional). 	<p>HEALTH HIGHLIGHTS</p> <p>PUMPKIN One cup (100 grams) of cooked pumpkin contains vitamin A, 245% of the Reference Daily Intake (RDI). High antioxidant content. Contains vitamins A, C and E, all of which are helpful for the immune system.</p> <p>ONION High in vitamin C, a nutrient involved in regulating immune health, collagen production, tissue repair and iron absorption. High antioxidant content.</p>	<h3>GARLIC AND POTATO SOUP</h3> <p>INGREDIENTS</p> <ul style="list-style-type: none"> 2 medium leeks 2 cups stock 1 small potatoes, cubed 4 cloves garlic, minced 1 cup evaporated skim milk 1/4 cup shredded cheese 2 tablespoons crumbled feta cheese <p>DIRECTIONS</p> <ol style="list-style-type: none"> Preheat and discard the high green leaves and root ends of the leeks. Cut leeks in half lengthwise. Wash well to remove any dirt from between the layers, then slice thinly. In a 2 quart saucepan, combine the leeks, stock, potatoes, and garlic. Bring to a boil. Reduce heat to medium-low, cover loosely, and simmer until the potatoes are tender, about 15 minutes. Stir in milk and cheese. Simmer just until heated through. Place the cheese in a bowl. Reheat with cold water to remove excess salt. 	<p>HEALTH HIGHLIGHTS</p> <p>LEEK Leeks are a good source of vitamins A, C and K. They also contain minerals such as iron, which is important for red blood cells and manganese. Blood source of dietary fiber.</p> <p>SWEET POTATO One cup (100 grams) of baked sweet potato with skin contains: Vitamin A: 75% of the Daily Value (DV) Vitamin C: 65% of the DV Manganese: 50% of the DV Vitamin B6: 20% of the DV Potassium: 27% of the DV</p> <p>GARLIC Can combat ailments such as the common cold. Reduce blood pressure. Good for immune system.</p>	<h3>TOMATO SOUP</h3> <p>INGREDIENTS</p> <ul style="list-style-type: none"> 12-15 tomatoes, de seeded and skinned 2 stalks of celery 3 large carrots 2 large sweet potato 2 large parsnips 1/4 cup shredded cheese 2 tablespoons crumbled feta cheese <p>DIRECTIONS</p> <ol style="list-style-type: none"> Preheat and discard the high green leaves and root ends of the leeks. Car leeks in half lengthwise. Wash well to remove any dirt from between the layers, then slice thinly. Car vegetables into small pieces. Combine all vegetables and 2 tablespoons of butter and 1/4 cup oil. Simmer soup for 1 1/2 hour. Don't add any salt—tomatoes will give enough liquid. Use salt and vegetables are soft. Cool and put it through a blender. You can eat everything through a blender. Servings: 10-12 cups 	<p>HEALTH HIGHLIGHTS</p> <p>TOMATO Contains Vitamin C, potassium, vitamin K1 and Folate (B9).</p> <p>CELERY Antioxidant and anti-inflammatory support. Helps the digestive tract and cardiovascular support.</p>
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<h3>PUMPKIN SOUP</h3> <p>INGREDIENTS</p> <ul style="list-style-type: none"> 1 large minced onion 2 cups chicken stock 1 1/2 cups parmed cooked pumpkin 1/2 teaspoon dried oregano 1/4 teaspoon hot pepper sauce 1/4 cup toasted pumpkin seeds <p>Directions</p> <ol style="list-style-type: none"> In a 2 quart saucepan, cook the onion in 2 tablespoons of the stock until limp. Add the remaining stock, pumpkin, oregano, and hot pepper sauce. Simmer for 15 minutes. Some sprinkled with pumpkin seeds (optional). 	<p>* SUPERFOODS * PUMPKIN, ONION, CHICKEN BROTH</p>	<h3>PUMPKIN SOUP</h3> <p><i>Superfoods: pumpkin, onion, chicken</i></p> <p>Ingredients</p> <ul style="list-style-type: none"> 1 large minced onion 2 cups chicken stock 1 1/2 cups parmed cooked pumpkin 1/2 teaspoon dried oregano 1/4 teaspoon hot pepper sauce 1/4 cup toasted pumpkin seeds <p>Directions</p> <ol style="list-style-type: none"> In a 2 quart saucepan, cook the onion in 2 tablespoons of the stock until limp. Add the remaining stock, pumpkin, oregano, and hot pepper sauce. Simmer for 15 minutes. Some sprinkled with pumpkin seeds (optional).
<h3>Leek Soup</h3> <p>Servings: 10-12 cups</p> <p>Ingredients</p> <ul style="list-style-type: none"> 6 large leeks 3 sweet potatoes 3 carrots 2 large parsnips 1-2 quarts of chicken broth <p>Directions</p> <ol style="list-style-type: none"> Sauté in olive oil and a pat 12 tablespoons of butter until tender. Simmer until vegetables are soft. Cool and put through blender. For a different taste, use a miso quart. 	<p>* Superfoods * Leeks, Sweet potatoes, & Carrots</p>	<p>Superfoods: Leeks, Sweet potatoes, & carrots</p> <p>Directions</p> <ol style="list-style-type: none"> Sauté in olive oil and a pat 12 tablespoons of butter until tender. Simmer until vegetables are soft. Cool and put through blender. For a different taste, use 2 miso quart.

Super Foods

AVOCADO

Nutrition Facts
Vitamin K: 26% of the DV
Folate: 20% of the DV
Vitamin C: 17% of the DV
Potassium: 14% of the DV
Vitamin B5: 14% of the DV
Vitamin B6: 13% of the DV
Vitamin E: 10% of the DV

What do these benefits do?

Potassium: Essential nutrient—helps maintain electrical gradients in your body's cells and serves various important functions.

Heart-healthy monounsaturated fats: Avocados contain oleic acid. This has been associated with reduced inflammation and shown to have beneficial effects on genes linked to cancer.

Fiber: Indigestible plant matter that can contribute to weight loss, reduce blood sugar spikes and is strongly linked to a lower risk of many diseases.

Antioxidants: High in antioxidants such as the carotenoids lutein and zeaxanthin, which are incredibly important for eye health. Studies show that they're linked to a drastically reduced risk of cataracts and macular degeneration.

Cholesterol and triglyceride levels: Numerous studies have shown that eating avocado can improve heart disease risk factors like total, "bad" LDL and "good" HDL cholesterol, as well as blood triglycerides.

Super Foods

BLUEBERRIES

NUTRITION FACTS
Fiber: 4 grams
Vitamin C: 24% of the RDI
Vitamin K: 36% of the RDI
Manganese: 25% of the RDI

What do these benefits do?

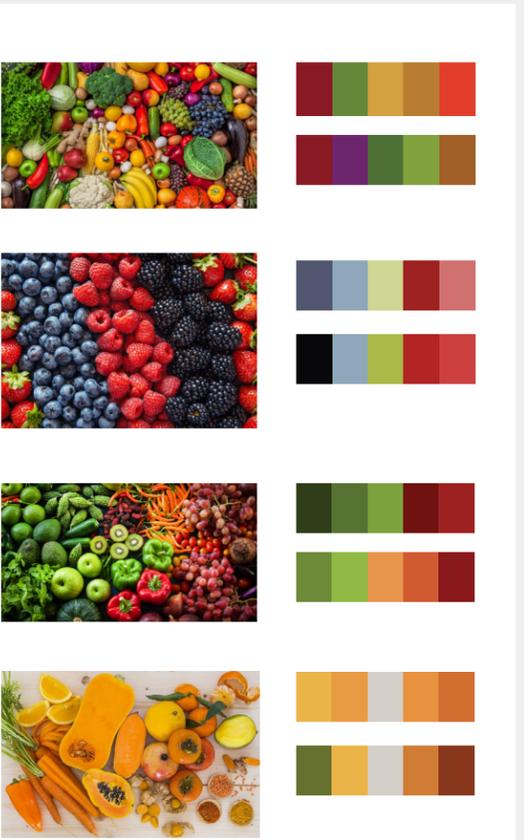
Brain Function and Memory: Oxidative stress can accelerate your brain's aging process, negatively affecting brain function. The antioxidants in blueberries seem to benefit your brain by aiding brain function and delaying mental decline.

Blood Pressure: Blueberries appear to have significant benefits for people with high blood pressure, which is a major risk factor for heart disease.

Anti-diabetes effects: Several studies demonstrate that blueberries have anti-diabetes effects, improving insulin sensitivity and lowering blood sugar levels.

Reduce DNA damage: DNA damage is part of the reason we grow older. It also plays an important role in the development of diseases like cancer. They can neutralize some of the free radicals that damage your DNA.

COLOR PALETTE IDEAS



FONT EXPLORATION

Pumpkin Soup

Didot Bold

Pumpkin Soup

Dancing Script Regular

Pumpkin Soup

Passion One Bold

PUMPKIN SOUP

DIN Condensed Bold

PUMPKIN SOUP

Amatic SC Bold

Pumpkin Soup

Playfair Display Black

Pumpkin Soup

Lobster Two Regular

Body text here
Helvetica Neue Std 45 Book

Body text here
Roboto Light

Body text here
Didot Lt Std Roman

Body text here
Futura Std Bold

Body text here
Century Schoolbook Regular

Body text here
Baskerville Regular

Body text here
Raleway Medium

RESEARCH COMPONENT

RESEARCH COMPONENT

Around the middle of October, I began looking into the idea of creating my own research survey. As I looked at different studies, I liked the idea of creating my own and asking the questions about food habits and nutrition that I was most interested in. I spent a few weeks figuring out the logistics on how to go about creating and distributing a study.

PERSONAL INTEREST

From my reading and own personal interest, the three elements I decided to focus on were the types of foods people were eating, why they were eating them, and how their physical and mental well-being was. I began the process of looking at specific research articles and the measurement scales that were used, compiling a set of questions that would eventually be used in my survey. I narrowed down the age group to be 18 to 30 years old.

PAST PROJECTS

I really enjoyed the project that I did in ARS329 Design Research in the Spring 2019 semester. In this class, we had the opportunity to choose a topic we were interested in, create survey questions, analyze the responses, and create a large-scale poster displaying the results in visually interesting ways. The surveys only went out to students in the SUNY New Paltz Graphic Design department, so it was a very small scale survey.

It was a systematic and satisfying process to go through in Design Research and it was one of my favorite projects I've done in school. I really liked the idea of doing something similar for my thesis project. Thesis was the perfect opportunity to build upon what I did in Design Research and explore these topics on a much larger scale.

PSYCHOLOGY COURSES

In addition to my design courses, I began taking Psychology courses in 2017. I really enjoyed the classes and ended up pursuing a second major in Psychology, so I've had some formal exposure to research and data. In the Fall 2019 semester, I was also taking PSY311 Research Methods with Dr. Greta Winograd, which got me more interested in data and made me want to pursue the research aspect for my thesis project.

HREB PROCESS

In order to make this survey accessible to the general public, I had to get it approved through the SUNY New Paltz Human Research Ethics Board. This was a long and tedious process. After I initially submitted my paperwork, I was advised to make edits on a few sections and re-submit. It was approved once I made the edits, right about the end of November.

New Paltz
STATE UNIVERSITY OF NEW YORK

Checklist: Survey/Interview Research Exemption
Human Research Ethics Board
Sponsored Programs & Research Compliance
800 Hawk Dr. New Paltz, NY 12561
Old Main B120

Investigator's Name: Danielle Kruchow

Protocol Title & Number: Food Choices, Motivation, and Well-Being of Young Adults Ages 18 to 30. (Protocol# 1939)

Basic Survey/Interview Determination Criteria (select one of the following):

<input type="checkbox"/>	1.	Recorded information cannot readily identify the subject (directly or indirectly/linked); OR
<input type="checkbox"/>	2.	Any disclosure of responses outside of the research would NOT reasonably place subject at risk (criminal, civil liability, financial, employability, educational advancement, reputation); OR
<input type="checkbox"/>	3.	Information is recorded with identifiers, and there is a clear plan for how documents will be stored and protected.

Further Criteria:

Yes <input type="checkbox"/>	No <input type="checkbox"/>	1.	The level of risk to which participants are exposed in this interview/survey does not exceed minimal risk.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	2.	There are no activities in this research other than the interview/survey administration.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	3.	This interview/survey will be given to persons 18 years of age and older.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	4.	The population to be interviewed/surveyed is not considered "vulnerable to coercion"
Yes <input type="checkbox"/>	No <input type="checkbox"/>	5.	Prisoners will not intentionally be interviewed/surveyed.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	6.	Individuals who lack the capacity to provide informed consent (e.g., Alzheimer's patients, individuals with certain mental disabilities) will not be interviewed/surveyed.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	7.	Confidentiality will be protected by proper secure storage of interview notes and electronic data – OR – paper surveys and electronic databases.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	8.	All researchers have completed CITI training.
Yes <input type="checkbox"/>	No <input type="checkbox"/>	9.	External site approval, if needed, is attached.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	10.	Faculty Assurance Addendum is attached.

Revised: March 4, 2019 Page 1 of 2

Protocol Modifications

Item 2.3 – As per the instructions, you must provide justification if you intend to exclude non-English speaking individuals.
Edit: The survey will be in English. This is a pilot study with no therapeutic intent.

Item 2.5 – How will you obtain email addresses? What specific social media platforms will be used?
These questions relate to a determination of the degree to which the participants will be directly or indirectly identifiable. There is nothing in your current advertisement that directs a recipient to a particular online location for the survey. How will potential participants get to the consent document from the advertisement? Provide the necessary information within the advertisement. For HREB review, I need to see EXACTLY what the participants will see.
Edit: No specific individual e-mail addresses will be obtained. I will use Facebook to distribute the survey. It will be posted on my Facebook, which will allow it to be visible for 757 people to see. The link will also be shareable, so if anyone shares the survey with their Facebook friends, it will reach an even wider audience. I will also be posting it on the SUNY New Paltz Graphic Design Community Facebook Page, which contains 359 members, consisting of students, faculty, alumni, and professionals from different places around the country, who work in related fields. The consent form will be visible when the link to the survey is opened.
The Facebook post will look exactly like this. This is what potential participants will see: Hello everyone!

My name is Danielle Kruchow, and I am an undergraduate student pursuing a double major in Psychology and Graphic Design at SUNY New Paltz. For my year-long senior thesis project, I am conducting research on eating habits, motivation, and well-being of individuals 18 to 30 years old. This survey will take approximately 15-20 minutes to complete. You will have the opportunity to quit the survey at any point if you wish. In order to participate in this study, you must be between the ages of 18 and 30. No individually identifying information will be collected, and responses will be anonymous.

The survey can be accessed through this link:
https://newpaltz.col.qualtrics.com/jfe/preview/SV_8CHI0M7Le01ex93?Q_SurveyVersionID=&Q_CHI=preview

Thank you for your consideration—your participation would be greatly appreciated!

This study has been approved by the SUNY New Paltz Human Research Ethics Board. If you have any questions, please contact Danielle Kruchow at kruchowd1@hawkmail.newpaltz.edu.

*Note to reviewer:
(This link is to the preview of my survey because it is not published yet because it is not yet approved.)

Modifications the HREB requested after my first submission

STUDY00001939: Food Choices, Motivation, and Well-Being

Principal Investigator: Danielle Kruchow
Submission type: Initial Study
Primary contact: Danielle Kruchow
IRB coordinator: Rosann Merrill
IRB office: Human Research Ethics Board

History: Pre-Submission, Pre-Review, HREB Review, Post-Review, Review Complete

Activity	Author	Activity Date
Submitted Ancillary Review	Papaelias, Amy	11/7/2019 4:33 PM
Managed Ancillary Reviews	Merrill, Rosann	11/7/2019 10:07 AM
Pre-Review Submitted	Merrill, Rosann	11/7/2019 10:06 AM
Response Submitted	Kruchow, Danielle	11/7/2019 9:54 AM

HREB-approval process

INFORMED CONSENT

To be presented on the first screen of the web-based survey.

Thank you for participating in this study! The purpose of this research study is to explore the eating habits, motivations for eating habits, and well-being of young adults ages 18-30 years old. You must be 18 years or older to participate. This survey should take about 15-20 minutes to fill out and should be completed in one session.

The risks associated with your participation are minimal and not greater than any you may encounter in your everyday life. If you experience distress as a result of your participation, please contact the SUNY New Paltz Psychological Counseling Center at 845-257-2920. Benefits to you include being able to obtain experience participating in a research study, as well as contributing to beneficial research.

Your anonymity is guaranteed. Once you have completed the survey, it will not be possible to identify who it was completed by. There are no questions that ask for identifying information (e.g., names).

This study is voluntary and you are free to withdraw your participation at any time. If you have any questions regarding the procedures, please contact Danielle Kruchow at kruchowd1@hawkmail.newpaltz.edu

If you have concerns or are unclear about your rights as a subject, please contact the chair of the SUNY New Paltz Human Research Ethics Board, Dr. Maryalice Citera, at 845-257-3476.

The SUNY New Paltz Human Research Ethics Board has found that this research meets the criteria for human subjects according to Federal guidelines.

By clicking the below button, you are consenting to participate in this study.

Informed consent

SURVEY DEVELOPMENT

While developing my survey, I looked at many different research studies for reference to see the types of questions that researchers have used in studies. This was very helpful in drafting my own questions and getting an idea of how to phrase them. I customized them more to fit what I specifically wanted to ask.

To measure food choices, I adapted a scale from Steptoe, Pollard, & Wardle’s (1995) Food Choices Questionnaire (FCQ). To measure health motivation, I adapted a scale from Min’s (2015) College Students Health Motivation Questionnaire (CSHM-Q). To measure well-being, I adapted a scale from Bericat’s (2013) Socioemotional Well-Being Index (SEWBI).

