

THE FRESHMAN 15: A CREATIVE APPROACH TO
HELPING STUDENTS MAKE HEALTHIER NUTRITIONAL
CHOICES DURING THEIR FIRST YEAR IN COLLEGE

by

CELINE JOHNSON

A THESIS

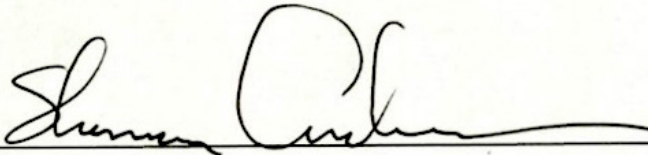
Presented to the Department of Advertising
and the Robert D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Arts

June 2016

An Abstract of the Thesis of

Celine Johnson for the degree of Bachelor of Arts
in the Department of Advertising to be taken June 2016

Title: The Freshman 15: A Creative Approach to Helping Students Make Healthier
Nutritional Choices during Their First Year in College

Approved: 
Shannon M. Anderson

The purpose of this thesis is to examine factors related to weight gain among freshman students in college and to create educational health tools that can help them make healthier lifestyle choices during this time. Information was gathered from multiple sources, including independent research, an interview with the University of Oregon Dietician, and insights from students of the freshman class at the University of Oregon. This information was then used to formulate the focus and strategy of two separate campaigns, each of which addresses a specific factor related to problems facing freshman regarding their health and nutrition. The first campaign addresses the role that alcohol plays in adding calories to one's diet and the second campaign addresses students' total reliance on dorm food and the inability to prepare their own meals. The executions for each campaign were designed using a combination of Adobe Illustrator and Adobe Photoshop and each contains interactive/social, traditional and non-traditional components. Looking forward, the campaigns and interactive tools created could help future incoming students make smarter decisions regarding alcohol and to better cope with the transition in diet that occurs when living in dorm residence halls.

Acknowledgements

I would like to thank Professor Anderson for his integral role in helping to develop the strategy and creative executions for each campaign. Professor Anderson's guidance and support helped foster creativity and allowed me to produce the best work possible. I would also like to thank Professor Shoenberger and Professor Balbuena for serving on the committee and helping to advise me through this process. Lastly, I would like to express gratitude to Casey Mast, for taking the time out of her schedule to share her insights regarding the University of Oregon's health and nutrition program.

Table of Contents

Chapter 1: Introduction.....	1
Chapter 2: Research	3
Background Research.....	3
Interview with UO Dietician and Health Educator	8
Freshman Insights	9
Chapter 3: Campaign 1 Execution	12
Campaign Description	12
Campaign Components	12
Overall Design	12
Logo	12
Website.....	14
Promotional Posters.....	20
Coasters.....	22
Chapter 4: Campaign 2 Execution.....	24
Campaign Description	24
Campaign Components	24
Overall Design	24
App.....	24
Promotional Handouts	34
Chapter 5: Conclusions.....	36
Appendix A	38
Appendix B.....	39
Appendix C – Sample Survey Questionnaire	40
Appendix D – Survey Results	41
Bibliography.....	45

List of Figures

Figure 1: Campaign 1 – Logo.....	13
Figure 2: Website – Cover Page.....	14
Figure 3: Website – Account Page.....	15
Figure 4: Website – Home Page.....	16
Figure 5: Website – Drinks.....	17
Figure 6: Website – Red Wine Nutritional Information.....	18
Figure 7: Website – Personal Tracker.....	18
Figure 8: Website – Recipes.....	19
Figure 9: Campaign 1 – Promotional Poster 1.....	20
Figure 10: Campaign1 – Promotional Poster 2.....	21
Figure 11: Campaign 1 – Coaster Deck.....	22
Figure 12: Campaign 1 – Coaster Front and Back.....	23
Figure 13: Campaign 2 – App Cover Page.....	25
Figure 14: App – Account Page.....	26
Figure 15: App – Navigation.....	27
Figure 16: App – Recipes.....	28
Figure 17: App – All Recipes.....	29
Figure 18: App – Omelet Recipes.....	30
Figure 19: App – Grocery List.....	31
Figure 20: App – Map.....	32
Figure 21: App – Upload.....	33
Figure 22: Campaign 2 – Promotional Mugs.....	34
Figure 23: Campaign 2 – Newspaper Advertisement.....	35

Chapter 1: Introduction

Introduction

Freshman year of college is an important time in many people's lives. For some, this is their first time away from home and they must learn independence, adjust to a new environment, new friends and a demanding work load. Oftentimes, another change freshman experience during this time is weight gain, often referred to as the dreaded 'Freshman 15.' As discussed later in this paper, there are many possible factors that can contribute to extra weight gain during this period and it is difficult to pinpoint the exact cause for each individual. Although there are resources available for health-conscious students who seek to avoid this dilemma, they are not always widely advertised or made easily accessible.

Project Description

I have created two separate campaigns that aim to educate freshman students on how to make healthier lifestyle choices during their first year in college and hopefully, alleviate some of the difficulties they face concerning nutrition. Each campaign has its own focus, strategy and execution and contains some type of educational tool/health resource that students can use at their convenience. The designs for each campaign were created using a combination of Adobe Illustrator and Adobe Photoshop. I used the following questions as guidance in helping develop my executions: What will be the main goal of each campaign? How can I reach students most effectively? How do I plan to execute each campaign/what components will I incorporate to deliver my message?

Methodology

Background Research

In formulating my campaigns, I first conducted independent research on the 'Freshman 15' and factors related to weight gain during freshman year. Some factors I have identified so far include changes in diet/food independence, changes in habits, increased alcohol consumption, decreased physical activity, stress, sleep deprivation, monetary restrictions and/or a general lack of nutritional knowledge.

Interview with University of Oregon Dietician and Health Educator

I had the opportunity to interview the University of Oregon Dietician and Health Educator, Casey Mast. Casey conducts one-on-one nutrition therapy sessions with college students and helps promote healthy eating programs within the university. Collaboration with her offered me useful insights into what challenges currently face freshman here on campus and helped me gain a better understanding of the resources available to students. I also plan to offer my final campaigns to the University of Oregon Health and Nutrition program, to possibly be implemented in the future.

Freshman Insights

A survey was sent out to students in the freshmen class to gain insights about their eating habits, thoughts about dorm food, and general lifestyle upon arriving in college. The survey included ten questions and was administered to a total of ten respondents via Survey Monkey. To view the survey questions, refer to Appendix C.

Chapter 2: Research

Background Research

The 'Freshman 15'

The term 'Freshman 15' is a familiar concept among college-age students and refers to the belief that during their first year of school, college freshmen will gain about 15 pounds due to a number of factors, including general changes in habits and lifestyle and an increased consumption of unhealthy foods and alcohol.¹ The roots of this concept can be traced back to 1989, when *Seventeen Magazine* first coined the term after a study reported that the average female student gained roughly nine pounds during her freshman year.² The term 'Freshman 15' became popular during the 1990s and there was a surge in publications and articles warning incoming students of this inevitable weight gain.³ However, a recent study conducted by Brown shows that many of these popular media articles fail to back their claims with supporting evidence and rather, tend to sensationalize the term 'Freshman 15' in order to attract readers.⁴

1

Graham, Melody A., and Amy L. Jones. "Freshman 15: Valid Theory or Harmful Myth?" *Journal of American College Health* 50.4 (2002): 171-73. *NCBI*. Web.