Measuring and Investigating Health Motivation Among College students in China

English version of original items	Concise items
I never think of practicing health-promoting lifestyles	Never think of it
I practice health-promoting lifestyles because of the influence of my friends	Influence of friends
I practice health-promoting lifestyles because I want to project a healthy image to the others	A healthy image to other people
I want to improve my life quality by practicing health-promoting lifestyles	Improve life quality
Practicing health-promoting lifestyles is fun	It’s fun
My teachers told me I should have health-promoting lifestyles	Teachers told me to do so
The facilities and environment that my school provides make me want to practice health-promoting lifestyles	Facilities and environment
I practice health-promoting lifestyles because I understand the importance of health to my life	Understand the importance of health
I feel upset if I don’t practice health-promoting lifestyles	Be upset if fail to do so.
I enjoy the process of practicing health-promoting lifestyles	Enjoy the process
I don’t think of health-promoting lifestyles unless I have health problems	Don’t think of it unless having health problems
I practice health-promoting lifestyles in order to improve my	Improve learning performance

Development of a Measure of the Motives Underlying the Selection of Food: The Food Choice Questionnaire

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TABLE I
Food Choice Questionnaire—items and factor loadings

Item	Loading
Factor 1—Health	
22. Contains a lot of vitamins and minerals	0.77
29. Keeps me healthy	0.75
10. Is nutritious	0.75
27. Is high in protein	0.72
30. Is good for my skin/teeth/hair/nails etc	0.68
9. Is high in fibre and roughage	0.66
Factor 2—Mood	
16. Helps me cope with stress	0.79
34. Helps me to cope with life	0.79
26. Helps me relax	0.78
24. Keeps me awake/alert	0.60
13. Cheers me up	0.60
31. Makes me feel good	0.57
Factor 3—Convenience	
1. Is easy to prepare	0.82
15. Can be cooked very simply	0.81
28. Takes no time to prepare	0.76
35. Can be bought in shops close to where I live or work	0.65
11. Is easily available in shops and supermarkets	0.59
Factor 4—Sensory Appeal	
14. Smells nice	0.80
25. Looks nice	0.72
18. Has a pleasant texture	0.70
4. Tastes good	0.53
Factor 5—Natural Content	
2. Contains no additives	0.81
5. Contains natural ingredients	0.72
23. Contains no artificial ingredients	0.71
Factor 6—Price	
6. Is not expensive	0.87
36. Is cheap	0.87
12. Is good value for money	0.76

The Socioemotional Well-Being Index (SEWBI)

Emotional states	Components		
	1	2	3
Proud of yourself	.728	.074	.061
Worried about the things happening to you	-.165	-.117	.852
Full of energy and life	.718	-.236	.090
Lonely	-.195	.827	-.067
Enjoying life	.713	-.321	-.134
Depressed with no desire to do anything	-.453	.616	.255
Stressed because of all the things you have to do	.163	.429	.604
Satisfied with the life you are leading	.689	-.253	-.272

Emotional states	Components		
	1	2	3
Were happy	.644	-.399	-.232
Felt depressed	-.309	.730	.171
Had lot of energy	.760	.005	-.244
Felt lonely	-.127	.850	.119
Enjoyed life	.742	-.219	-.210
Always optimistic about my future	-.197	.036	.859
In general feel very positive about myself	-.153	.298	.776
Felt calm and peaceful	.689	-.243	.016

Survey Questions

1. Demographics

- What is your age?
Drop down box with choices of ages (18-30)

- Which gender identity do you most identify with?
Female
Male
Non-binary
Prefer not to answer
My preferred answer: _____

- Do you identify as transgender?
Yes
No
Prefer not to answer

- I identify my race/ethnicity as: (Select all that apply)
Asian
Black or African-American
Caucasian
Latina/o/x or Hispanic
Middle Eastern or North African
Native American or Native Alaskan
Native Hawaiian or Pacific Islander
Not listed: _____

- I attend school...
Full-time
Part-time
I am not in school

- I work...
Full-time
Part-time
I do not work

- Where do you currently live?
College dorm
Apartment

Survey question examples

2. FOOD CHOICES PART 1

- On a typical day, the food I eat...
 - Contain a lot of vitamins and minerals
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is nutritious
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is high in protein
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is high in fiber and roughage
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Helps me cope with stress
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Makes me feel good
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Gives me energy
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is easy to prepare and cook
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is easily available in stores close to where I live
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is not expensive
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Contains no additives or artificial ingredients
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Contains only natural ingredients
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Is low in calories
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Helps me control my weight
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
 - Tastes Good
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree

2. FOOD CHOICES PART 2

- In your own words, please describe how you would define “healthy food” and/or “healthy eating” as it pertains to you:
(Open-ended response): _____
- On average, how many servings of vegetables do you eat per day? (1 serving= approx. 75g or 1/2-1 cup)

4. Motivation

- I never think of eating healthy foods
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I want to improve my overall quality of life by eating healthy foods.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I feel regretful if I don’t eat healthy foods.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I enjoy eating healthy foods.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- It doesn’t matter whether I eat healthy foods or not.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I eat healthy foods because I have had health problems in the past.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I eat healthy foods as a form of prevention.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I eat healthy foods because I want to maintain a good body figure.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I eat healthy foods because I believe there are strong connections between overall health and diet.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree
- I eat healthy foods because of the influence of people in my life.
Answer options: Strongly disagree, Disagree, Neutral, Agree, Strongly Agree

Once my study was fully approved by the HREB committee and once it was successfully uploaded onto Qualtrics, I shared it around on my personal Facebook, on New Paltz Community Facebook groups, and an academic surveys Facebook group. I shared my survey around the end of November, and responses came in from then to January.

Some friends in different parts of the world such as Texas, Michigan, and England even shared it in hopes of getting some more diverse data that wasn’t mostly concentrated in the Northeast region of the US.



Facebook post sharing the study

PECHA KUCHA

At the beginning of November, we had an event called Pecha Kucha where each student in Thesis had 4 minutes to give a presentation that covered specified topics related to our projects. We were required to have 12 slides, and each slide only stayed on the screen for 20 seconds each. The slides automatically changed, so it was imperative that we were prepared.

I spent days writing, editing, and practicing my presentation to ensure that the script flowed and moved with the timed slides perfectly. We presented in front of the entire thesis cohort (approximately 30 students), design faculty, underclassmen in the design program, and any other interested faculty and students who may have come by to listen.

PRESENTATION SCRIPT

Slide 1- Opening Slide

Hi, my name is Danielle and my thesis project is about the health benefits of different foods and the way we can use food, in conjunction with modern medicine for a more complete healing process.

Slide 2- Brief Overview of Topic Selection

Everyone has heard phrases such as, "eat your greens!" and "an apple a day keeps the doctor away!" since they were young. These sayings seem like they don't hold much meaning, but there is now a lot of research showing the importance of healthy eating in order to prevent and even help to cure, many different ailments.

Slide 3- Background Info

Since hunter-gatherer times, dietary patterns have gone through many changes. The current, technological age has caused negative effects related to food, including an increase in mass-produced foods that contain additives, artificial flavors, and chemicals. Eating natural foods has become more difficult than ever due to high cost and inaccessibility.

Slide 4- Concepts- Part 1

Most doctors are not required to have extensive knowledge of nutrition, and often don't give patients enough information on this topic. This can create a gap in treatment and can lead to the overprescription of medication. A more holistic approach to healing that includes detailed nutritional guidance could be beneficial in many situations.

Slide 5- Concepts- Part 2

Many of the recipes in my project are simple and contain everyday, inexpensive ingredients. Instead of focusing on ineffective, low-fat, low-calorie popular dieting trends, I'm more interested in a wide range of foods. It's important to be informed on this in order to make individualized dietary choices that work for you.

Slide 6- Audience

This topic can benefit everybody, but my project is targeted towards college students and young adults in their 20s. During this time, many people go through big changes, which causes unique challenges that affect food choices and overall lifestyle.

Slide 7- Research

I have researched different studies on topics related to nutrition, healthcare in America, the inequality of food accessibility, using food as prevention, what motivates an individual's food choices, and overall well-being. I am most interested in what motivates people to eat healthy and how they define "healthy eating."

Slide 8- Existing Projects

There are many different types of cookbooks available now. My recipes are gathered from friends and family, which creates a unique collection of foods, and which will offer many different health benefits. Also, the data I find through my research will provide interesting anecdotal information related to this topic.

Slide 9- In-Progress Making

So far, I have developed a questionnaire that explores food choices and eating habits, motivation for these choices, and overall well-being. I have been working with my psychology professor, Dr. Winograd to develop and clarify my questions. I submitted my research proposal to the Human Research Ethics Board last week and am awaiting a response.

Slide 10- Goals Part 1

I will be making 2 pieces for my project. The first will be a small, zine-like booklet. This will show the results from my survey, combined with outside information on the topic. Background information, previous research findings, and data visualizations of the information I find through my survey will be included.

Slide 11- Goals Part 2

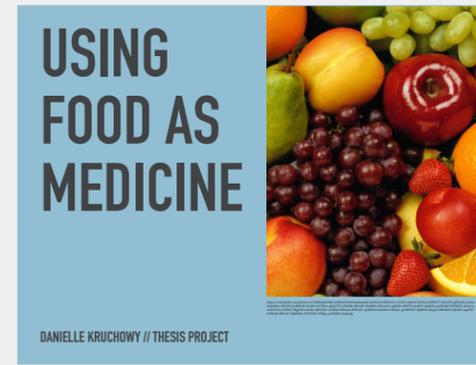
The second artifact will be a book of recipes, nutritional information, and illustrations. I began collecting recipes and health information to include. It will be broken up into different sections, including soups, salads, meat dishes, vegetarian options, baked goods, etc. The health information will be interspersed throughout the recipes.

Slide 12- Ending Slide

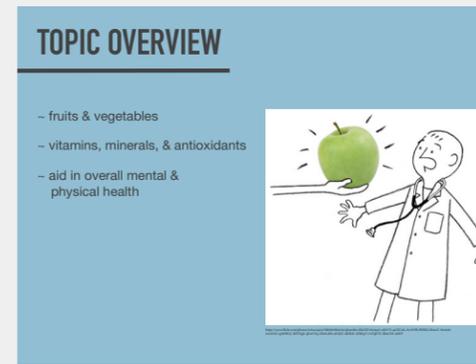
Thank you!

Please look out for my survey and take that when it's up! :)

PRESENTATION SLIDES



Slide 1



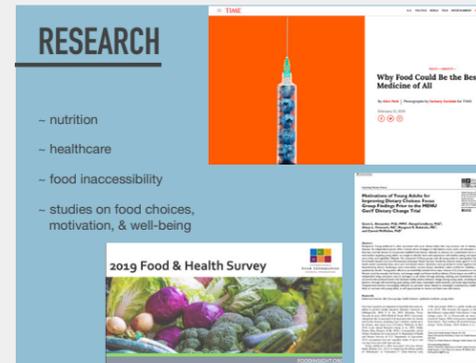
Slide 2



Slide 3



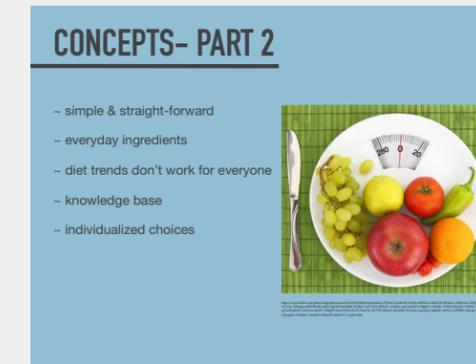
Slide 4



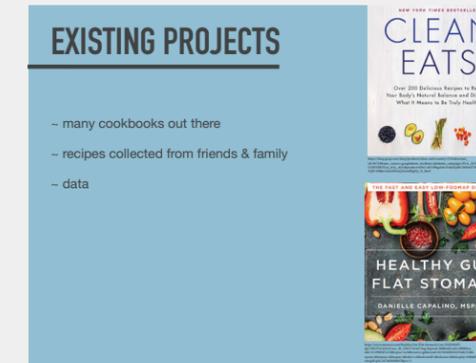
Slide 7



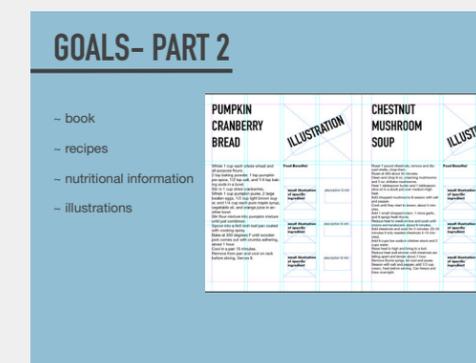
Slide 10



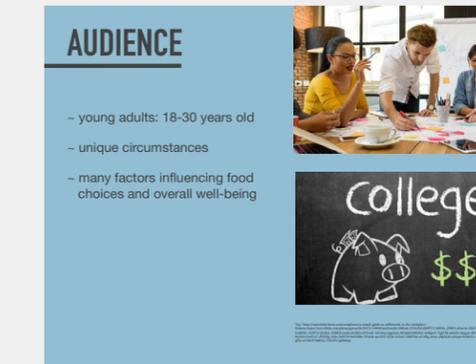
Slide 5



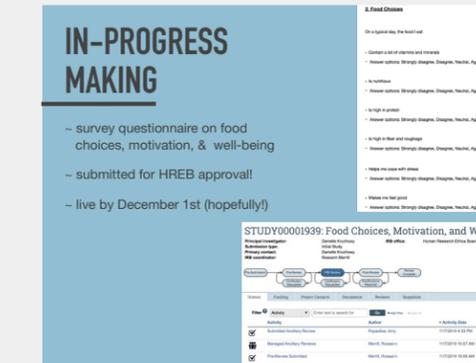
Slide 8



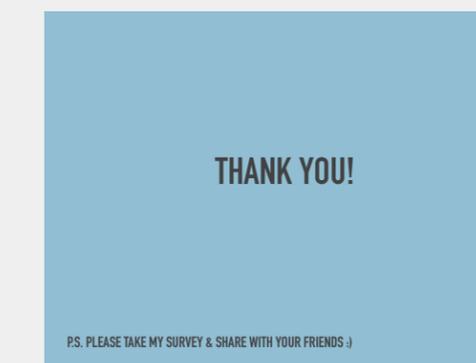
Slide 11



Slide 6

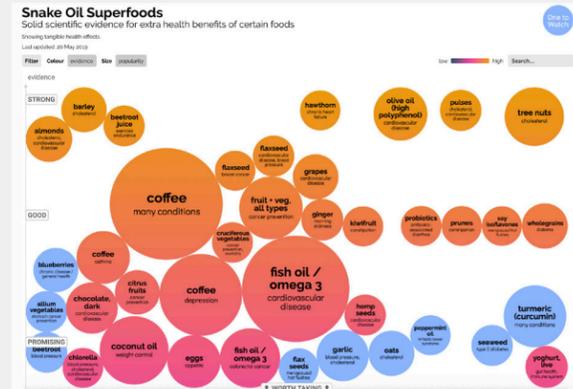


Slide 9



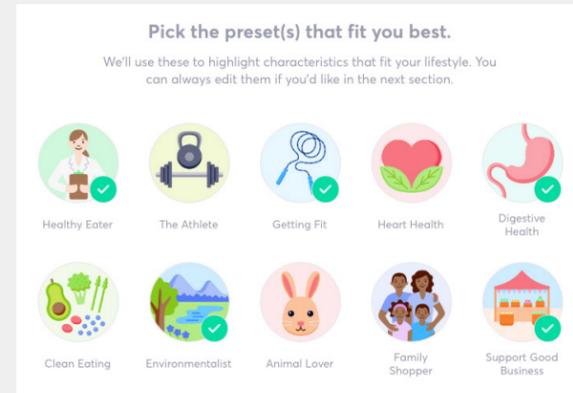
Slide 12

DESIGN INSPIRATION: EXISTING PROJECTS



Snake Oil Superfoods

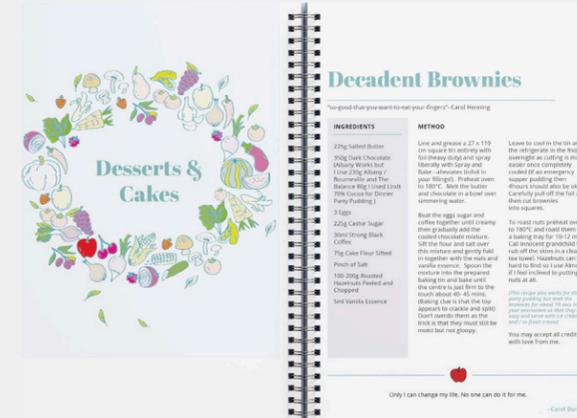
This project is called Snake Oil Superfoods by David McCandless. It includes scientific evidence for health benefits of certain foods such as coffee, eggs, coconut oil, almonds, and cruciferous vegetables, among many others. Each circle has a different food with the main health benefit shown. When you click on the circle, it will bring you to a scientific research study supporting the claim. This is a great interactive resource center to learn about the benefits of a wide range of foods.



The Sage Project

The Sage Project was originally started by a graduate student, and it now has a partnership with Whole Foods. The goal of it is to provide answers to questions such as: where does my food come from, what are my healthiest and unhealthiest choices, which foods have GMOs, what foods are good to eat with certain dietary restrictions, etc. The information is shown with clear and easy to understand graphics, and categories can be easily sorted to find what you are looking for.

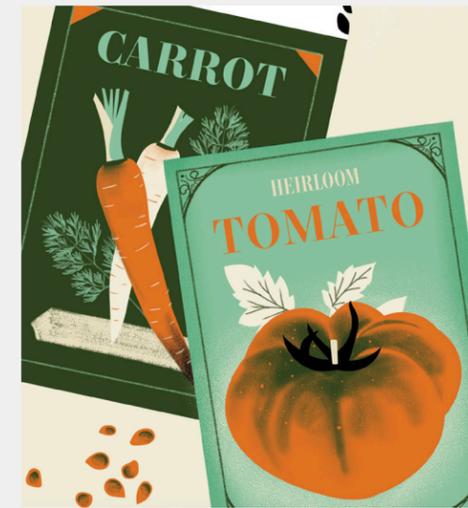
This is a collection of projects that are related to my thesis topic that I gained inspiration and knowledge from.



Harvest Basket Cookbook

The Harvest Basket Cookbook, by Caitlin Sloane, is a vegetarian recipe book designed as a response to global warming. It is simply laid out with clear ingredients and instructions on how to make certain foods. There are minimal illustrations, but the ones that are included are simple, effective and clean. I love Sloane's simple illustrations, and this style is similar to mine.

DESIGN INSPIRATION: ARTISTS



Marisol Ortega

I really like Marisol Ortega's illustration style in all of her projects. They all look similar to collages, drawings, or paintings with acrylic or watercolor. I was inspired by her work, and originally wanted to experiment more with digital painting and illustration similar to this style.



Amber Day

Amber Day has a wide range of illustrations, many of which are focused on food, drinks, recipes, etc. and have been used in cookbooks, magazines, and more. I love the gestural, and bright nature of her illustrations. They are realistic, legible and clear, but they are done in a style that is highly refined and very unique.

This is a collection of work by different artists that I really admired and used as inspiration at the beginning of the semester when I was thinking of creating a cookbook for my project.



Nic Gossage

Nic Gossage is a food photographer who takes beautiful, bright, and vivid photos of different meals, combined with silverware, drinks, cutting boards, pitchers, and any other materials that may be necessary for the meal. Some of his photos are very simple and straight-forward, while others are more involved and contain a more elaborate layout and presentation.

OUTREACH & FEEDBACK

PSYCHOLOGY COURSE

Throughout taking PSY311 Research Methods with Dr. Winograd in Fall 2019, I learned about the different steps that go into conducting a formal research study and the way data is analyzed in psychological research studies. For my thesis project, I did not go into the same level of depth that one would go into if conducting a true psychological study, but it resembled the process.

Dr. Winograd was very helpful with clarifying the focus of what I wanted to look at and in guiding me on how to adapt existing questions from different measures to suit my project. She was also very helpful in the HREB approval process, helping me to make the edits that the ethics board required. I am very grateful for her guidance and for the opportunity to take a class to learn about the many steps and procedures that go into conducting research.

DATA VISUALIZATION

In the fall, I registered to take ARS371 Data Visualization with Professor Korenblat in Spring 2020. I had some experience with data visualization through ARS329 Design Research in Spring 2019, but I was excited to learn more about this design field. Professor Korenblat was very helpful with providing resources on how to make successful data visualizations and with providing different tools that can be used to create graphs and charts. He also helped with an introduction on how to work with data in Tableau and Google Sheets.

CAMPUS DIETITIAN

I also spoke with Marie Murphy, the campus dietitian. I shared my project ideas with her, and I learned more about her role on campus and about different types of resources that are offered to students in regards to nutrition. She provided me with many resources where I could find information about functional medicine, integrative health, and alternative medicine in addition to resources on only nutritional information and recipes.

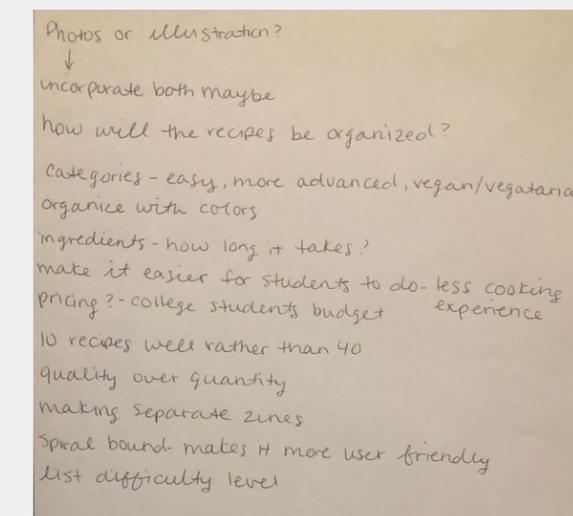
THESIS I FINAL REVIEW

...And just like that, the fall semester was over! I finished Thesis I with a much better idea of what I wanted to do. At the time, I didn't quite realize how much work would go into working with the survey data, and part of me still wanted to incorporate a small zine with recipes and nutritional information as a supplemental part of the project. This part was still a little open-ended. Students in my class provided great feedback, and they suggested that if I were to also create zines to target them towards college students. They suggested to include quick and easy recipes, focus on healthy but cheap ingredients to fit a college student's budget, and to think about what the printed product will look like.

Overall, I had direction of what to focus in on, the survey was approved and distributed, and I was developing a plan for what I wanted to do with the results from the survey.



Thesis I final review display



Feedback from classmates

THESIS II

January 2020 to May 2020

- Qualtrics & Data
- In Progress Work: January to March
- Inspiration & Examples
- Thesis II Midterm Review
- In-Progress Work: March to May
- Cover Design

THESIS II

SURVEY

I closed my survey at the end of January. From the end of November to January, I got a total of 146 responses. I began looking through all of the results on Qualtrics, trying to make sense of all the information that came in. I began using Google Sheets more to organize and clean up the data and to look at specific questions more closely.

DATA VISUALIZATION

I also began working with different data visualization tools, such as Tableau to create some visualizations. Tableau was very difficult to use with so much data, so I also began working with Adobe Illustrator and other online tools to create simple, clear representations of the data. I watched a lot of tutorials and learned about some great tools to use in Illustrator, and that is where I ended up creating many of the visualizations.

Response id	What is your age?	Which gender id...	Which gender id...	Do you identify as...	I identify my race...	I identify my race...	I attend school...
1	23	Prefer not to answer	null	Prefer not to answer	Asian,Black or Africa...	null	I am not in school
2	null	Female	null	No	Caucasian	null	I am not in school
3	23	Non-binary	null	No	Caucasian	null	Part time
4	null	Female	null	No	Caucasian	null	I am not in school
5	22	Male	null	No	Caucasian	null	Full time
6	21	Female	null	No	Caucasian	null	Full time
7	null	Female	null	No	Caucasian	null	I am not in school
8	25	Female	null	No	Caucasian	null	I am not in school
9	26	Female	null	No	Caucasian	null	I am not in school
10	null	Female	null	No	Caucasian	null	Full time
11	24	Female	null	No	Caucasian	null	Full time
12	25	Female	null	No	Caucasian	null	I am not in school
13	21	Female	null	No	Caucasian	null	Full time
14	22	Female	null	No	Caucasian	null	I am not in school

Tableau Interface

- How to create graphs in Adobe Illustrator | Illustrator Tutorial**
Creative Tap • 19K views • 1 year ago
In this tutorial I will show you how to use the Graph tool to create different types of graphs in Adobe Illustrator. Music for intro and ...
- Make a Radial Bar Graph in Adobe Illustrator keeping data live**
The Design Ninja • 77K views • 3 years ago
Continuing on from the movie on making a doughnut chart, this movie shows how to make a radial bar graph in Illustrator.
- How to make a simple pie graph in Adobe Illustrator - Graphic Design How to**
Graphic Design How To • 23K views • 2 years ago
As designers, making charts and graphs doesn't usually sound appealing - after all, most of us are generally right-brained and ...
- How To Make a Donut Chart in Adobe Illustrator**
Brooke Kovitz • 41K views • 4 years ago

Illustrator Data Viz Tutorials

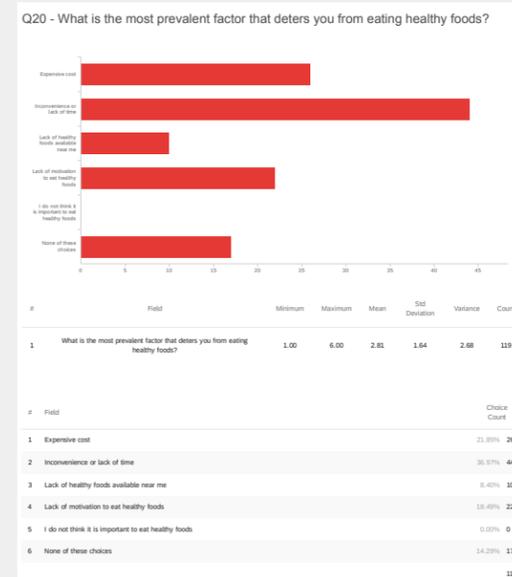
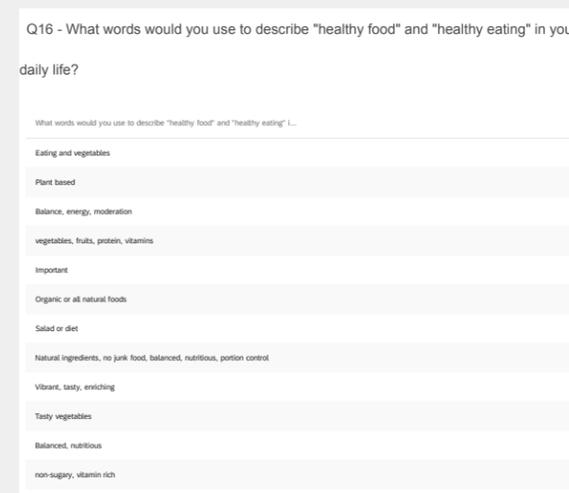
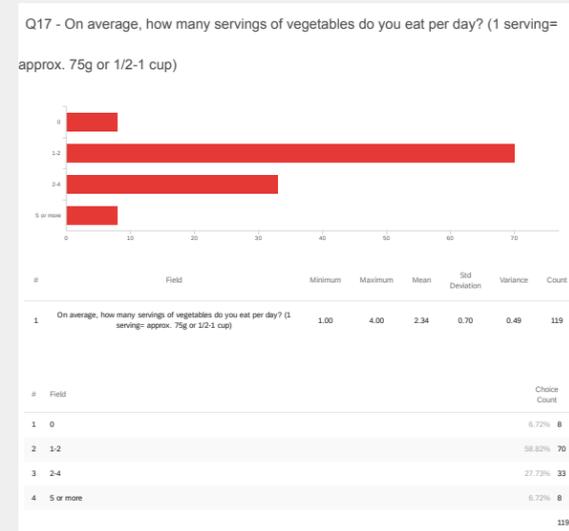
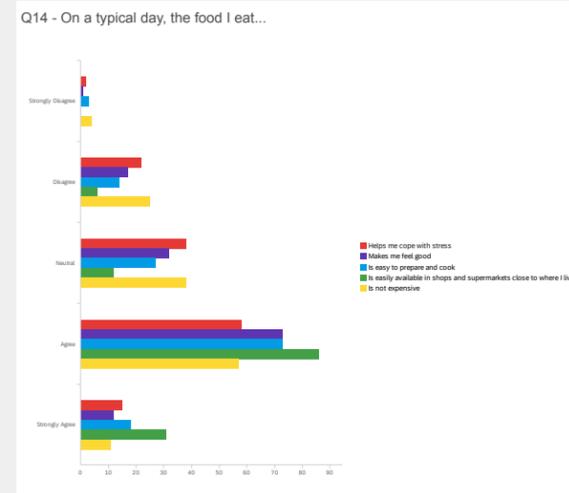
- Scatter Plot: Dispersion
- Contour Plot: Dispersion
- Convex Hull: Dispersion
- Hexagonal Binning: Dispersion
- Voronoi Tesselation: Dispersion
- Beeswarm Plot: Distribution
- Box plot: Distribution
- Cluster Dendrogram: Hierarchy
- Circle Packing: Hierarchy (weighted)
- Sunburst: Hierarchy (weighted)
- Alluvial Diagram: Multi categorical
- Parallel Coordinates: Multivariate
- Bar chart: Other

Online Data Viz Tool

QUALTRICS & DATA

I spent a lot of time looking more closely at the data and exploring the cross tabs option, which shows how respondents answered across multiple questions. This provided a more in-depth look at their answers, and it provided insight into how certain groups responded to different questions that may have a relationship.

RAW DATA FROM QUALTRICS



CROSS TABS COMPARING RESULTS

Stub: Q5: I attend school...

	It is difficult for me to obtain healthy foods					
	Total	Agree	Disagree	Neutral	Strongly agree	Strongly disagree
Total Count	119	6	55	26	3	29
Full-time	44	3	21	11	2	7
I am not in school	71	2	31	15	1	22
Part-time	4	1	3	0	0	0
Full-time	37.0%	50.0%	38.2%	42.3%	66.7%	24.1%
I am not in school	59.7%	33.3%	56.4%	57.7%	33.3%	75.9%
Part-time	3.4%	16.7%	5.5%	0.0%	0.0%	0.0%

Comparing:
 "It is difficult for me to obtain healthy foods."
 and "I attend school..."

Stub: Contains a lot of vitamins and minerals

	It is difficult for me to obtain healthy foods					
	Total	Agree	Disagree	Neutral	Strongly agree	Strongly disagree
Total Count	119	6	55	26	3	29
Agree	52	1	27	10	0	14
Disagree	15	1	7	5	0	2
Neutral	34	3	16	11	1	3
Strongly Agree	15	0	5	0	2	8
Strongly disagree	3	1	0	0	0	2
Agree	43.7%	16.7%	49.1%	38.5%	0.0%	48.3%
Disagree	12.6%	16.7%	12.7%	19.2%	0.0%	6.9%

Comparing:
 "The food I eat contains a lot of vitamins and minerals"
 and "It is difficult for me to obtain healthy foods..."

Stub: I have a lot of energy

	Is nutritious					
	Total	Agree	Disagree	Neutral	Strongly Agree	Strongly disagree
Total Count	114	63	9	27	13	2
Agree	21	12	0	4	4	1
Disagree	36	17	4	12	3	0
Neutral	38	24	3	8	2	1
Strongly agree	11	6	0	1	4	0
Strongly disagree	8	4	2	2	0	0
Agree	18.4%	19.0%	0.0%	14.8%	30.8%	50.0%
Disagree	31.6%	27.0%	44.4%	44.4%	23.1%	0.0%
Neutral	33.3%	38.1%	33.3%	29.6%	15.4%	50.0%
Strongly agree	9.6%	9.5%	0.0%	3.7%	30.8%	0.0%
Strongly disagree	7.0%	6.3%	22.2%	7.4%	0.0%	0.0%

Comparing:
 "The food I eat is nutritious..."
 and "I have a lot of energy..."

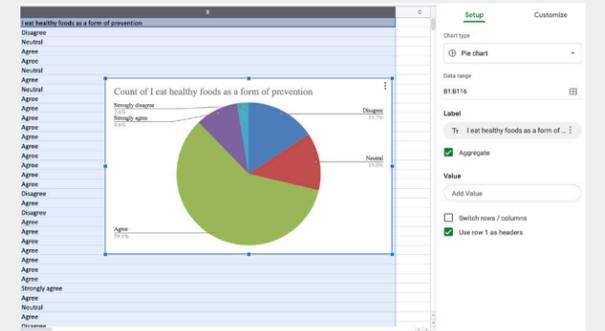
DATA VIZ EXPLORATION

Ultimately, the easiest way for me to organize and work with all of my data was through Google Sheets. I had a master document there with all of the raw data from Qualtrics. I would then go through the different questions and pull the data from different questions that I wanted to look at side-by-side. This is similar to the Qualtrics cross tabs function, it is just in a different layout.

I mainly used Adobe Illustrator and a free online tool to create all of my visualizations. These methods may have been a little more time consuming, but it was the most straight-forward and simple way I knew to create this work. It also allowed for highly customizable graphics that I could make fit the aesthetic I was looking for.

Response Id	Contains only natural ingredients	the food I eat... is low in calories	the food I eat... helps me control my weight	the food I eat... is
1	Strongly Disagree	Disagree	Strongly Disagree	Disagree
2	Disagree	Agree	Agree	Agree
3	Disagree	Agree	Neutral	Neutral
4	Neutral	Disagree	Strongly Disagree	Agree
5	Neutral	Neutral	Neutral	Agree
6	Disagree	Disagree	Disagree	Agree
7	Disagree	Strongly Agree	Strongly Agree	Agree
8	Agree	Agree	Strongly Agree	Strongly Agree
9	Strongly Disagree	Neutral	Disagree	Agree
10	Neutral	Neutral	Agree	Agree
11	Neutral	Neutral	Agree	Agree
12	Disagree	Disagree	Disagree	Agree
13	Disagree	Neutral	Neutral	Strongly Agree
14	Disagree	Disagree	Agree	Agree
15	Agree	Neutral	Neutral	Strongly Agree
16	Agree	Neutral	Neutral	Agree
17	Agree	Neutral	Agree	Strongly Agree
18	Disagree	Disagree	Disagree	Agree
19	Neutral	Disagree	Disagree	Strongly Agree
20	Disagree	Disagree	Disagree	Agree
21	Disagree	Disagree	Disagree	Agree
22	Disagree	Neutral	Agree	Agree
23	Disagree	Disagree	Disagree	Agree
24	Neutral	Neutral	Agree	Agree
25	Neutral	Disagree	Disagree	Agree
26	Disagree	Disagree	Disagree	Agree
27	Disagree	Disagree	Disagree	Agree
28	Agree	Neutral	Agree	Agree
29	Agree	Disagree	Strongly Agree	Strongly Agree
30	Strongly Disagree	Neutral	Disagree	Strongly Agree
31	Agree	Neutral	Neutral	Agree

All data in Google Sheets



Simple graph in Google Sheets

the food I eat... is nutritious	I have a lot of energy
Disagree	Neutral
Agree	Disagree
Neutral	Disagree
Neutral	Strongly agree
Agree	Disagree
Strongly disagree	Neutral
Agree	Neutral
Agree	Strongly agree
Neutral	Agree
Agree	Neutral
Agree	Agree
Agree	Strongly agree
Neutral	Disagree
Disagree	Disagree
Agree	Neutral
Agree	Agree
Agree	Strongly agree
Neutral	Disagree
Disagree	Disagree
Agree	Strongly disagree
Neutral	Disagree
Agree	Neutral
Strongly Agree	Neutral
Agree	Strongly agree
Neutral	Disagree
Agree	Agree
Neutral	Agree

Looking at: "The food I eat is nutritious..." and "I have a lot of energy..."