2 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

3 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

4 Brown, Cecelia. "The Information Trail of the 'Freshman 15'—a Systematic Review of a Health Myth within the Research and Popular Literature." *Health Information & Libraries J Health Information and Libraries Journal* 25.1 (2008): 1-12. *NCBI*. Web.

Actual Statistics

Conversely, there are only a handful of peer-reviewed scientific articles in which weight gain studies have been conducted. What more, these studies reveal that freshman weight gain is typically far less than the media portrays.⁵ Studies conducted at colleges and universities throughout the United States have found that on average, freshman typically gain around 2-3 pounds their first year in college⁶ and males tend to gain only about half a pound more than their female peers.⁷ Furthermore, these studies indicate that only a small percentage of students within each experiment, typically no more than 10% of the subject pool, end up gaining anywhere close to the full fifteen pounds.⁸

Factors Contributing to Weight Gain

Although gaining a significant amount of weight is less common than the media portrays, freshman still tend to put on about 2-3 pounds of additional weight during their first year in college. There are several possible factors which could contribute to this.

5 Brown, Cecelia. "The Information Trail of the 'Freshman 15'—a Systematic Review of a Health Myth within the Research and Popular Literature." *Health Information & Libraries J Health Information and Libraries Journal* 25.1 (2008): 1-12. *NCBI*. Web.

6 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

7 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

8 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

1) *Changes in Diet & Food Independence*^{9 10}

The transition from living at home to a college environment also results in a transition in diet. No longer relying on the home-cooked foods prepared by their parents, freshmen eat the majority of their meals in campus dining halls, where there is a greater range of foods to choose from and easy access to junk and fast food. Portion sizes are generally much larger and many campuses offer buffet style, all-you-can-eat dining venues, which can encourage unmindful eating. Moreover, many dorm rooms are without kitchens, which limits students ability to prepare their own meals and many are forced to completely rely on dining halls and nearby campus restaurants for food. As many students are independent for the first time and in charge of their own meals, they no longer have parents telling them what to eat and are free to eat whatever and however much they please.

2) *Changes in Habits*^{11 12 13}

College schedules are often hectic and adjusting to this new environment can take time. Without proper planning, it is easy to skip or miss meals during the day. This can prompt poor nutritional decisions at the next meal, as well as overeating, sometimes doubling or tripling the number of calories consumed. A lack of time can mean skipping

9 Nelson, Melissa C., Rebecca Kocos, Leslie A. Lytle, and Cheryl L. Perry. "Understanding the Perceived Determinants of Weight-related Behaviors in Late Adolescence: A Qualitative Analysis among College Youth." *Journal of Nutrition Education and Behavior* 41.4 (2009): 287-92. *NCBI*. Web.

10 Hoffman, Daniel J., Peggy Policastro, Virginia Quick, and Soo-Kyung Lee. "Changes in Body Weight and Fat Mass of Men and Women in the First Year of College: A Study of the "Freshman 15"" *Journal of American College Health* 55.1 (2006): 41-46. *NCBI*. Web.

11 Nelson, Melissa C., Rebecca Kocos, Leslie A. Lytle, and Cheryl L. Perry. "Understanding the Perceived Determinants of Weight-related Behaviors in Late Adolescence: A Qualitative Analysis among College Youth." *Journal of Nutrition Education and Behavior* 41.4 (2009): 287-92. *NCBI*. Web.

12 Schuna, Carly. "What Effect Does Skipping Meals Have on the Body." *Livestrong*. Livestrong Foundation, 27 Mar. 2014. Web.

13 Jackson-Michel, Shavon, Dr. "Side Effects of Not Eating Breakfast." *Livestrong*. Livestrong Foundation, 13 Mar. 2014. Web.

breakfast, which increases junk food cravings and chances of overeating throughout the day. Increased workloads also require late nights of studying, which can lead to additional calories consumed during late night snacking.

3) *Increased Alcohol Consumption*¹⁴¹⁵

In college, drinking is a major part of many social events. According to the NIH 2015 Survey, “almost 60% of college students age 18-22 drank alcohol in the past month and almost 2 out of 3 of them engaged in binge drinking during that same time frame.” Binge drinking is defined as when men consume 5 drinks or more and women consume 4 drinks or more, in the span of two hours. Alcohol is bad not only for your overall health, but consuming a few drinks in one night can secretly pack on hundreds of calories. Alcohol-induced eating is also common after a night out, as alcohol can inhibit an individual's control over both food consumption and food choice.

4) *Decrease in Physical Activity*¹⁶

An increase in study time can translate into a decrease in physical activity, as students end up devoting more time to their homework and spending less time on their fitness and health. Moreover, college students are no longer required to participate in organized sports as is often required in high school. Without this enforced motivation, it is possible that some students may be less incentivized to exercise independently.

14 "College Drinking." *PsycEXTRA Dataset* (2012): n. pag. *College Drinking Prevention*. NIH National Institute on Alcohol Abuse and Alcoholism, Oct. 2015. Web.

15 "Fact Sheets - Binge Drinking." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 16 Oct. 2015. Web. 21 Apr. 2016.

16 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

5) *Stress*¹⁷

The first year in college can be especially stressful as students must adjust to a new environment, social life, class schedule and workload. Stress has been shown to trigger increased food consumption, especially for foods higher in fat and sugar. After a stressful episode, a hormone called cortisol is released, which stimulates appetite. Another brain chemical called neuropeptide Y, is “released during mild stress episodes that can stimulate the craving for fat and sugar” as higher fat and carbohydrate rich foods “stimulate reward systems in the brain and produce a calming effect, thereby turning off the body's hormonal stress-response.” Thus, elevated stress levels can lead to increased consumption of comfort foods, such as pizza or ice cream, in place of healthier alternatives.

6) *Sleep Deprivation*¹⁸

Staying up late to study for an exam or not getting enough sleep on the weekend due to social events can also contribute to weight gain. It has been shown that “hormones involved in appetite regulation, such as leptin and ghrelin, are altered by sleep duration” and due to these lower hormonal levels, individuals can become “predisposed to overeating” and seek higher fat foods in response.

17 Sapolsky, Robert M. "Why Do We Eat Junk Food When We're Anxious?" *Wall Street Journal*. N.p., 13 Sept. 2013. Web.

18 St-Onge, M.-P., A. L. Roberts, J. Chen, M. Kelleman, M. O'keeffe, A. Roychoudhury, and P. J. Jones. "Short Sleep Duration Increases Energy Intakes but Does Not Change Energy Expenditure in Normal-weight Individuals." *American Journal of Clinical Nutrition* 94.2 (2011): 410-16. *NCBI*. Web.

7) *Monetary Restrictions*¹⁹

Many college students live on a budget and in order to spend less money, it is common for students to favor cheaper, though higher calorie foods, over more expensive, but healthier foods. For instance, dorms may price french fries at a lower price than a salad. Students may be influenced to pick the unhealthier option in order to stretch their money.

8) *General Lack of Nutritional Knowledge*

It is possible that some students lack general knowledge of basic nutritional guidelines, such as how many servings of each food group is recommended per day, daily caloric requirements, or what foods are healthier for you and why. This information is not always readily advertised and those who are health-conscious must actively seek out such resources on their own.

Interview with UO Dietician and Health Educator

I had the opportunity to interview Casey Mast, the University of Oregon Dietician and Health Educator. Casey conducts one on one nutrition therapy sessions with students, specifically incoming freshman and freshman entering their second year who are learning how to cook for themselves. Casey also works to promote various health programs within the school, such as *Stress Less* and *All Sizes Fit*.