IN-PROGRESS WORK: JANUARY TO MARCH

Throughout the first part of the spring semester, I also continued experimenting with different layouts, data visualizations, and color palettes to develop a solid visual language.

FONT EXPLORATION: HEADINGS

STUDENTS & MOTIVATION TO EAT HEALTHY
Poiret One

STUDENTS & MOTIVATION TO EAT HEALTHY
Poiret One .25 stroke added

STUDENTS & MOTIVATION TO EAT HEALTHY
Poppins Regular

STUDENTS & MOTIVATION TO EAT HEALTHY
Roboto Black

STUDENTS & MOTIVATION TO EAT HEALTHY
Avenir Lt Std Light

FONT EXPLORATION: NUMBERS & BODY

58%
Raleway Black
Roboto Black

58%
Poiret One
Poppins Light

58%
Helvetica Neue 75 Bold
Avenir Lt Std 95 Black

Among full-time and part-time students (n= 48), the top three reasons for wanting to eat healthy include, for overall physical health (58.3%), to lose weight (14.6%),
Helvetica Neue 35 Thin- 9.5 pt / 12

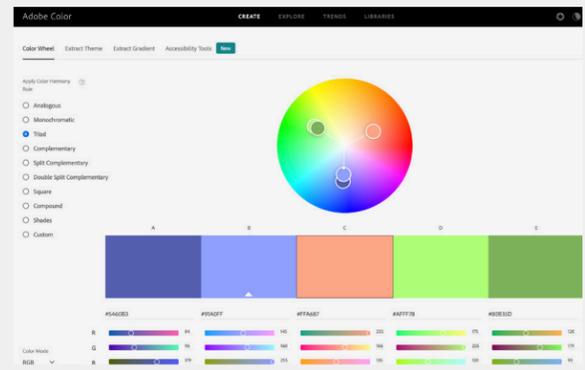
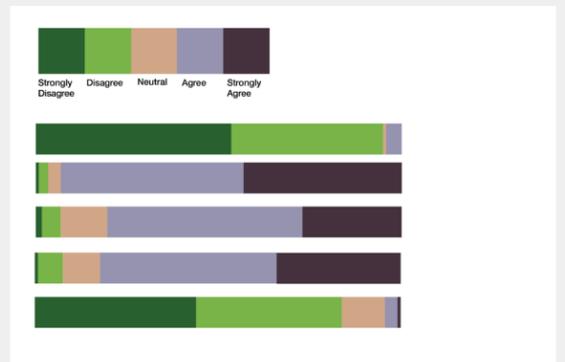
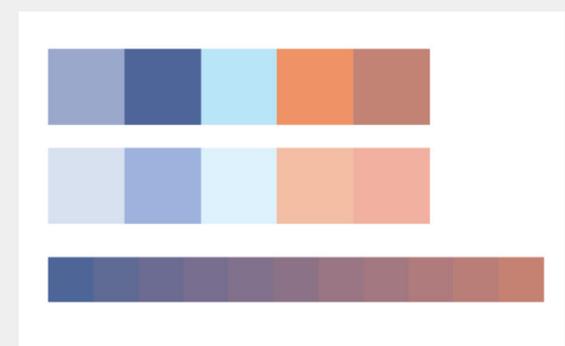
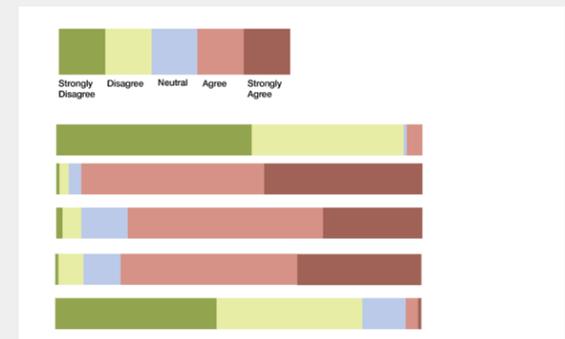
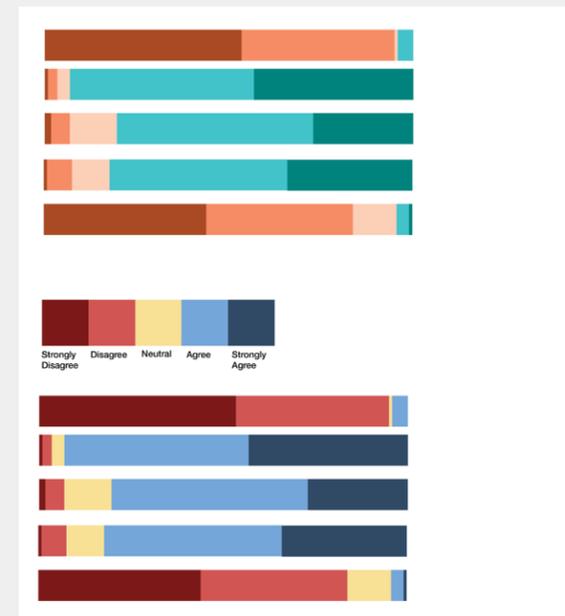
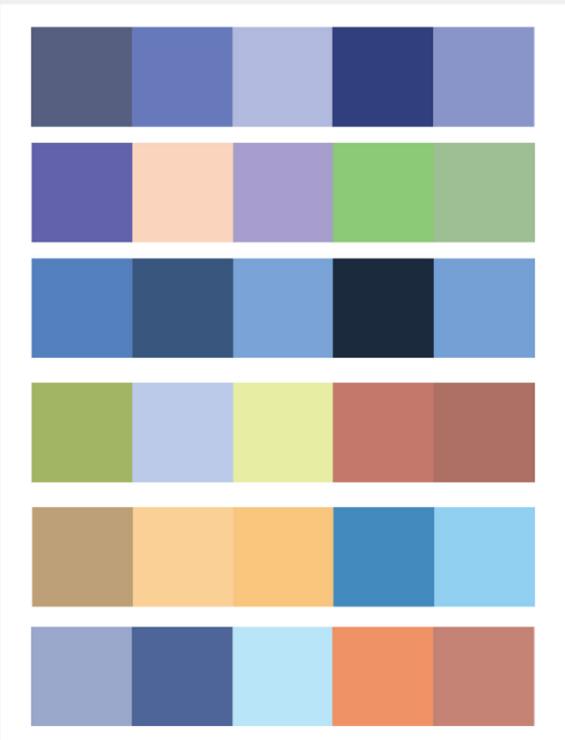
Among full-time and part-time students (n= 48), the top three reasons for wanting to eat healthy include, for overall physical health (58.3%), to lose weight
Avenir Lt Std 45 Book- 9.5 pt / 11

Among full-time and part-time students (n= 48), the top three reasons for wanting to eat healthy include, for overall physical health (58.3%), to lose weight (14.6%),
Roboto Light- 9 pt / 13

COLOR PALETTE EXPLORATION

I spent some time looking at different color schemes and trying different ideas to see what types of colors would work well together. I tried to keep in mind that the colors would be used right next to each other on data visualizations, so I wanted colors that were different enough that it wouldn't cause confusion. It was tough to achieve this and to also make sure that the palette looked cohesive all together.

Color palette ideas



Adobe color picker tool

INSPIRATION AND EXAMPLES

While developing my work, I looked at many different examples of data visualization in booklets and reports. I especially saw a lot of annual report templates that I thought looked very clean and organized with a clear, branded aesthetic.

One of my favorite examples that I saw is the WEEE Ireland Annual Environmental Report 2016. I thought this one had the perfect balance of illustration, text, data visualizations, and photos. It still felt very unique while being very clean and "corporate."



Generic annual report template



Generic annual report template

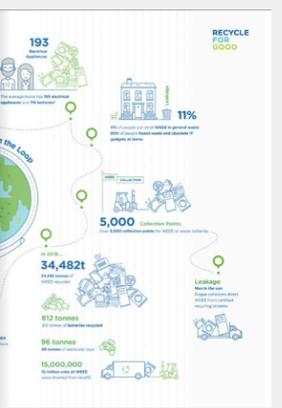
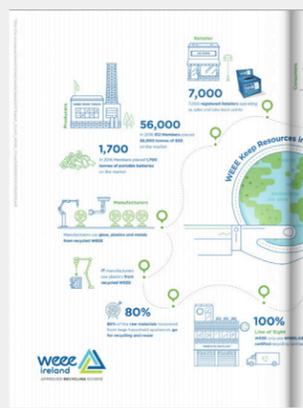
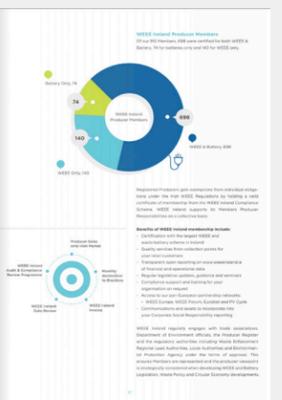
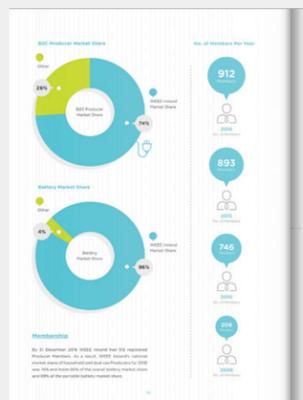


Generic annual report template

WEEE Ireland Annual Environmental Report 2016



Cover



THESIS II MIDTERM REVIEW

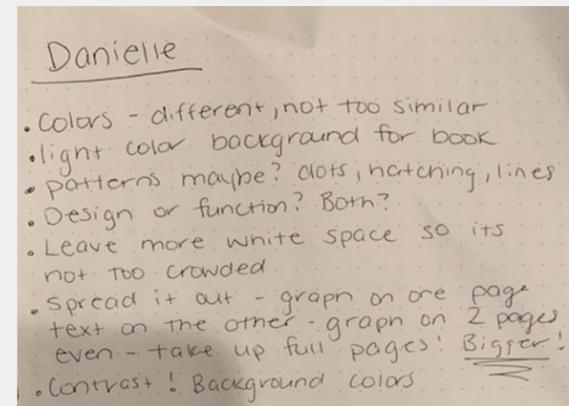
IN-CLASS CRITIQUE

At the Spring 2020 midterm in early March, I was still struggling a bit with the color scheme and layout. I had all of the data and information organized and began creating the visualizations, but they weren't assembled in a comprehensive way yet. I still had some stylistic elements to work out, but I was feeling good about the actual content. It was a tedious process: I would go through the data and pick out information I needed, create the visualization, and then place it into my InDesign layout. At this point, the layout was not fully organized yet. I was mostly focused on getting the visualizations made.

It is also important to note that around this time, COVID-19 was beginning to rapidly spread in the US and other parts of the world. Things were very uncertain and there was talk of school moving to all online for the remainder of the semester.



Thesis II midterm display



Feedback from classmates

IN-PROGRESS WORK: MARCH TO MAY

RESEARCH STUDIES

I spent a lot of time going through more research studies on topics that were related to my survey topics. There is written content in my finished booklet, serving as background information from published research articles on topics that are directly related to the themes studied in my survey. I wanted to give a background on the information that has already been established in wider studies and include this information.

Food, Mood, and Brain Health: Implications for the Modern Clinician
by Laura Lachance, MD & Drew Ramsey, MD

Helping patients to eat a diet that is rich in brain food – fish, seafood, beans and legumes, leafy greens and other vegetables, olive oil (monounsaturated fat), yogurt, nuts – can be an effective and relatively simple way to promote mental health and recovery from mental illness that can easily be integrated into health care.

Abstract
Improved, innovative strategies are needed for the prevention and promotion of recovery from mental illness as these disorders leading cause of disability worldwide. This article will review the evidence linking dietary patterns to brain-based illnesses and provide an overview of the mechanisms that underlie the association between brain health and the food we eat. Considerations for dietary intervention will be discussed including encouraging a shift towards a traditional or whole foods dietary pattern.

The evidence is growing food choice is strongly implicated in mental health risk. In cases like Robert's, a food history is a vital piece of data, both in assessing low appetite as a possible medication side effect, or as a symptom of depression. Furthermore, a food history is imperative to understand whether targeted dietary recommendations could assist in his recovery.

An approach to consider for patients with mental health symptoms is to offer counseling on lifestyle interventions, such as diet. Physicians often feel ill-equipped to discuss diet due to lack of training, limited time, and a sense of helplessness.

Proceedings of the Nutrition Society (2013), 72, 420–432
© The Authors 2013 First published online 11 September 2013
doi:10.1017/S0029665113003133
The Nutrition Society Irish Section 22nd Annual Postgraduate Meeting was hosted by Queen's University Belfast on 14–15 February 2013

The potential role of fruit and vegetables in aspects of psychological well-being: a review of the literature and future directions

Ciara Rooney*, Michelle C. McKinley and Jayne V. Woodside
Nutrition and Metabolism Research Group, Centre for Public Health, Queen's University Belfast, Belfast BT12 6BJ, UK

ORIGINAL RESEARCH

Physical Activity and Dietary Habits of College Students
Loureen Downes, PhD, FNP-BC

ABSTRACT
The majority of chronic diseases are preventable by lifestyle behaviors. This study explored physical activity (PA), dietary habits (DH), and weight status related to motivators and barriers of healthy lifestyle choices in a cohort of 106 college students. PA was significantly correlated to motivating factors ($p < .01$). Poor DH was significantly correlated with inhibiting factors ($p < .05$). Nurse practitioners are prepared through educational training to provide counseling in the context of motivators and barriers to improve PA and DH, and to be at the forefront of policy implementation to prevent chronic diseases and decrease the cost of healthcare.

Keywords: barriers, college students, dietary habits, health behaviors, motivators, physical activity
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Advance Access publication 26 October 2005

Young people and healthy eating: a systematic review of research on barriers and facilitators

J. Shepherd*, A. Harden, R. Rees, G. Brunton, J. Garcia, S. Oliver and A. Oakley

Abstract
A systematic review was conducted to examine the barriers to, and facilitators of, healthy eating among young people (11–16 years). The review focused on the wider determinants of health, examining community- and society-level interventions. Seven outcome evaluations and eight studies of young people's views were included. The effectiveness of the interventions was mixed, with improvements in knowledge and increases in healthy eating but differences of food products), or where there were no methodologically sound evaluations. Rigorous evaluation is required particularly to assess the effectiveness of increasing the availability of affordable healthy food in the public and private spaces occupied by young people.

Introduction
Healthy eating contributes to an overall sense of well-being, and is a cornerstone in the prevention of

PLOS ONE

RESEARCH ARTICLE
Let them eat fruit! The effect of fruit and vegetable consumption on psychological well-being in young adults: A randomized controlled trial

Tamlin S. Conner^{1*}, Kate L. Brookie^{1*}, Anitra C. Carr², Louise A. Mainville³, Margreet C. M. Visiers²

Abstract
This study tested the psychological benefits of a 14-day preregistered clinical intervention to increase fruit and vegetable (FV) consumption in 171 low-FV-consuming young adults (67% female, aged 18–25). Participants were randomly assigned into a diet-as-usual control condition, an ecological momentary intervention (EMI) condition involving text message reminders to increase their FV consumption plus a voucher to purchase FV, or a fruit and vegetable intervention (FVI) condition in which participants were given two additional daily servings of fresh FV to consume on top of their normal diet. Self-report outcome measures were depressive symptoms and anxiety measured pre- and post-intervention, and daily negative and positive mood, vitality, flourishing, and flourishing behaviors (curiosity, creativity, motivation) assessed nightly using a smartphone survey. Vitamin C and carotenoids were measured from blood samples pre- and post-intervention, and psychological expectancies about the benefits of FV were measured post-intervention to test as mediators of psychological change. Only participants in the FVI condition showed improvements to their psychological well-being with increases in vitality, flourishing, and motivation across the 14-days relative to the other groups. No changes were found for depressive symptoms, anxiety, or mood. Intervention benefits were not mediated by vitamin C, carotenoids, or psychological expectancies. We conclude that providing young adults with high-quality FV, rather than reminding them to eat more FV (with a voucher to purchase FV), resulted in significant short-term improvements to their psychological well-being. These results provide initial proof-of-concept that giving young adults fresh fruit and vegetables to eat can have psychological benefits even over a brief period of time.

Trial registration: Australian New Zealand Clinical Trials Registry ACTRN12615000183563

WRITTEN CONTENT

I spent a lot of the Spring 2020 semester writing the research paper that goes along with my project topic. This is my initial outline, finished word count, and preview of the written content.