Casey provided me valuable insights into the challenges facing freshman here on our campus. One big factor is stress and learning to adjust to a new environment and new schedule. A second challenge for students is navigating the food options in dining

19 Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.

halls. A monetary system of points is used by students to acquire food in the dining halls, which gives them the flexibility of choosing whatever items they wish.

Oftentimes, this free reign can make it difficult for students to exercise control over their diet. A third challenge is the general lack of knowledge about nutritional resources available to students. Many students are unaware about the University of Oregon Nutrition Calculator, which allows users to calculate nutritional information for a variety of foods found in the dining halls. This lack of awareness is partially due to the lack of advertisements or promotional materials in dining halls or around campus.

Freshman Insights

The following is a summary of students responses to the survey questions. To view individual survey responses, refer to Appendix D.

Students reported eating greater amounts of foods such as bread, pasta, burgers, chips and burritos and less amounts of fruits and vegetables. Students also reported that they were skipping more meals than in the past. Habits regarding alcohol showed that binge drinking was a common occurrence, as 60% of respondents reported consuming between four and five drinks per session, while 20% of respondents reported consuming between eight and nine per session. Furthermore, 50% of the respondents said they drank alcohol three days out of the week, while 30% of respondents reported drinking four days or more each week.

Contrary to my expectations, students reported getting regular amounts of sleep each night. When asked to list the stressors they've experienced, 30% of the respondents reported not experiencing any, while the remaining 70% attributed their stress to homework, new friends, living quarters and adjusting to a new environment. When

asked if they knew about general nutrition guidelines, such as appropriate serving sizes or daily caloric requirements, 90% of students surveyed reported that they were knowledgeable about this topic.

The students also provided interesting insights and opinions about the dining halls. Many of the students liked the convenience and accessibility that the dining halls offer and for the most part, tolerated the food. However, many respondents felt like there was a lack of variety, that the options became boring over time and expressed frustration over no longer being able to cook their own meals.

Next Steps

Although the UO Dietician pinpointed stress and learning to navigate the food options as the most troublesome factors for freshman, the insights provided by the students themselves gave me a better sense of what I should focus on in my campaigns. Through these freshman insights, I determined two directions in which to execute my campaign. Since alcohol plays a big role in the college environment and responses indicated that students do engage in binge drinking, I have chosen to center one campaign around educating students on the caloric effects of alcohol. Secondly, many respondents expressed discontent over the lack of variety in the dining halls and frustration over the inability to prepare meals of their own. The second campaign will address this issue by finding a creative way for students to expand their culinary appetites and cook for themselves despite the limitations of living in a dorm.

Additionally, as mentioned during the interview with the University Dietician, there is a general lack of awareness about the nutritional resources available to students. When asked in the survey the type of resource students would be most

responsive to, the majority said an app/website would be most useful, followed second by informational posters, while flyers and handouts were ranked third in effectiveness. After hearing this feedback, I decided to center each of my campaigns around either a website or an app and use a combination of posters and handouts to help support and advertise the interactive/social digital platform.

Chapter 3: Campaign 1 Execution

Campaign Description

The first campaign, *Know Your Drinks* is centered around a website, *knowyourdrinks.com*. This campaign addresses the role of alcohol consumption as one of the contributors of freshman weight gain and seeks to educate students on the hidden calories in alcohol while providing them with an accessible online nutritional guide to alcoholic beverages. See Appendix A for the full strategy brief of this campaign.

Campaign Components

Overall Design

The pages for the website prototype, promotional posters and coasters were created using Adobe Illustrator.

Logo

This logo is a combination of a lightbulb and a martini glass. A lightbulb can be interpreted as a symbol of intelligence, so the merging of it with an alcoholic beverage is meant to represent making intelligent decisions about one's drink choices.



Figure 1: Campaign 1 - Logo

Website

Students can log onto the knowyourdrinks.com website to gain access to detailed nutritional information about various types of drinks, a personal tracker to keep track of their daily calorie balance from alcohol and exercise, as well as a database full of healthy drink recipes they can make on their own or order when out.



Figure 2: Website - Cover Page

This is the first page users will see when they log onto the website.

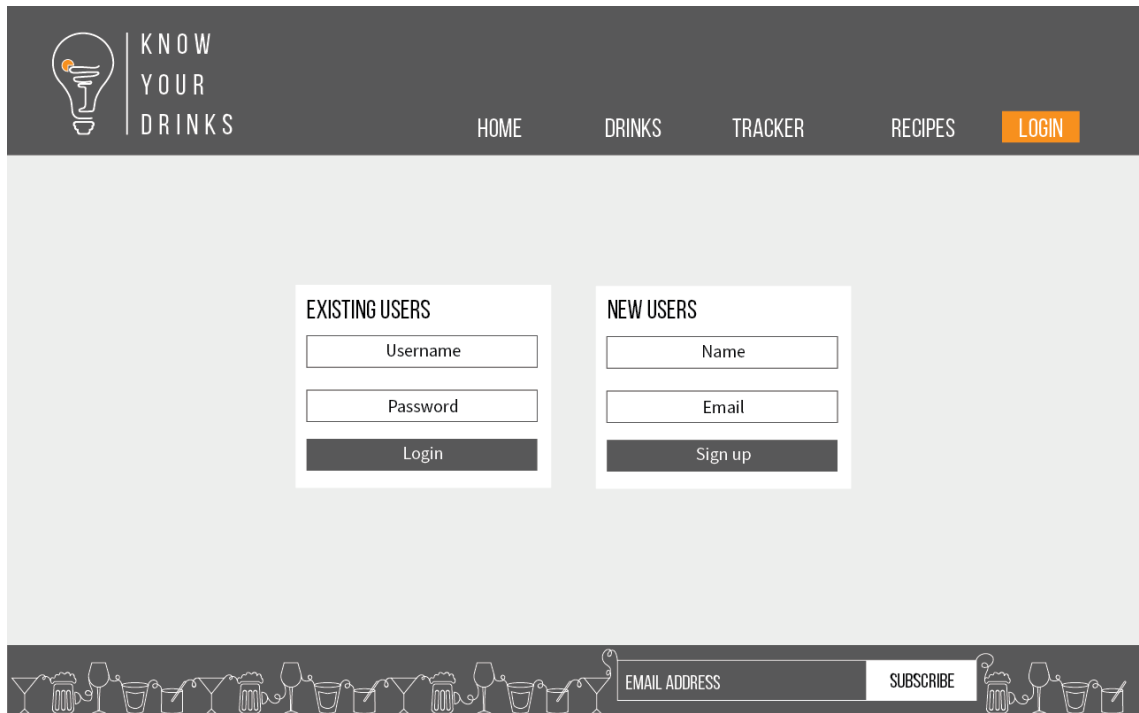


Figure 3: Website – Account Page

Students are prompted to either log in with an existing username and password or sign up for a new account. All account memberships are free.

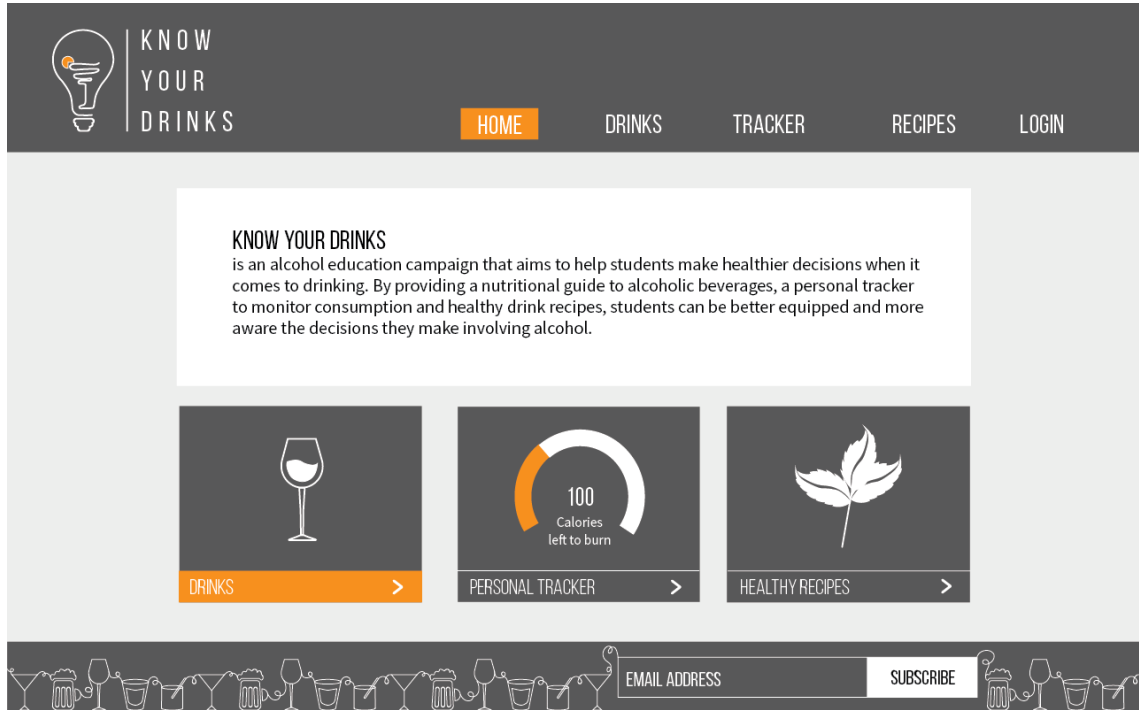


Figure 4: Website - Home Page

Users are greeted with a message explaining the goal of the campaign and the functions of the website. Users have the option of choosing to read more about 'Drinks', 'Personal Tracker' or 'Healthy Recipes'. In this prototype, the option 'Drinks' is highlighted.






Figure 5: Website - Drinks

Users can choose from a list of alcoholic beverage categories to read more about their unique nutritional information. In this prototype, the category 'Wine' is chosen, specifically the beverage 'Red Wine'.

KNOW YOUR DRINKS

HOME DRINKS TRACKER RECIPES LOGIN

TYPE OF ALCOHOL	CALORIC EQUIVALENT	EXERCISE
 = 125 RED WINE CALORIES	 = 130 CHOCOLATE CHIP COOKIE CALORIES	 = 1.3 JOGGING MILES

Drinking one glass of red wine is roughly the same as eating one chocolate chip cookie. You would have to run about 1.3 miles to burn off these calories.

ADD TO TRACKER >

EMAIL ADDRESS SUBSCRIBE

Figure 6: Website – Red Wine Nutritional Information

Users are able to see how many calories are in the specified alcoholic beverage, the caloric equivalent in food, and roughly how much exercise it would take to burn off the amount of calories ingested. Users then have the option to 'Add to Tracker'.



Figure 7: Website - Personal Tracker

The 'Personal Tracker' page allows users to track how much alcohol they are consuming each day, their activity levels and their net calorie balance. Users first input the number of alcoholic beverages they have had to see how many calories this amounts to. Then users input how much they have exercised that day to see how many calories they have burned off. Using this calorie intake and expenditure, their remaining excess calories from alcohol are displayed in a net calorie balance. Users who have created an account with the page will receive an additional benefit, as the tracker records and saves members inputted information. This allows account members the option of referring to their previously saved information to see their net calorie balance from day to day.

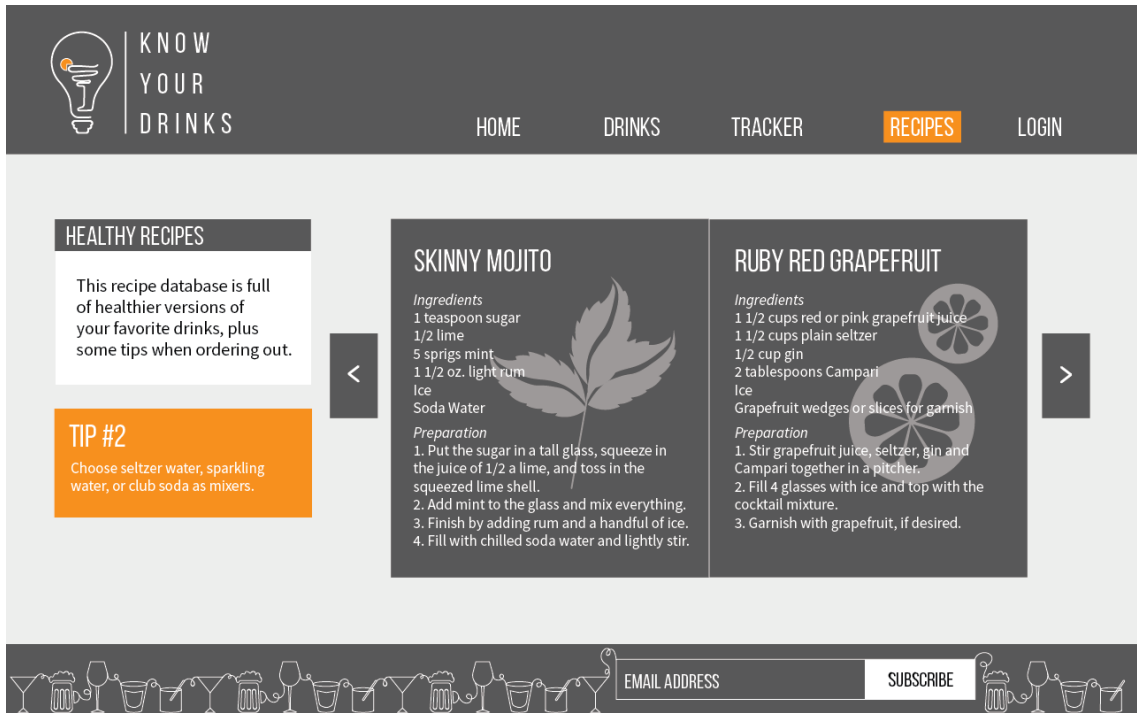


Figure 8: Website - Recipes

The website also offers users access to an online recipe database, featuring healthier versions of popular drinks. The page also offers tips on how to be a smarter drinker when ordering at a bar.

Promotional Posters

Posters would be put up in dorm residence halls, common areas and dining halls to spread awareness about the campaign and encourage students to visit the website.