Written content: initial outline

Thesis Outline

Section 1: Introduction

Section 2: Demographics
 age
 gender
 race/ethnicity
 school status
 work status
 school/work status combined
 where do you currently live
 who do you live with
 region

Section 3: Typical Eating Habits and Patterns

On a typical day the food I eat...
 helps me cope with stress
 Makes me feel good
 Is easy to prepare and cook
 Is easily available in shops and supermarkets close to where I live
 Is not expensive

On a typical day the food I eat...
 contains only natural ingredients
 is low in calories
 helps me control my weight
 tastes good
 contains no additives or artificial ingredients

On a typical day the food I eat...
 contains a lot of vitamins and minerals
 is high in protein
 is high in fiber and roughage
 gives me energy

Average fruit intake
 Average Vegetable intake

Correlation Graphs between...
 • the food I eat every day contains a lot of vitamins and minerals AND I have a lot of energy
 • the food I eat everyday contains a lot of vitamins and minerals AND I feel positive and optimistic
 • the food I eat every day is nutritious AND I feel positive and optimistic
 • the food I eat everyday contains only natural ingredients AND I have a lot of energy

Section 4: Students
 Student status and vegetable and fruit intake
 Motivation to eat healthy
 Students and motivation to eat healthy
 Deterrents to eating healthy
 Students and deterrents to eating healthy
 Dorm Living and deterrents to eating healthy
 Students, vitamins, and minerals
 Students and nutrition

Section 5: Accessibility
 It is difficult for me to obtain healthy foods...
 Type of community and difficulty
 Region and difficulty

Section 6: Motivation
 motivation to eat healthy
 deterrents to eating healthy
 Motivation
 I want to improve the quality of my life by eating healthy foods
 I feel regretful if I don't eat healthy foods
 I enjoy eating healthy foods
 It doesn't matter whether or not I eat healthy foods
 I never think of eating healthy foods
 I eat healthy foods...

As a form of prevention
 Because I've had health problems in the past
 To maintain a certain body figure
 Because I believe that there are strong connections between overall health and diet
 Because of the influence of people in my life

Well-being
 I have a lot of energy
 I often feel rested
 I feel positive and optimistic
 I feel motivated to complete daily tasks

Section 7: Conclusion

Word count	×
Pages	22
Words	6937
Characters	45158
Characters excluding spaces	38493

Display word count while typing

Final paper

Introduction

The ages between 18 and 30 come with many significant life changes, stressors, and challenges, including but not limited to the transition from high school to college or trade school, living in a college dorm or in an apartment away from family, starting a full-time job in a new place, working, while attending school, and more. During these situations, eating habits and patterns often shift due to inaccessibility of healthy foods, a lack of motivation to eat healthy foods, and the difficulty financial constraints of eating a healthy diet, among many others. All of these situations can contribute to eating habits that are not always healthy, often influencing the individual's overall well-being.

Poor nutrition and obesity are some of the biggest health problems facing society today. There are many different predictors of obesity, such as genetics, physical activity, and food consumption. Food selection is an important factor with many long-term consequences (Deshpande et. al, 2009).

The goal of this study was to get a general sense of the eating habits, motivation to eat healthy, and overall well-being of individuals aged 18 to 30.

METHODS

This study was conducted through an online survey platform, and it was distributed through various social media websites to participants. 146 individuals participated in total, but all participants did not answer every question. The sample size for each question varies, and the number of respondents who answered each question is noted.

To measure food choices, a scale was adapted from Steptoe, Pollard, & Wardle's (1995) Food Choices Questionnaire (FCQ). To measure health motivation, a scale was adapted from Min's (2015) College Students Health Motivation Questionnaire (CSHM-Q). To measure well-being, a scale was adapted from Bericat's (2013) Socioemotional Well-Being Index (SEWBI).

Participants

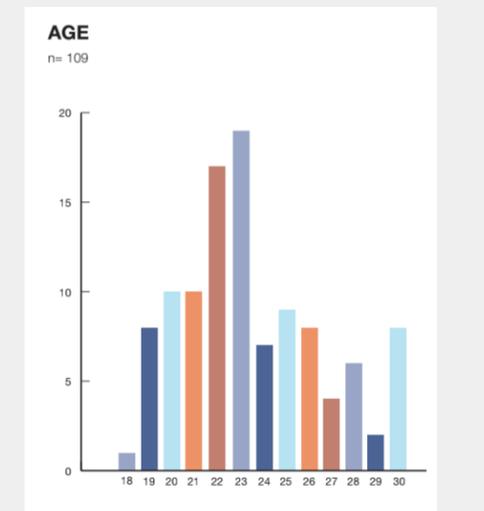
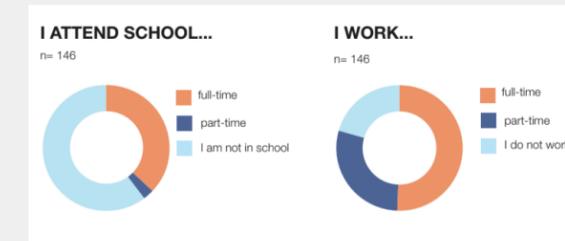
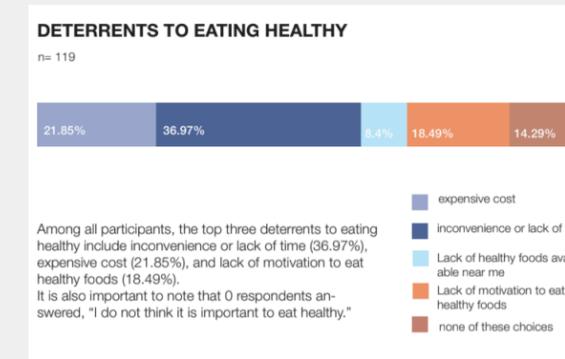
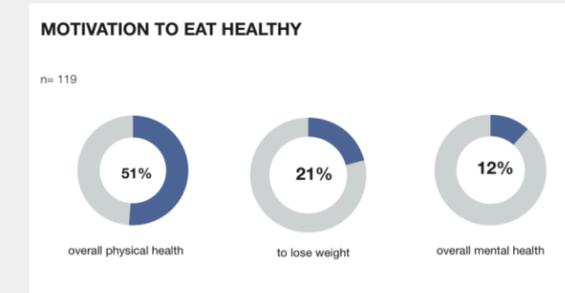
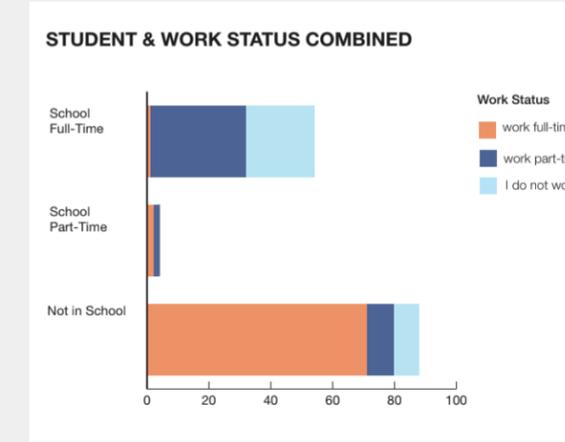
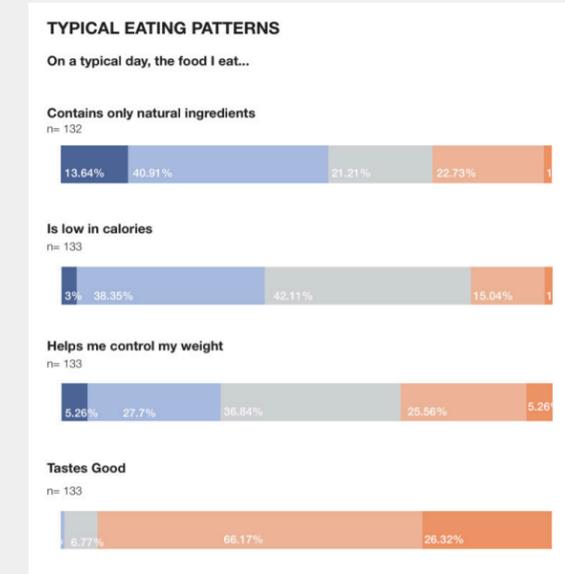
The majority of participants (82%, n=120) identified as female. 87% (n=130) identified their race/ethnicity as white or Caucasian. 73% (n=107) responded as living in the Northeast region of the United States of America. These three demographic reports show that a fairly

Written content preview

VISUAL LANGUAGE: MARCH

Throughout March, I continued creating all of the data visualizations and started laying out all of my information. This process was not as linear as I would have expected. I thought I would have a very neat process of gathering and looking through all the data, creating all the visualizations at once, and then placing everything into a layout. However, it didn't quite go like that.

As I went through the data, I would create the visualizations one by one. As the visualizations were developed, I would place them into my InDesign document. This allowed for a very fluid process, which I actually really enjoyed. As visualizations were created, I moved them around and tried out different layouts and grid structures. Also, as I went through the data, I would find interesting information that I may not have originally planned on including. The layout had to be flexible and constantly changing in order to accommodate all of the information that I ended up using.

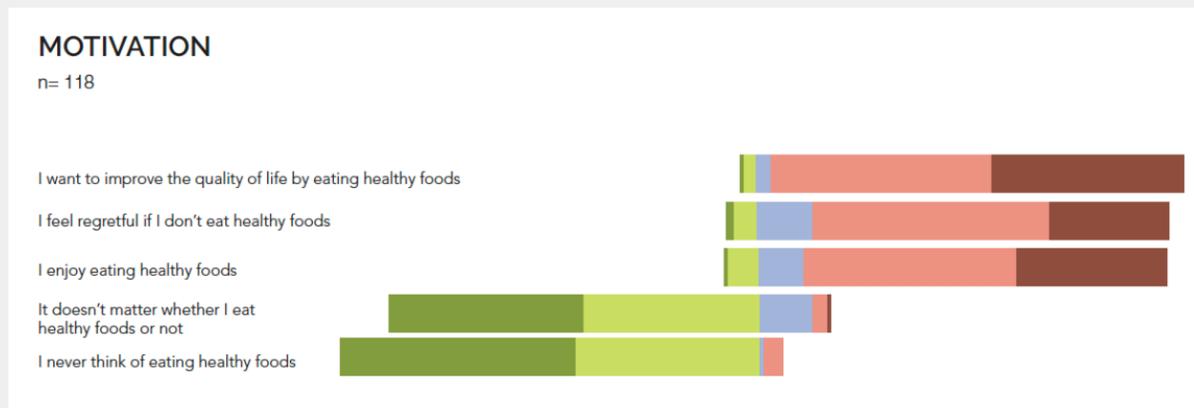
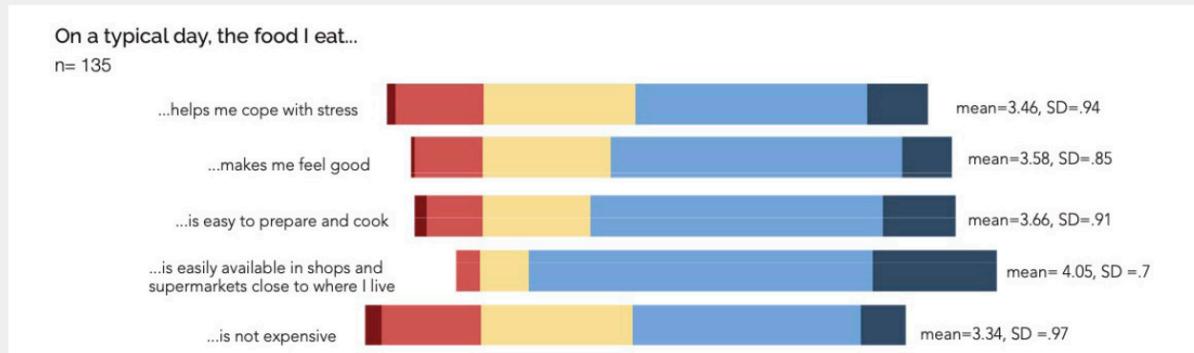
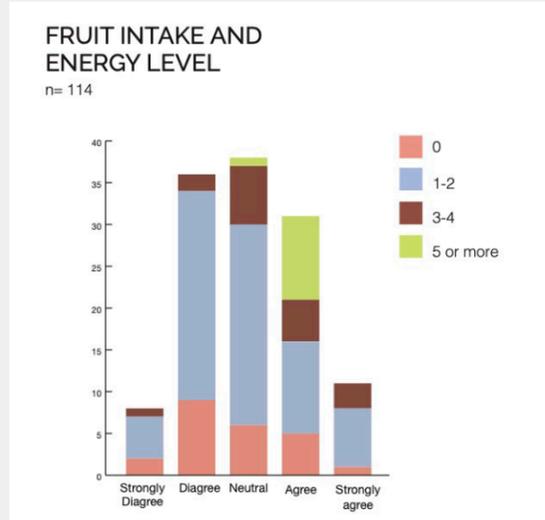
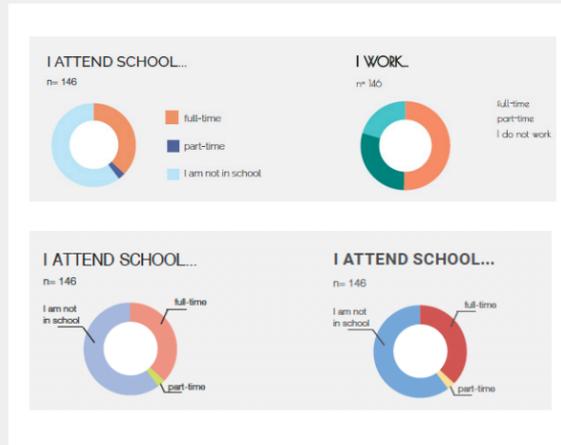


VISUAL LANGUAGE: APRIL

Throughout April, I continued working with my data and developing visualizations as I went. I continued working with different color palettes and fonts, trying many different options in context with the visualizations to see what they really look like.

By mid-April, I found a color palette that I really liked, and the direction of the aesthetic became clear. Also, after trying different layout sizes and grid structures, I chose a smaller book size: 5.5 x 8.5 inches. I liked the unique size of that booklet, and I felt that it would be a good size to show a lot of text and dense information without being too overwhelming on a large page.

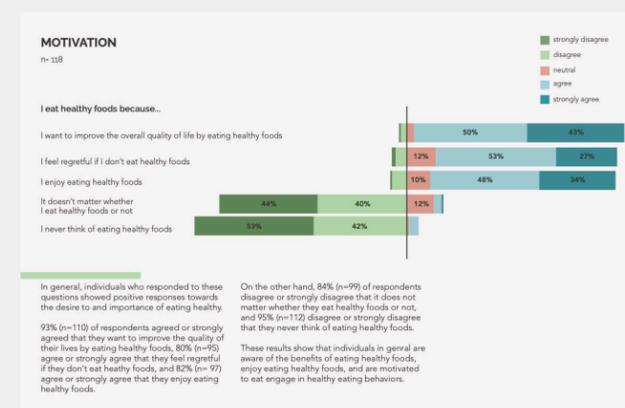
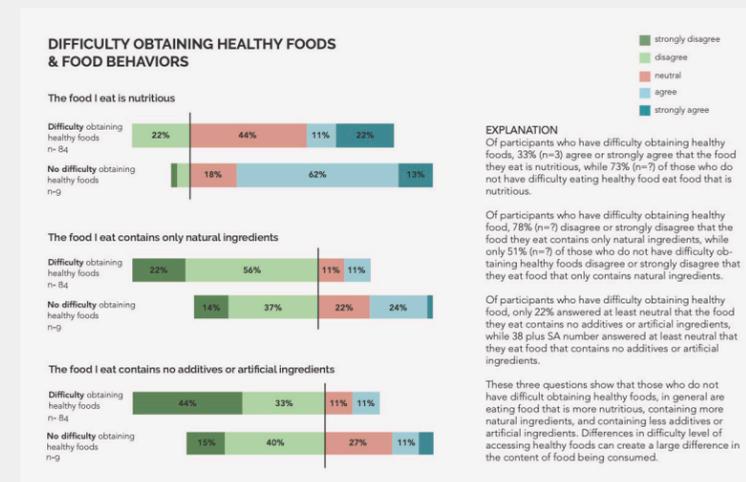
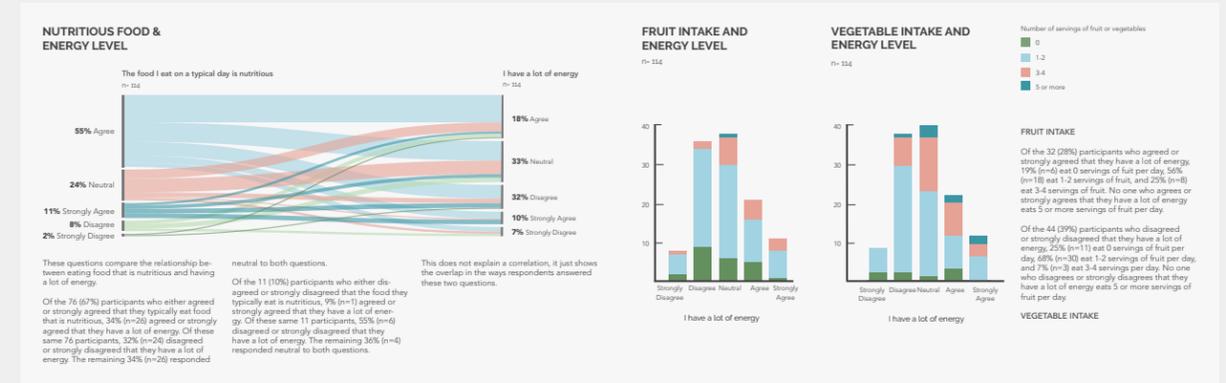
At this point, it was about just getting all of my visualizations and information together and in the document. I was really focused on having a rough, completed document rather than a half-done, perfectly polished document in April.



VISUAL LANGUAGE: MAY

By the beginning of May, I had most of my data and information finished and in my book. I had a solid color palette and aesthetic developed. At this point, it was really about making sure the layout was exactly how I wanted it. I spent a lot of time organizing the visualizations and text, and filling out each section correctly with all of its information. Many of the pages appeared crowded, so I ended up spreading the information out much more once everything was done. This expanded all of the information nicely, and it almost doubled the initial page count.

Also, I was working on finishing the research paper aspect. Once this was done, I worked on formatting it all correctly in InDesign and making sure the order of sections and information all made sense.