Figure 9: Campaign 1 - Promotional Poster 1

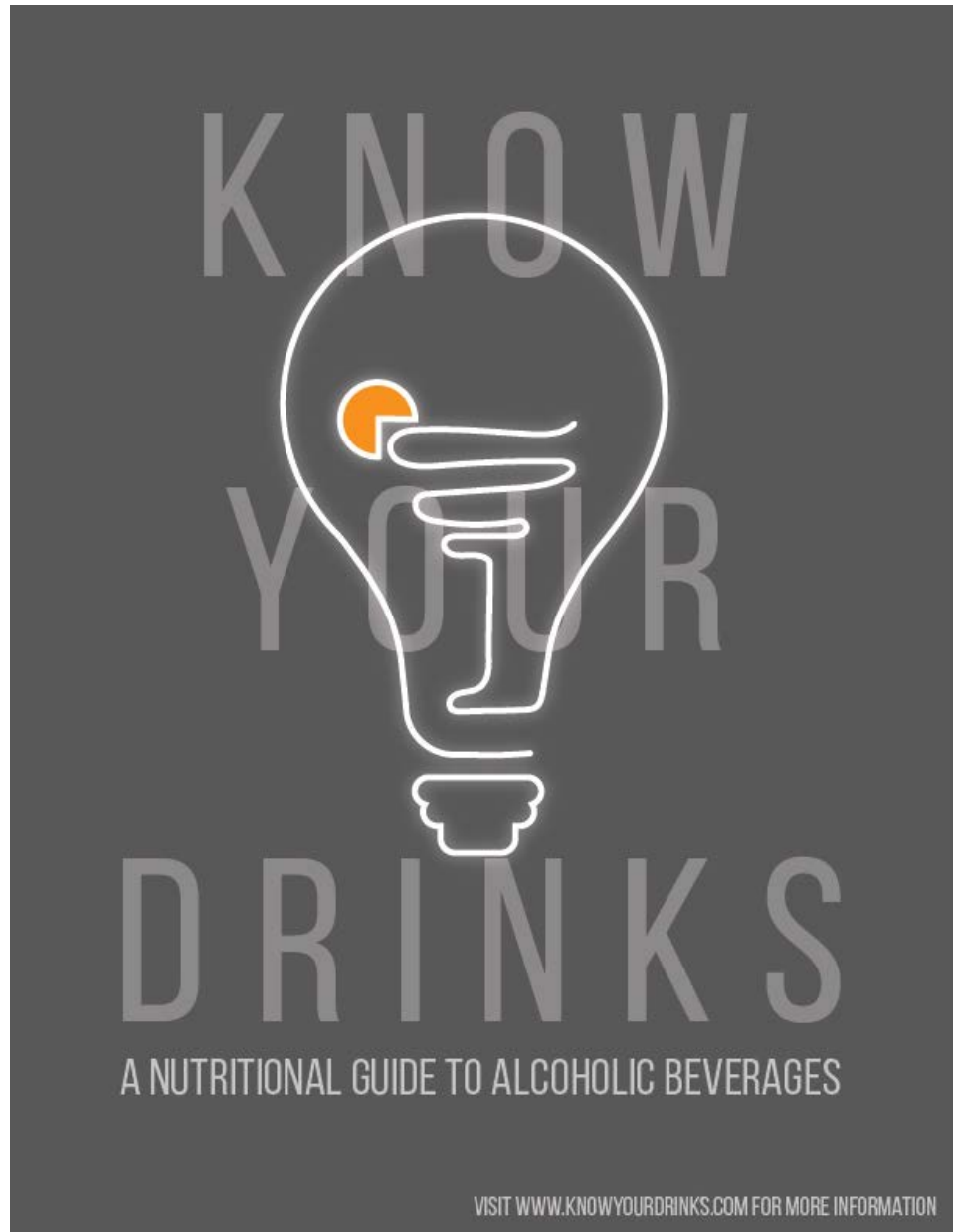


Figure 10: Campaign 1 - Promotional Poster 2

Coasters

To help promote the website while informing students about calories from alcohol, coasters would be created that display the caloric equivalents between alcohol and common foods. These coasters would be distributed to dorm dining halls, as well as participating restaurants and bars on campus.



Figure 11: Campaign 1 – Coaster Deck



Figure 12: Campaign 1 - Coaster Front and Back

Each coaster displays an alcoholic beverage on the front side and its nutritional counterpart on the back side. For example, drinking a bottle of red wine (approx. 765 calories) would be the equivalent of eating five slices of pepperoni pizza (approx. 730 calories). Each coaster also has the website URL displayed which encourages students to check out the online resource.

Chapter 4: Campaign 2 Execution

Campaign Description

The second campaign is centered around an app, *Mug Recipes*, and aims to address students frustration in being unable to prepare their own meals and having to completely rely on dorm dining halls for food. See Appendix B for the full strategy brief of this campaign.

Campaign Components

Overall Design

The screens for the app and promotional mugs were created using Adobe Illustrator. The newspaper advertisement was created using Adobe Photoshop.

App

Mug Recipes is an app created for freshman students that provides them with a convenient way to access healthy recipes that they can make easily in their dorm rooms with just a few ingredients, a microwave and a mug. This app features breakfast, lunch, dinner and dessert recipes, helps users create grocery lists to get all the ingredients they need, displays a map to help students find nearby stores to shop at and offers users the option to upload their own creative recipes to share with the online app community.



Figure 13: Campaign 2 - App Cover Page

Users are first greeted by this page, which displays the app name and logo.

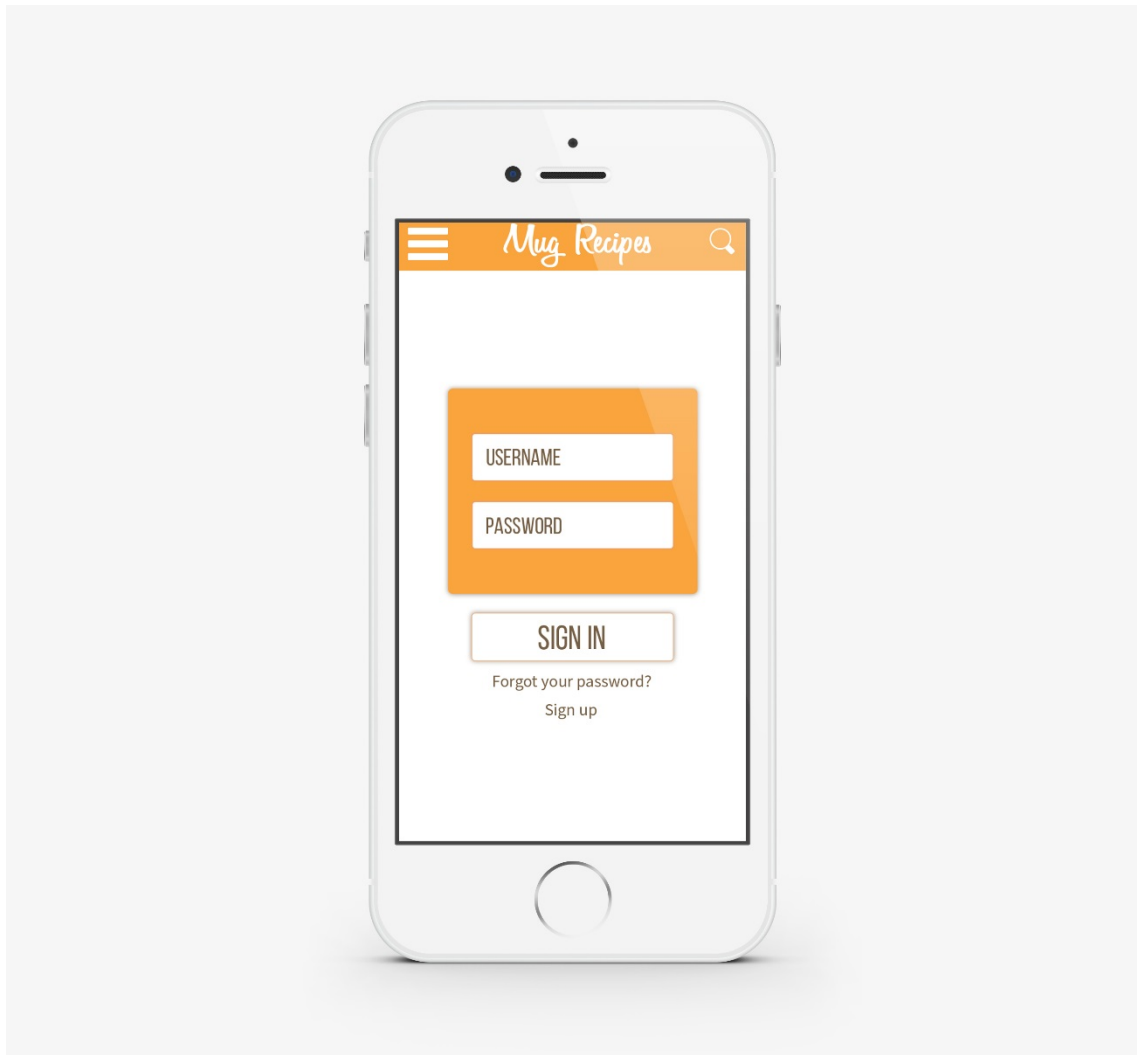


Figure 14: App – Account Page

Students are prompted to either log in with an existing username and password or sign up for a new account. All account memberships are free.

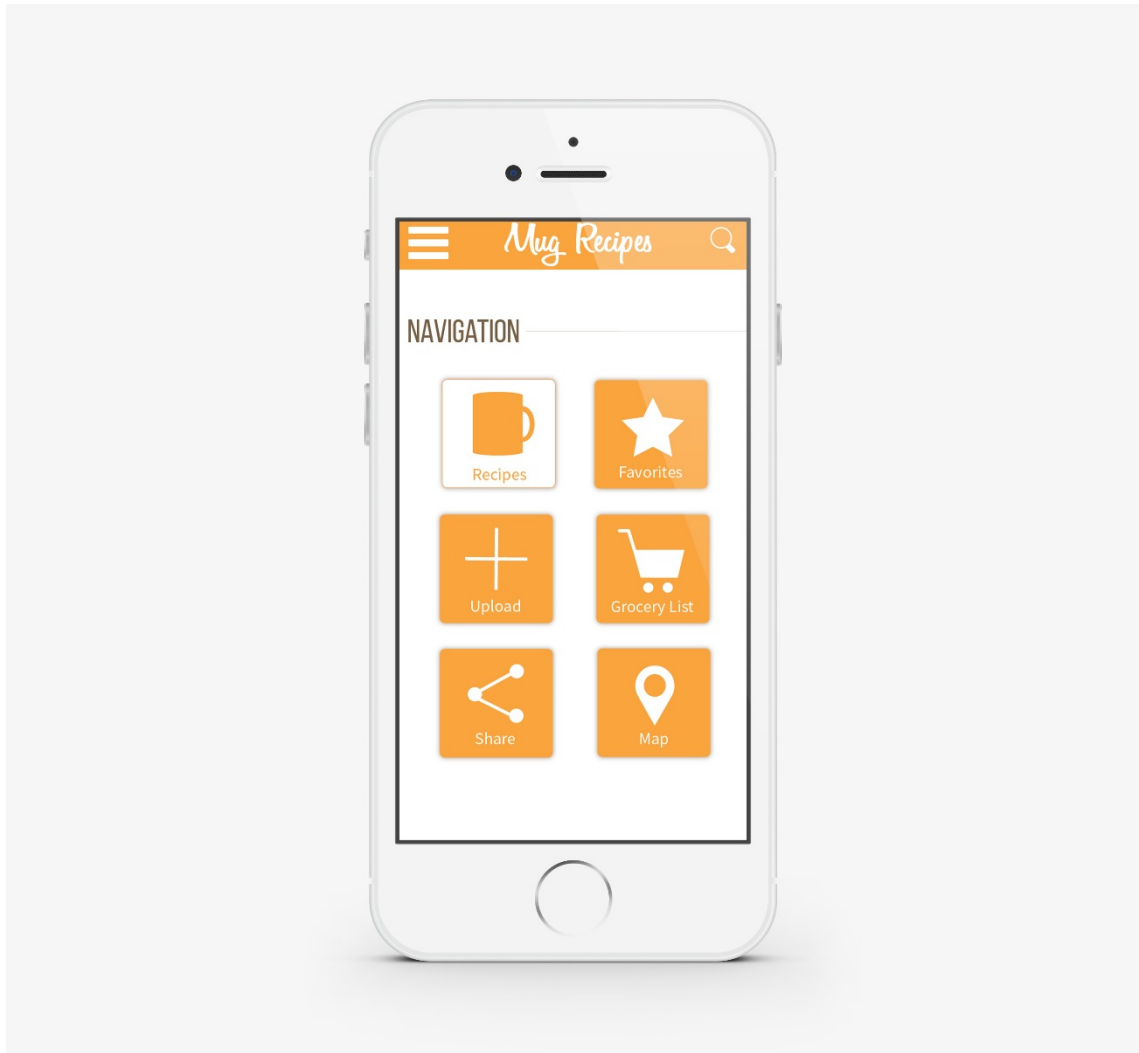


Figure 15: App – Navigation

The home page displays six options for users to choose from: Recipes, Favorites, Upload, Grocery List, Share and Map. In this prototype, the tab 'Recipes' is highlighted.