COVER DESIGN

One of the last elements I worked on and refined is the cover of the book. I had some trouble at first designing it, and I wasn't sure what direction to go in with it. I looked at some examples and started working with simple line drawings, creating a few icons to represent each theme that is studied in the survey.

COVER REFERENCES

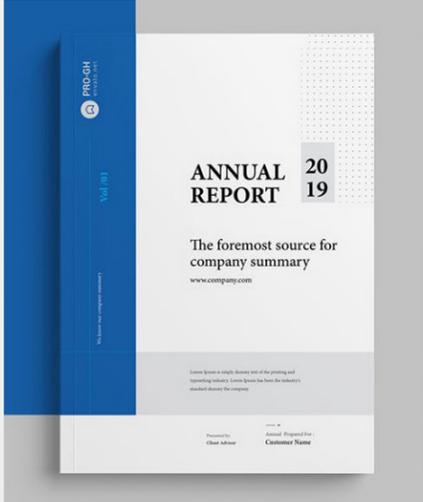
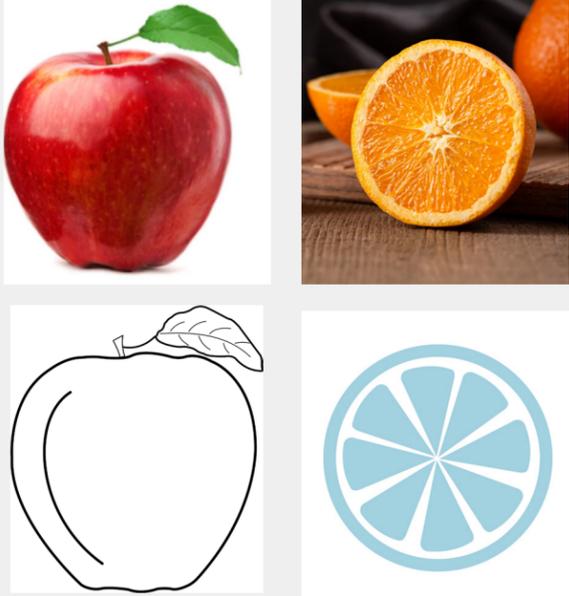
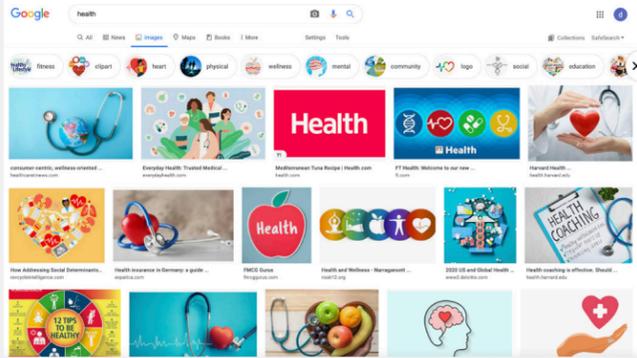


ILLUSTRATION DEVELOPMENT



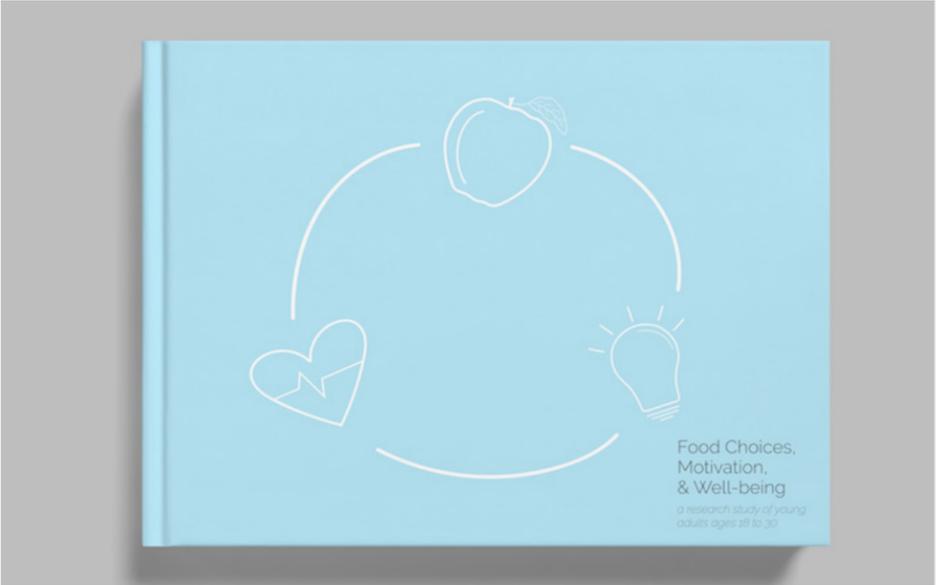
Line drawings & references



"Health" Google search for inspiration



First cover draft



Second cover draft in a mock up

FINAL WORK

May 2020

- Visual Language
- Font Palette
- Color Palette
- Booklet
- Posters

FINAL WORK: VISUAL LANGUAGE

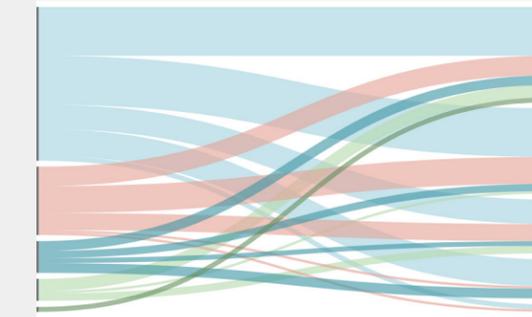
DATA VISUALIZATIONS

I created simple, 2-D vector drawings of pie charts, bar graphs, radial bar graphs, sunburst graphs, alluvial diagrams, Likert scales, and tree maps. These were the simplest, easiest to understand graphs to use that were also still visually interesting and aesthetically pleasing to look at.

The alluvial diagrams were great for showing the relationship between two questions to see how certain people answered the two questions that were being compared.

Pie charts, bar graphs, radial bar graphs and tree maps provided a mixture of interesting visual ways to show one question at a time.

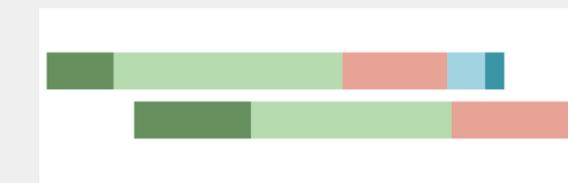
Likert scale graphs were very helpful to show questions that involved answers ranging from strongly disagree to strongly agree.



Alluvial diagram



Radial bar graph



Likert scale

DESIGN ELEMENTS

The design elements in the book were very simple. At the beginning of each section, the left page is blank and filled with one solid color. Each section has its own color. These colors are the same as the 5 colors that are used throughout the book in the data visualizations. There are more than 5 sections, so once all of the colors were used, the order started again from the beginning.

Also, a simple, horizontal line is used on different pages as a border, right above the text boxes. A horizontal line is also used underneath the title of each section. The colors that are used in these horizontal lines correspond to that section's color.

FINAL WORK: FONT PALETTE

SECTION HEADING

EATING HABITS & BEHAVIORS

Raleway Light 30pt. / 34

EATING HABITS & BEHAVIORS

OVERVIEW

It is well-known that a healthy diet is crucial for overall health and well-being. A poor diet can be associated with short-term and long-term health problems, and may increase the risk for certain health problems.

RECENT RESEARCH

According to the U.S. Department of Health and Human Services, the typical eating patterns of many people in the United States are not in line with the dietary guidelines. About 3/4 of the population eats low amounts of vegetables, fruits, dairy, and oils, more than 1/2 of the population is meeting or exceeding total grain

and total protein recommendations, most exceed the recommendations for added sugars, saturated fats, and sodium, and the eating patterns of many are too high in calories (Dietary, 2019).

PHYSICAL HEALTH

It has been found that healthy eating patterns are associated with positive health outcomes. There is established and emerging evidence showing that healthy eating patterns are associated with a reduced risk of cardiovascular disease, type 2 diabetes, certain types of cancers, obesity, and some neurocognitive disorders (Dietary, 2019).

CARDIOVASCULAR DISEASE

Cardiovascular disease is the top cause of death in Western Countries, which represents approximately 30% (17.3 million) of all deaths worldwide. Cardiovascular diseases include a wide range of disorders that affect the heart and blood vessels, including hypertension, stroke, atherosclerosis, peripheral artery disease, and vein diseases. The likelihood of developing a cardiovascular health problem is related to unhealthy dietary patterns, specifically including diets that consist of excessive sodium and processed foods, added sugars, unhealthy fats, in addition to low levels of fruits and vegetables, whole grains, fiber, legumes, fish, and nuts. It has

Eating Habits & Behaviors | 13

LEVEL 2 SUB-HEADING

CARDIOVASCULAR DISEASE

Raleway Light 30pt. / 34

FOOTER

Eating Habits & Behaviors | 13

Avenir Lt Std 35 Light
7pt.

SUB-HEADING

OVERVIEW

Avenir Lt Std 95 Black
9pt. / 12.5
All capital letters

BODY

United States are not in line with the dietary guidelines. About 3/4 of the population eats low amounts of vegetables, fruits,

Avenir Lt Std 45 Book
9pt. / 12.5

FINAL WORK: FONT PALETTE

SPECIFIC QUESTION

I Attend School...

Raleway Medium 12pt. / 14

GRAPH KEY TITLE

Work Status

Avenir Lt Std 65 Medium
9pt. / 9

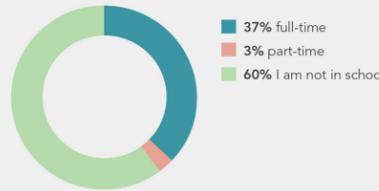
N NUMBER

n= 146

Raleway Light 8pt.

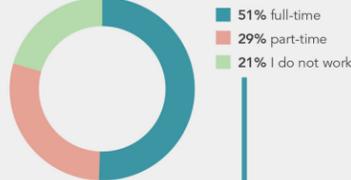
I Attend School...

n= 146



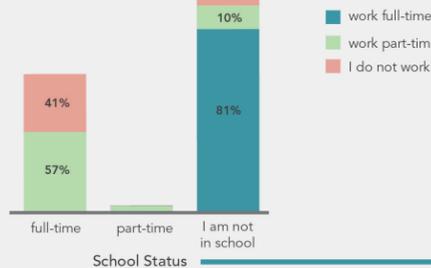
I Work...

n= 146



Student & Work Status

n= 146



Work Status

work full-time
work part-time
I do not work

GRAPH KEY CHOICES

work part-time
Avenir Lt Std 45
Book 8pt. / 9.5

GRAPH AXIS TITLE

School Status
Avenir Lt Std
65 Medium Book
9pt. / 9

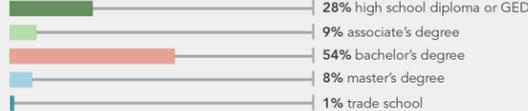
ANSWER CHOICES

...helps me cope with stress

Avenir Lt Std 45 Book
9pt. / 10

Highest Level of Education

n= 145



Demographics | 9

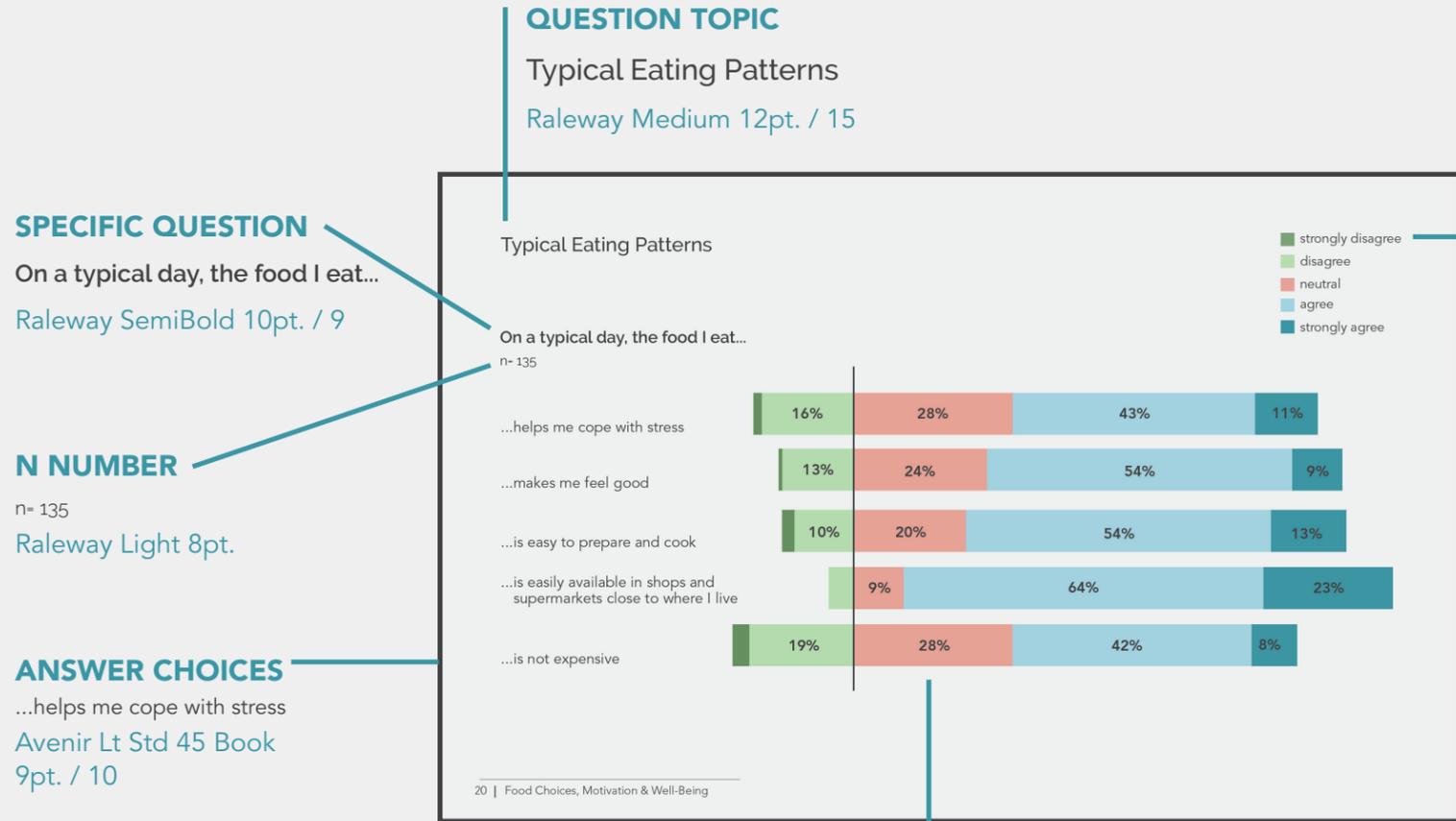
PERCENTAGES & ANSWER CHOICE LABELS

21% I do not work

Percentage: Avenir Lt Std 85 Heavy 8pt. / 9.5

Category: Avenir Lt Std 45 Book 8pt. / 9.5

FINAL WORK: FONT PALETTE



LIKERT SCALE KEY

strongly disagree
Avenir Lt Std 45 Book
11pt. / 14

LIKERT SCALE GRAPH VALUES

28%
Avenir Lt Std 85 Heavy 9pt. / 9

FINAL WORK: COLOR PALETTE

R: 125 G: 161 B: 119 #7da177
C: 55 M: 22 Y: 64 K: 2

R: 181 G: 220 B: 174 #b5dcae
C: 30 M: 0 Y: 40 K: 0

R: 230 G: 162 B: 150 #e6a296
C: 7 M: 42 Y: 34 K: 0

R: 162 G: 209 B: 224 #a2d1e0
C: 35 M: 5 Y: 9 K: 0

R: 59 G: 149 B: 163 #3b95a3
C: 75 M: 26 Y: 33 K: 1

The color palette I chose consists of greens, blues, and a pink. The colors are all distinctly different, but they still work well together aesthetically. No other colors besides different shades of gray and solid white were used throughout the book.

For many of the questions, a scale of strongly disagree to strongly agree was used, and I used Likert scale graphs to show these data visualizations. The dark green color was used for strongly disagree, light green was disagree, pink was neutral, light blue was agree, and dark blue was strongly agree. The two different greens and two different blues worked nicely to differentiate between strongly disagree vs. disagree, and strongly agree vs. agree, while pink was a totally different color for neutral.

R: 65 G: 64 B: 66 #414042
C: 68 M: 62 Y: 55 K: 46

R: 239 G: 239 B: 240 #eeeff0
C: 0 M: 0 Y: 0 K: 6

R: 255 G: 255 B: 255 #ffffff
C: 0 M: 0 Y: 0 K: 0

For all of the typography in my book, I used a dark gray. Solid black looked too harsh with the light, pastel colors I used in the data visualizations. Dark gray was just soft enough to stand out without being too much of a contrast. For the backgrounds, I used a very light gray. Again, a solid white felt like too stark of a contrast with the pastels.