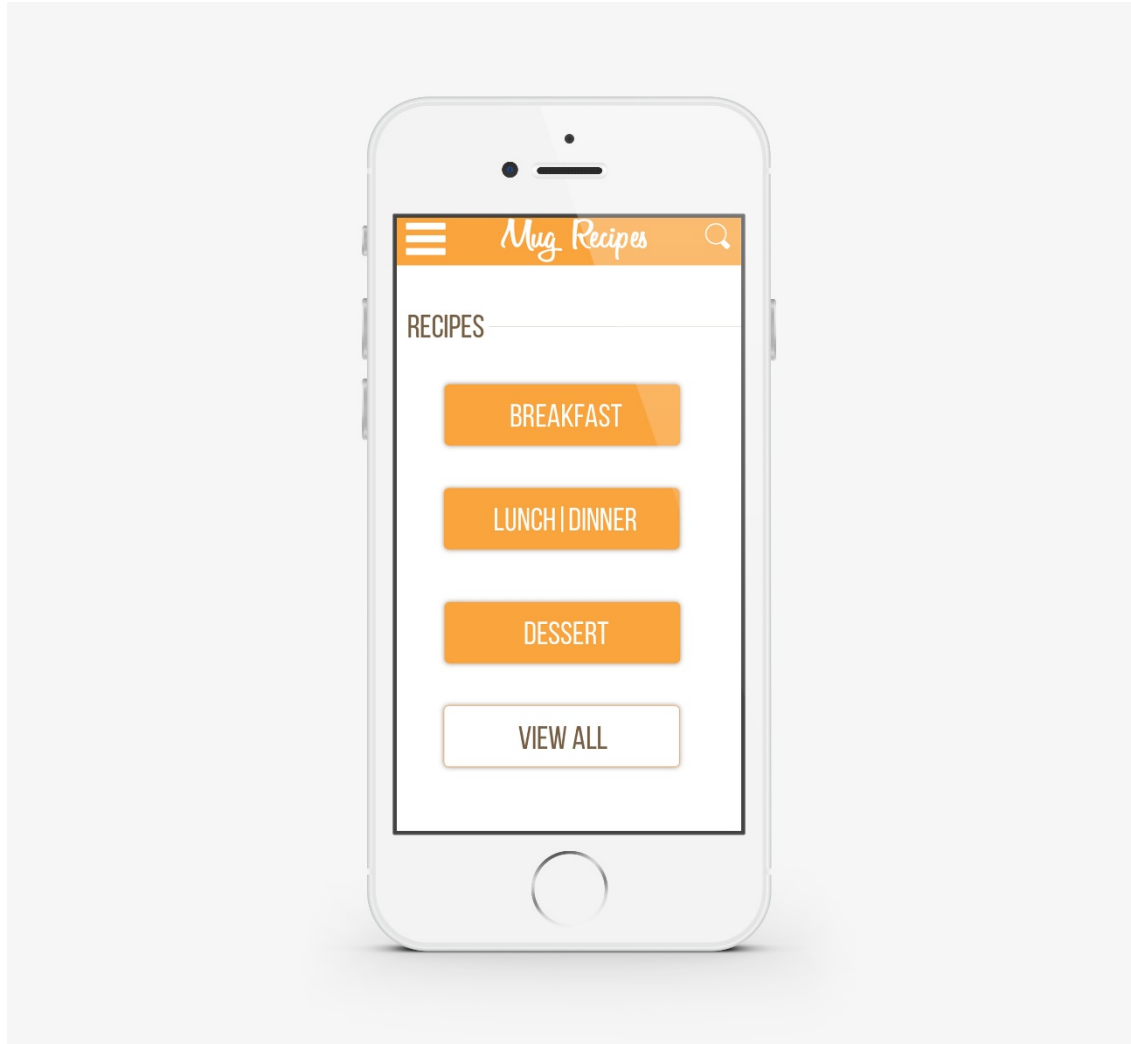


Figure 16: App – Recipes

The recipe page contains breakfast, lunch/dinner and dessert categories. In this prototype, the option 'View All' categories is selected.



Figure 17: App – All Recipes

The 'All Recipes' allows users to browse breakfast, lunch/dinner and dessert recipes as they choose. For instance, the following recipes are featured in the above screen: Blueberry muffin, Omelet, Cookie, Banana Muffin, Fried Rice and Lasagna. In this prototype, the recipe 'Omelet' has been selected.

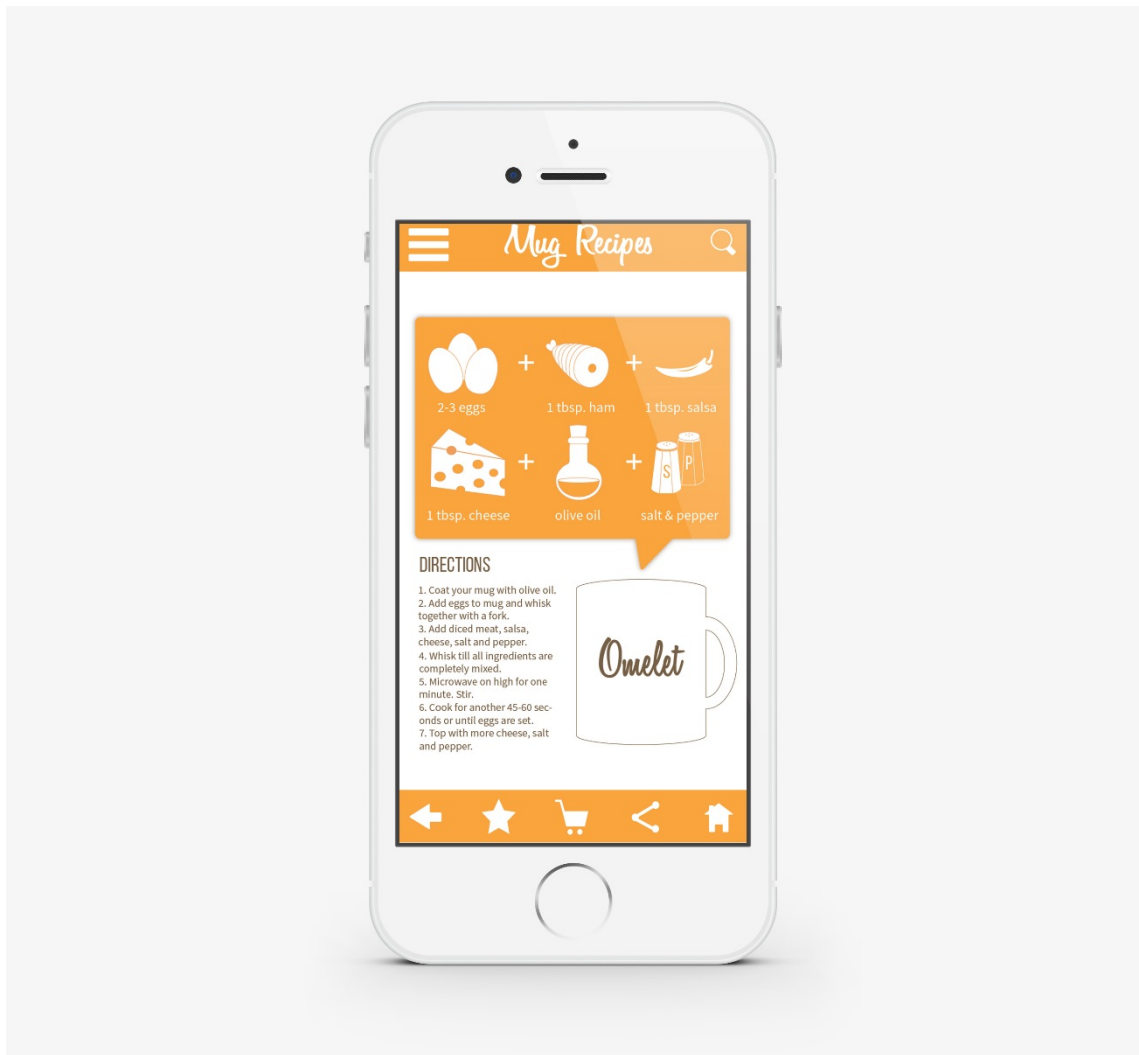


Figure 18: App – Omelet Recipe

This is an example of what a typical recipe page would look like. The screen features the recipe for an omelet, including the required ingredients (displayed visually) and a set of cooking directions. The bar at the bottom of the screen includes the following actions users can choose from (from left to right): a back button (to return to the previous page), a favorites button (to add to their list of favorite recipes), an add to grocery list button (to add these ingredients to a personalized grocery list), a share button (to share the recipe with peers) and a home button (to return to the home page).