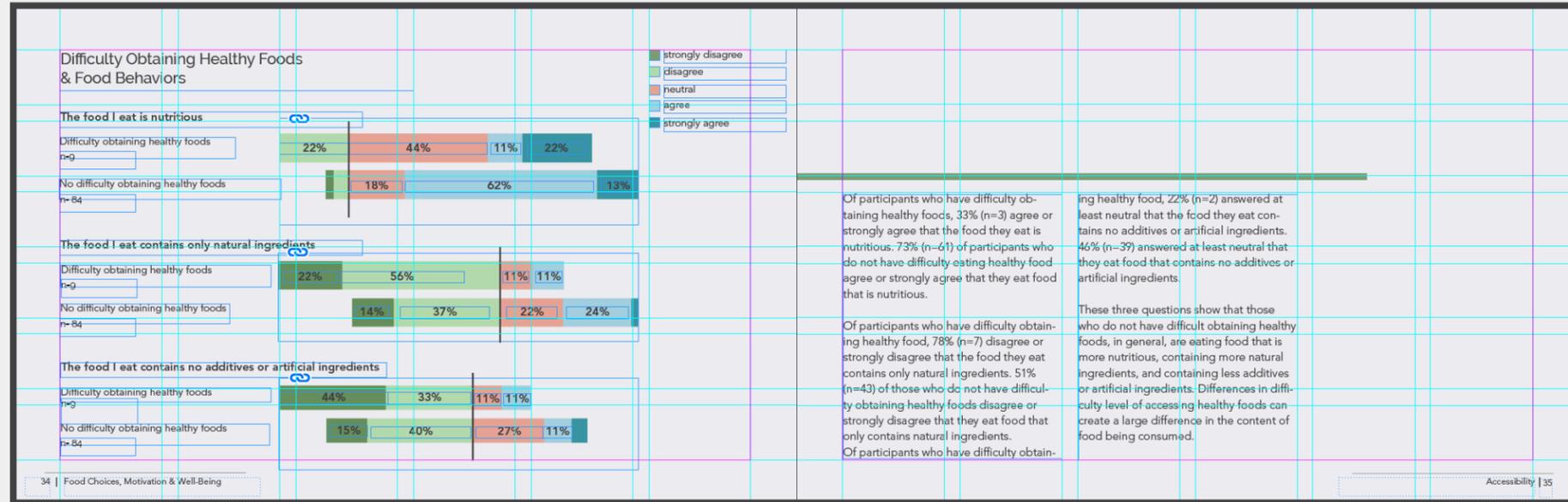
FINAL WORK: LAYOUT & GRID STRUCTURE

LAYOUT

I ultimately chose to create a half-letter sized book that is 8.5 inches wide by 5.5 inches tall. I love this sizing, and as a printed piece, it's an enjoyable book size to hold and flip through. I also thought that it was a good size for the data visualizations and dense explanations. There is enough room on a page for a few graphics without being too crowd-

ed. Many of the spreads are laid out with data visualizations on the left page, with explanations on the right page so as to not overwhelm the reader.

The margins are .5 inches on all sides, and the gutter between columns and rows is .1667 inches.



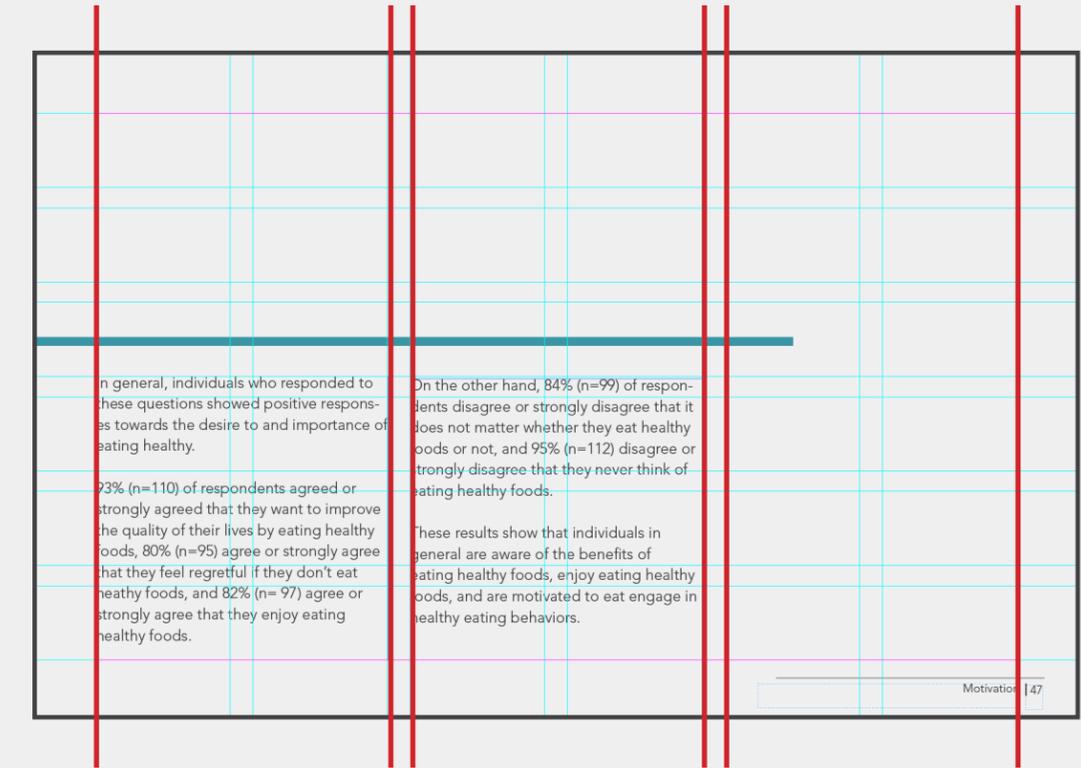
GRID STRUCTURE

I set the grid up with 6 columns and 6 rows. Having a 6 x 6 grid allowed for customizability within a structure.

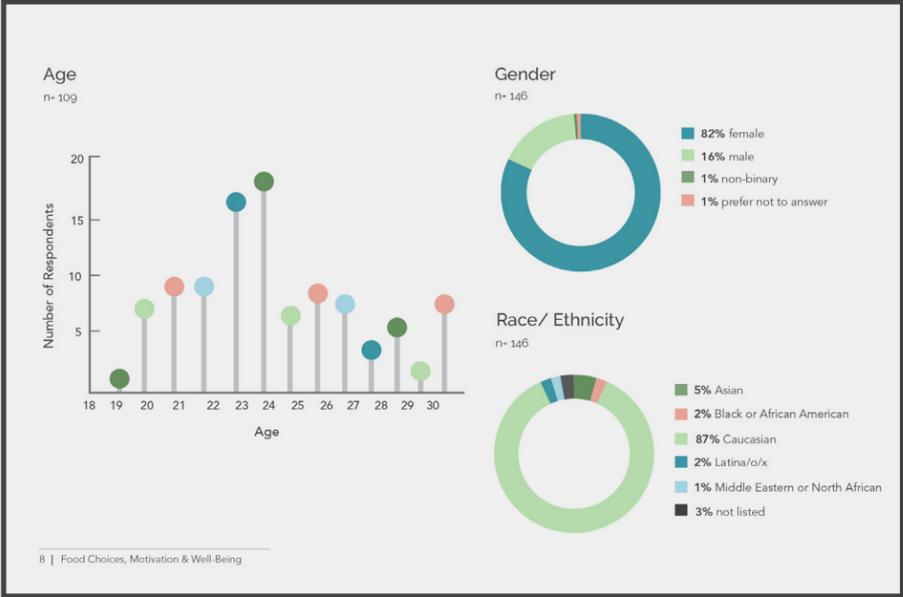
Looking at the grid as a 3 column by 6 row grid, the text was placed in 3 columns. This layout makes the text feel very digestible without being too overwhelming. The reader won't get tired reading across the columns, and they will be able to take in the information easily.

The height at which the columns began really depended on the section. Generally, I tried to have them start at the same point, but there is always some variability because every section can't be exactly, perfectly the same.

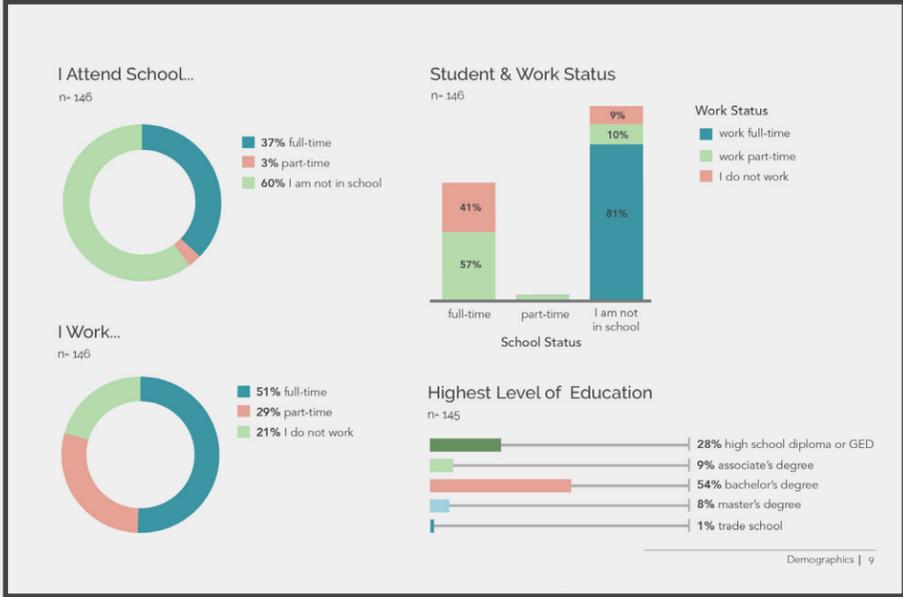
For some pages, there may have only been one or two data visualizations that were relevant to that question topic. For those, I would put the explanation on the same page as the graphic. The text explanation would be in one column to the left of the graphic. Depending on the size and complexity of the graphic, it would take up as much space as needed.



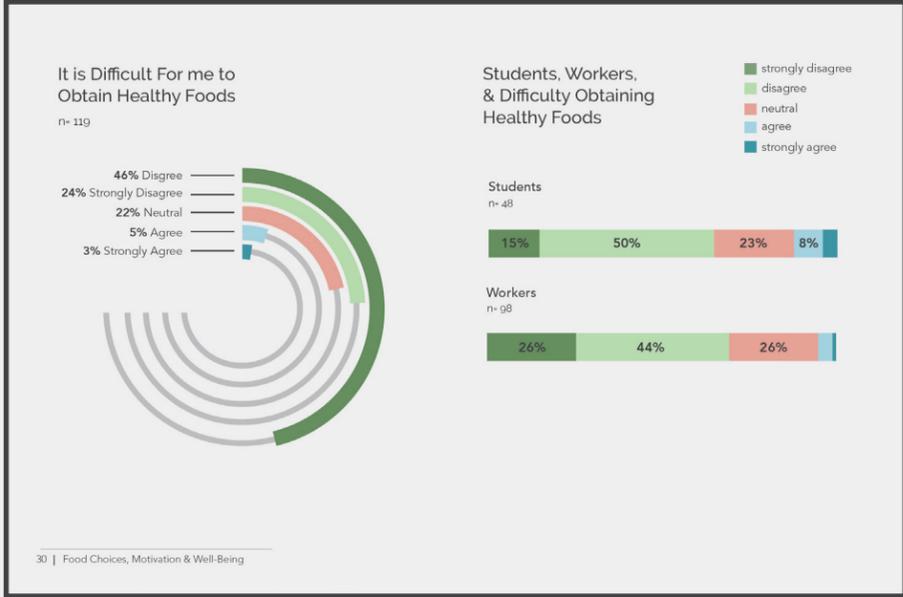
FINAL WORK: SPREAD EXAMPLES



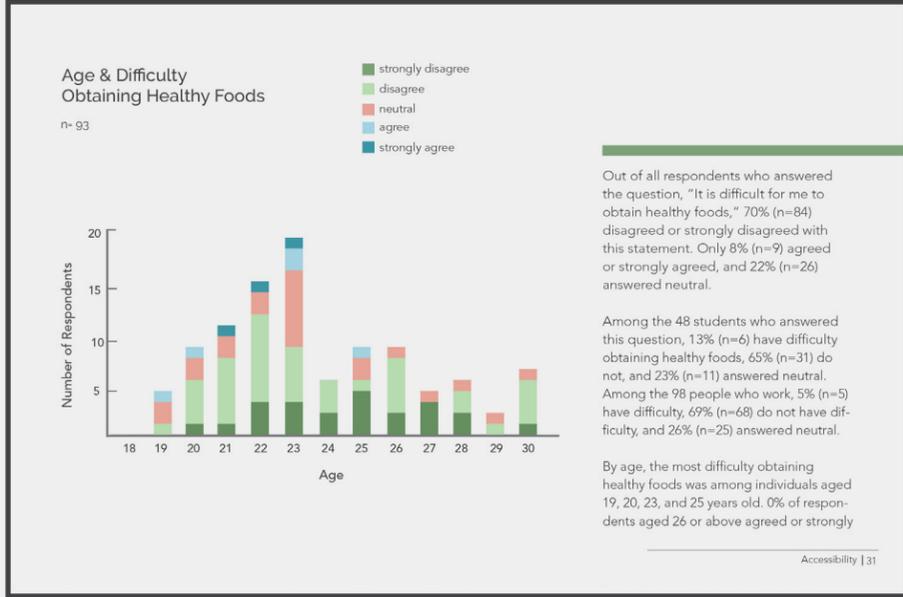
Page 8: Demographics



Page 9: Demographics

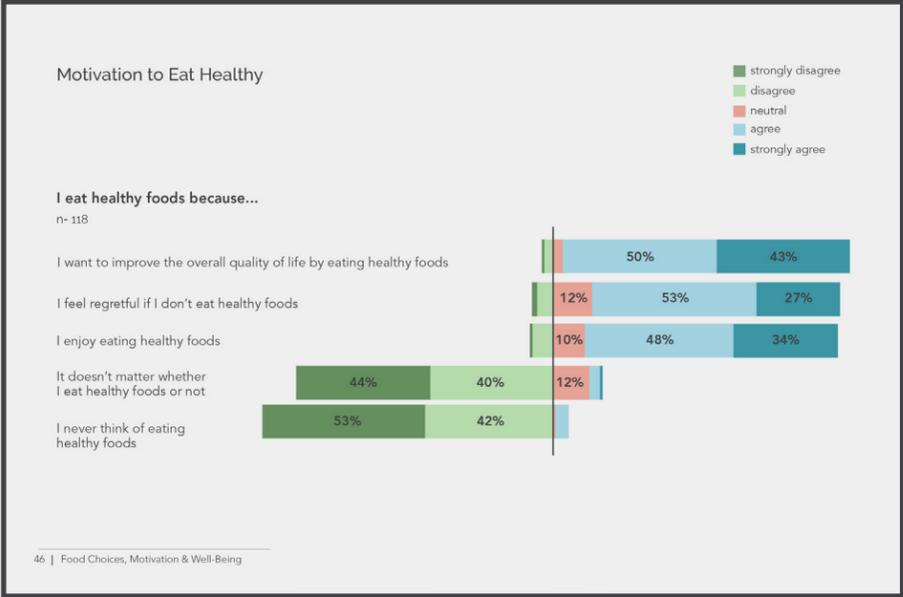


Page 30: It is Difficult for me to Obtain Healthy Foods



Page 31: It is Difficult for me to Obtain Healthy Foods

FINAL WORK: SPREAD EXAMPLES



Page 46: Motivation

In general, individuals who responded to these questions showed positive responses towards the desire to and importance of eating healthy.

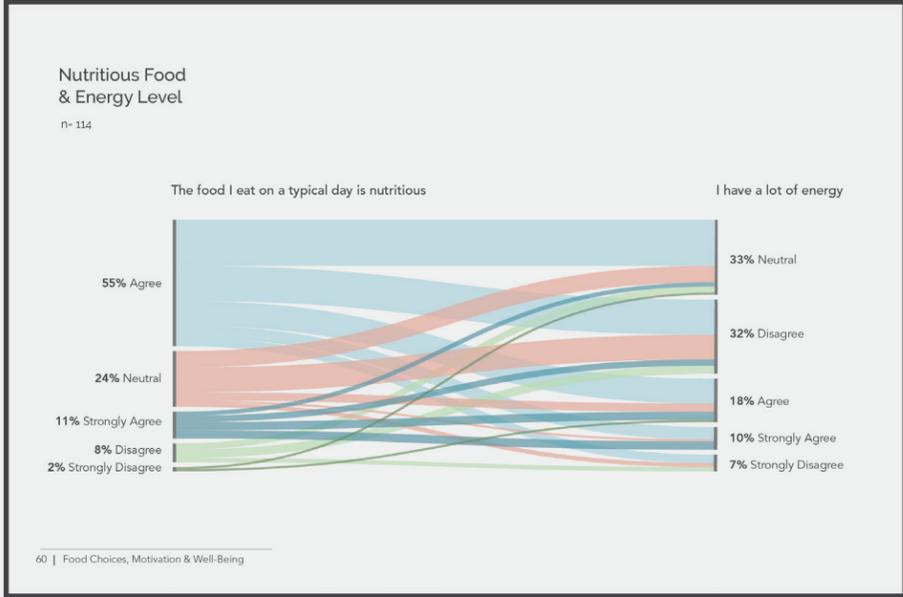
93% (n=110) of respondents agreed or strongly agreed that they want to improve the quality of their lives by eating healthy foods, 80% (n=95) agree or strongly agree that they feel regretful if they don't eat healthy foods, and 82% (n= 97) agree or strongly agree that they enjoy eating healthy foods.

On the other hand, 84% (n=99) of respondents disagree or strongly disagree that it does not matter whether they eat healthy foods or not, and 95% (n=112) disagree or strongly disagree that they never think of eating healthy foods.

These results show that individuals in general are aware of the benefits of eating healthy foods, enjoy eating healthy foods, and are motivated to eat engage in healthy eating behaviors.

Motivation | 47

Page 47: Motivation



Page 60: Nutritious Food & Energy Level

These questions compare the relationship between eating food that is nutritious and energy levels.

Of the 76 (67%) participants who either agreed or strongly agreed that they typically eat food that is nutritious, 34% (n=26) agreed or strongly agreed that they have a lot of energy. Of these same 76 participants, 32% (n=24) disagreed or strongly disagreed that they have a lot of energy. The remaining 34% (n=26) responded neutral to both questions.

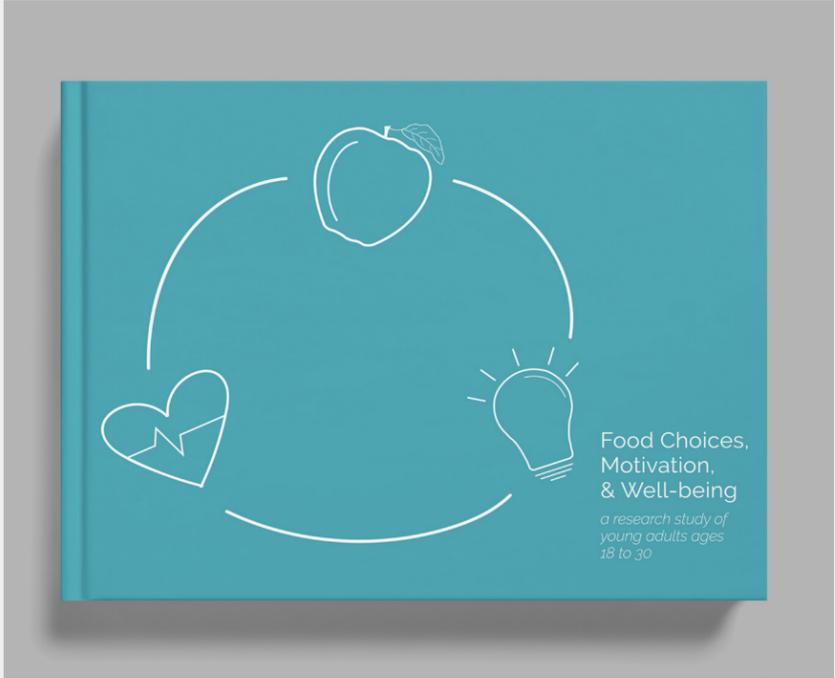
Of the 11 (10%) participants who either disagreed or strongly disagreed that the food they typically eat is nutritious, 9% (n=1) agreed or strongly agreed that they have a lot of energy. Of these same 11 participants, 55% (n=6) disagreed or strongly disagreed that they have a lot of energy. The remaining 36% (n=4) responded neutral to both questions.

This does not explain a correlation, it just shows the overlap in the ways respondents answered these two questions.

Well-Being | 61

Page 61: Nutritious Food & Energy Level

FINAL WORK: BOOKLET MOCK-UPS



Front Cover



Spread: Page 30-31



Spread: Page 10 -11



Spread: Page 74 -75

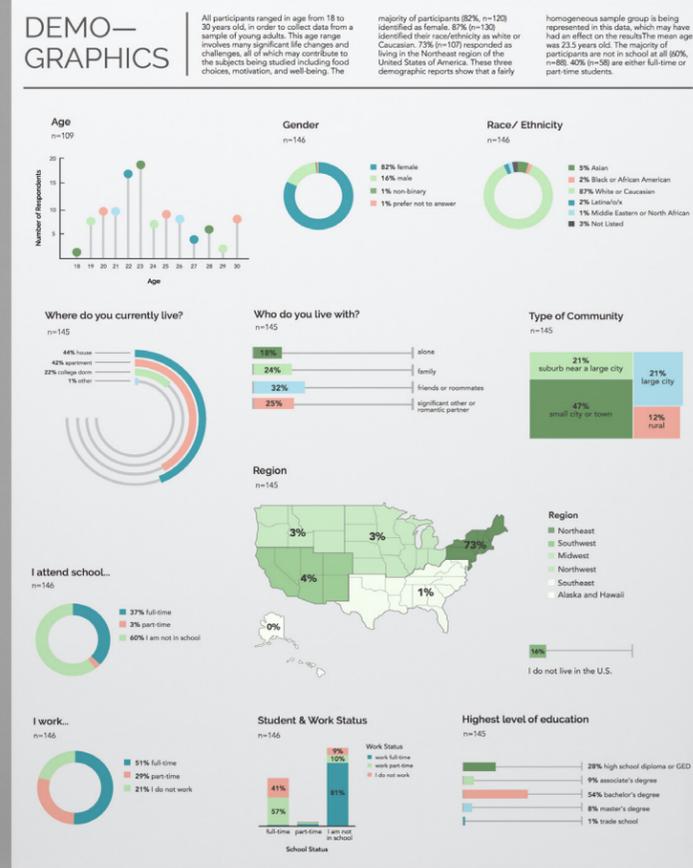


Spread: Page 46 -47

FINAL WORK: POSTERS

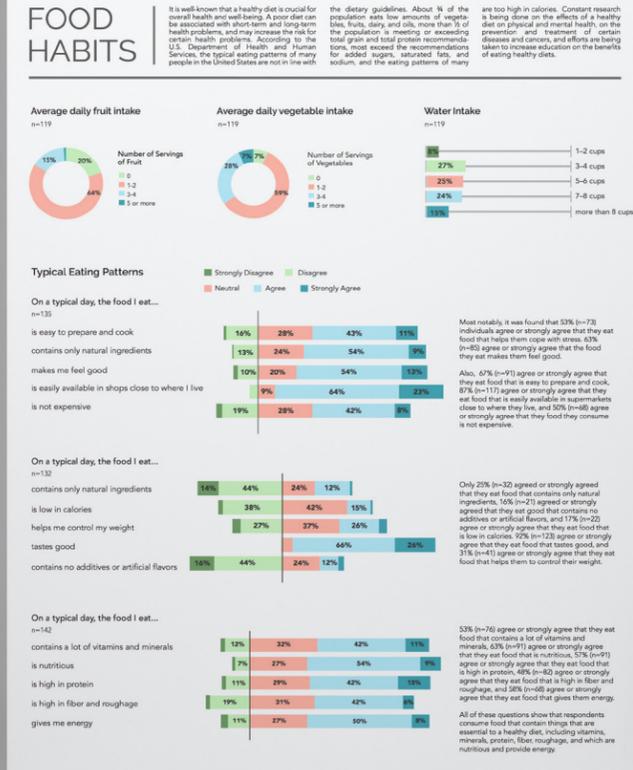
I didn't originally plan on making posters as part of my project, but I later thought that translating the information into an alternate layout style consisting of just the data visualizations and some small explanations would be an interesting piece to add. These show information broken up by section, focusing on one topic per poster. This layout spreads the information out in a larger format, making it easier to digest.

DEMOGRAPHICS



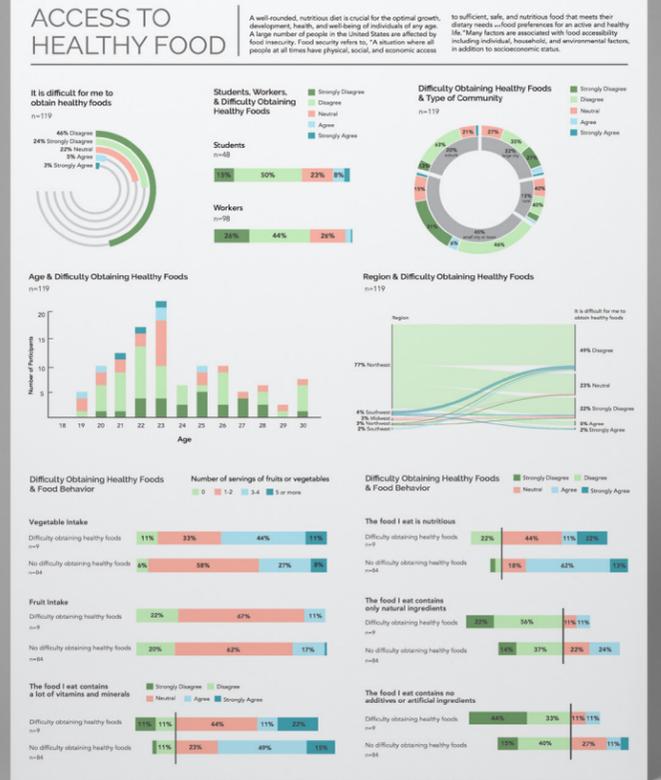
FOOD HABITS

FOOD HABITS

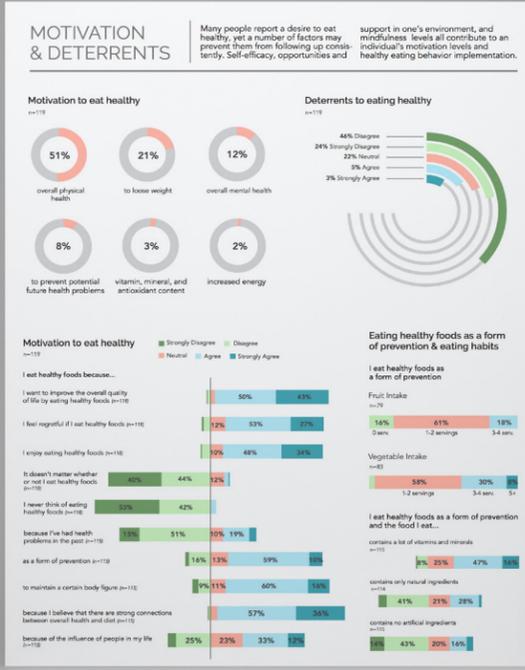


ACCESS TO HEALTHY FOOD

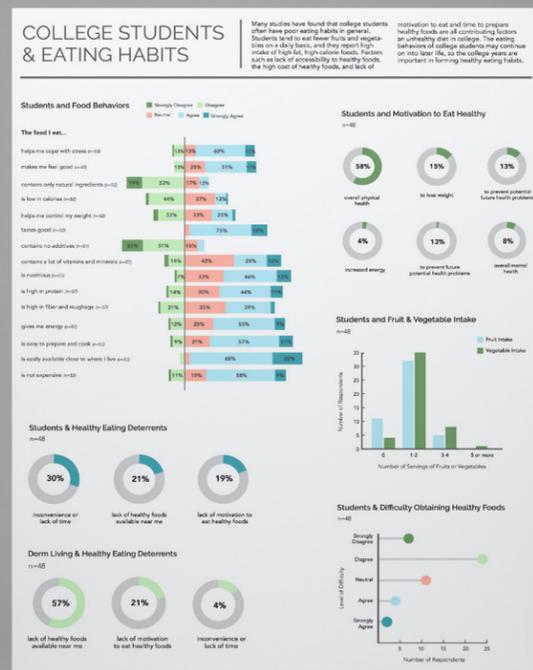
ACCESS TO HEALTHY FOOD



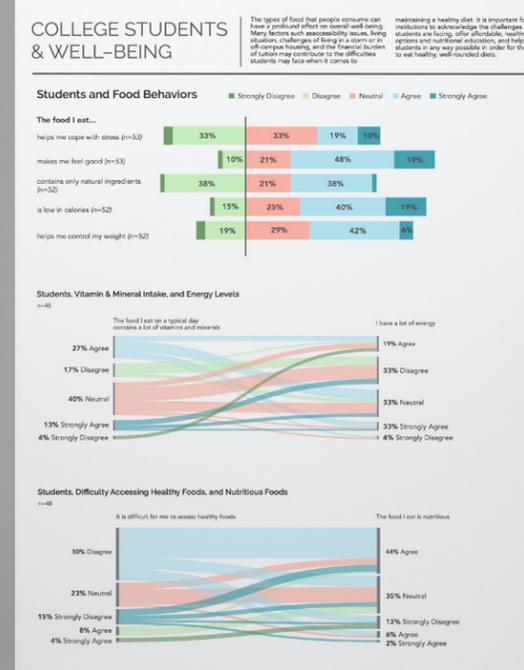
MOTIVATION & DETERRENTS



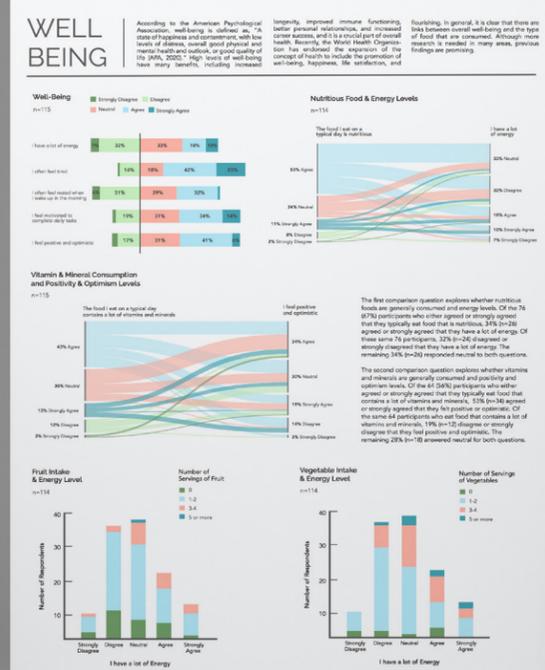
COLLEGE STUDENTS & EATING HABITS



COLLEGE STUDENTS & WELL-BEING



WELL-BEING



REFLECTIONS

May 2020

- Blog
- Obstacles
- Reflections

BLOG

Using the blog to track my weekly progress was a great experience for me. It held me accountable every week to show my progress, and it also provided a place to share any thoughts, concerns, or questions that I had. It became an important place for me to get my thoughts out and keep track of a “to-do” list and goals to meet for the following week. I also liked that it was constantly changing and nothing was set in stone. If I had an idea one week, I could easily explain my thought process in the next week’s post and share how I got to my new idea or direction.

My full blog site can be viewed at:
<https://gd.newpaltz.edu/kruchowy/>

Week 5- Progress Post

[1 Reply](#)

• I spoke with Professor Winograd last week about the potential for an independent study for next semester to conduct research, but she was hesitant to agree to anything because of the time constraints of only having 1 semester left- there likely would not be enough time to do everything that would be required. After speaking with Amy last week, she said I would be able to create and distribute a survey through thesis. I am really excited that this is a viable option, because I am very interested in research and data visualization aspects of design, so this seems like it will be good experience.

Thesis I week 5

TO DO:

- Revise assignments for final thesis proposal
- Start thinking about the final review for the semester
- Experiment with layout ideas, typefaces, etc.
- Look into a Wacom tablet & start watching tutorials on how to use Photoshop for digital painting.

This entry was posted in [Uncategorized](#) on [November 26, 2019](#). [Edit](#)

Thesis I week 13

Thesis III! Weekly post 1

[1 Reply](#)

Over break, I reflected on Thesis I and where I left things off with my project then. I didn't actually do any thesis work over break, but I have rethought some aspects and have some ideas on what to change in order to solidify exactly what I am planning on making this semester. Although I did a lot of work last semester with getting my survey together, going through the HREB approval process, putting it up on Qualtrics, and distributing it, I didn't really give the ultimate function of this part much thought. I was really focused on having another aspect to my project (the cookbook/ recipe zines as the main part, and the survey info more of a supporting part). Realistically thinking about it now, I am realizing I don't actually want to include the cookbook/ recipe zines. I love beautifully designed illustrations, but I don't have a lot of experience

Thesis II week 1

OBSTACLES

MANY DIFFERENT IDEAS

At the beginning, I did have a little trouble narrowing down my project focus. I really loved the idea of creating an illustrated, informative book on recipes and nutritional information, but I also really wanted to work with a survey and data. It was difficult to be realistic about what could be done over the year, but once I decided to fully go with the research project, I felt much more focused and much less overwhelmed by everything.

DATA VISUALIZATION

Another obstacle I faced was not having a ton of experience with data visualization. There was so much data from the survey, and it was very intimidating to try to work with in Tableau. Organizing and cleaning it up in Google Sheets was time consuming in itself, and trying to work with it in Tableau proved to be very difficult, so I did not use this program. I found alternative solutions to create visualizations with the data using Adobe Illustrator and online tools. The visualizations ultimately came out clear and easy to understand, while still being visually engaging.

GLOBAL PANDEMIC

Of course, one of the biggest challenges that the entire world faced this year is the COVID-19 global pandemic. Around the midpoint of the Spring 2020 semester, things began to get really bad and SUNY New Paltz, along with many other schools fully moved to remote learning.

This presented many challenges while working to finish my thesis project. First, losing the studio space to work where I had access to the computer and high-quality printing was one of the biggest challenges. It was difficult to do print tests at home, and much of my work remained digital.

Also, losing the collaborative nature of studio design classes, group & class critiques, access to one-on-one, in person meetings with professors was also difficult. Our class continued meeting through video calls, which I was grateful for.

REFLECTIONS

RESEARCH EXPERIENCE

This project allowed me to gain real experience in creating a research study from start to finish. Although I didn't perform any true statistical tests on the data, representing descriptive survey data as I did provided a rich amount of information in itself. It was an informative and difficult process at times, with many small details to work out.

Creating visual representations of the data and writing about the findings allowed me to really understand the information I was working with. If I could have done something differently, I would have focused in on the research project earlier on. I did get the survey submitted and distributed by November, but I wish I had known that this was the only thing I was going to focus on then.

DATA VISUALIZATION

I also would have started experimenting with data visualization tools and techniques earlier, instead of waiting for my data to come back. I could have been better prepared with a plan of how to handle the data when it came back in January, instead of trying to learn as I went along. Parts of the spring semester were a bit overwhelming because I felt like I was trying to do a lot of parts of the project all at once, instead of step-by-step.

SUMMARY

Overall, I am very happy with how everything came out, and seeing the progression of my ideas and work from start to finish is a rewarding experience. Despite the challenges of the last few months of school and the limitations that fully remote learning placed on completing my project, I am really proud of the way everything came together.

This was a difficult and rewarding experience that helped me grow a student, designer, and person. This project is more than just my senior thesis project: It is representative of the determination, perseverance, and commitment I showed throughout my entire time in college and in all areas of my life. I am grateful for everyone who helped me along the way by providing their feedback, assistance, and expertise.