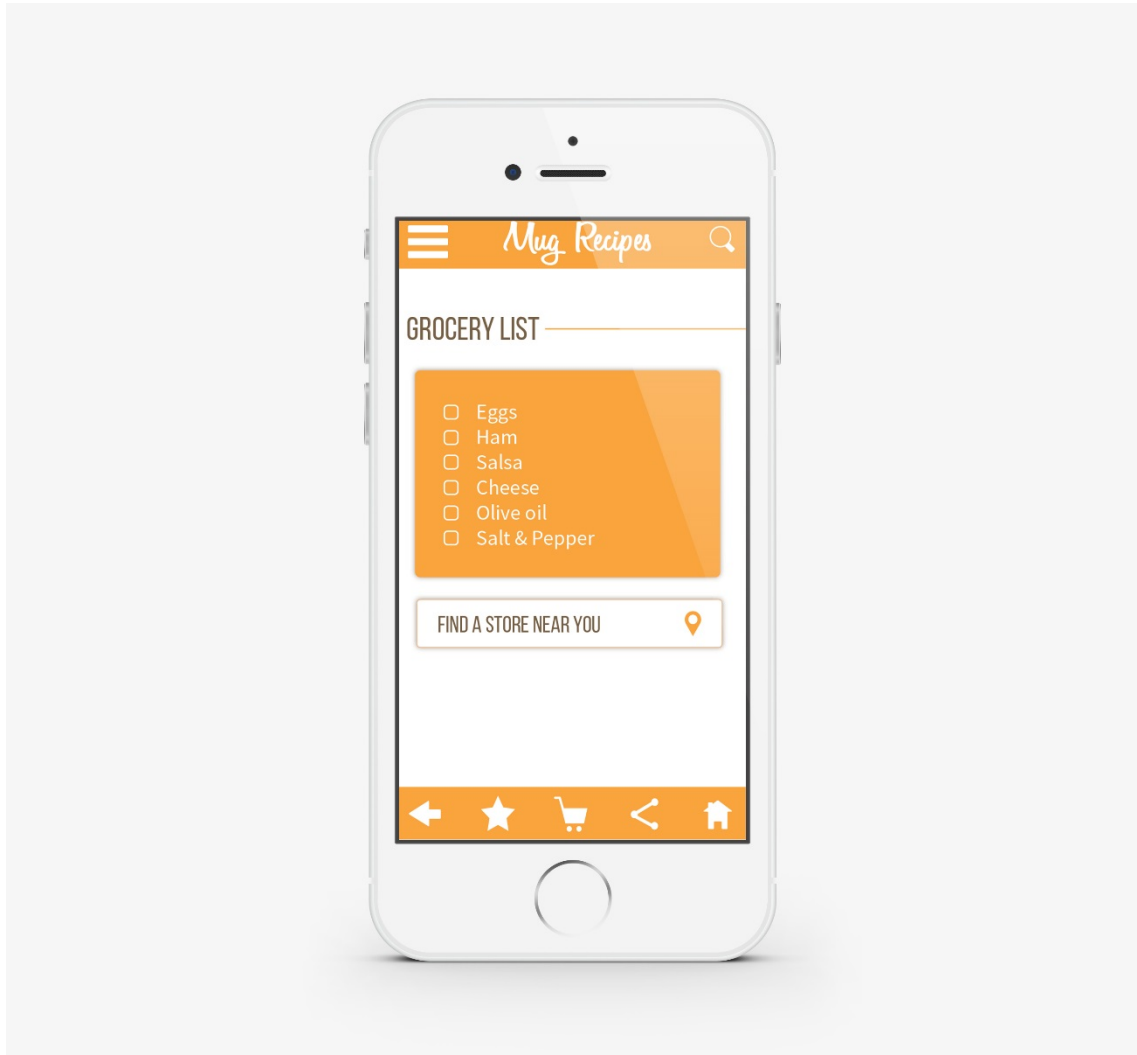


Figure 19: App – Grocery List

Users are able to create a personalized grocery list containing items from their favorite recipes. This screen features the ingredients necessary to make the omelet recipe (see Figure 18). There is also an option for users to find the store nearest them, to make their shopping trip that much easier.

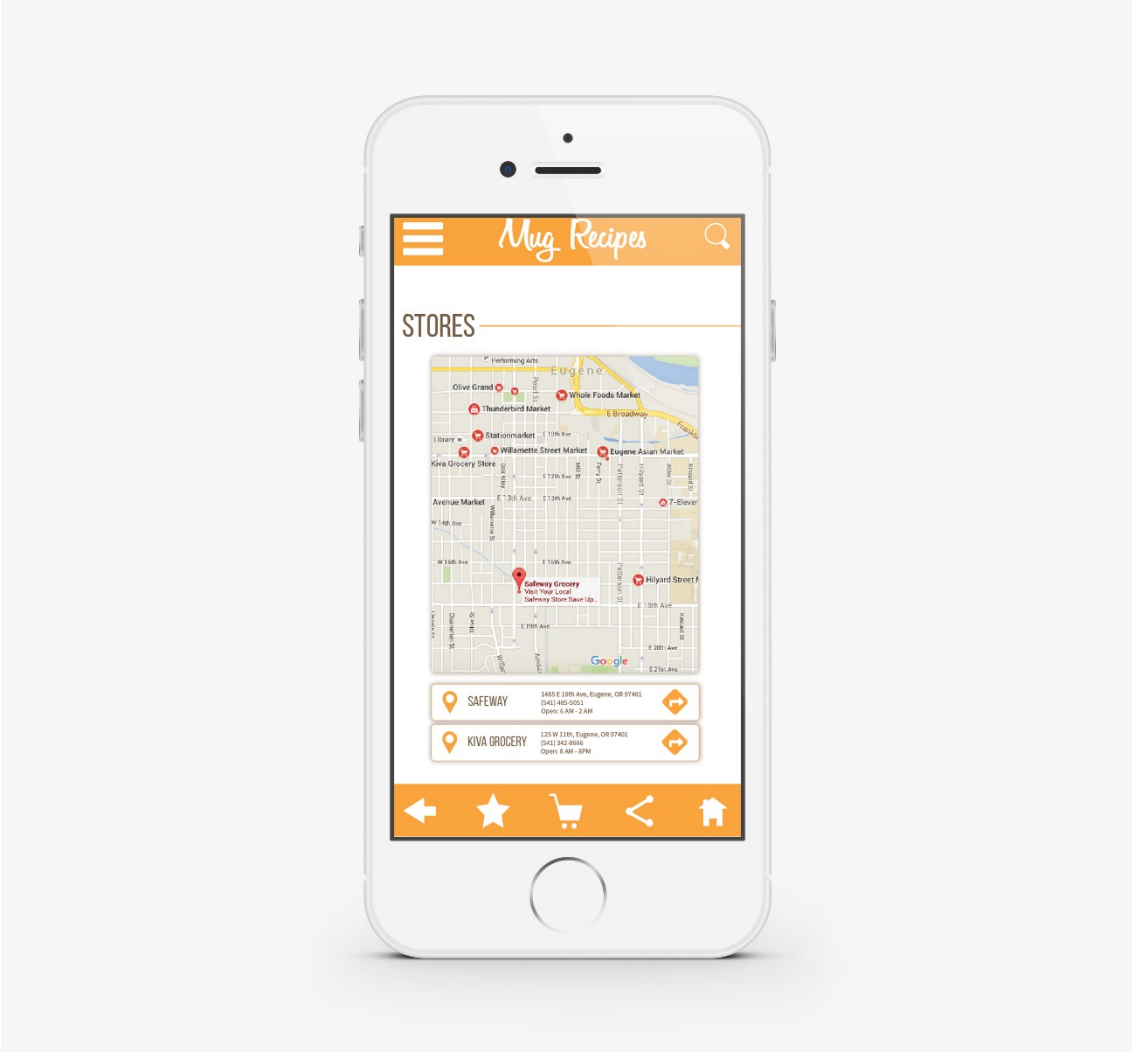


Figure 20: App – Map

To aid in planning their shopping trip, users are given a map displaying the grocery stores nearest them. Users can get directions from their current location and are also provided with the stores contact number and address.

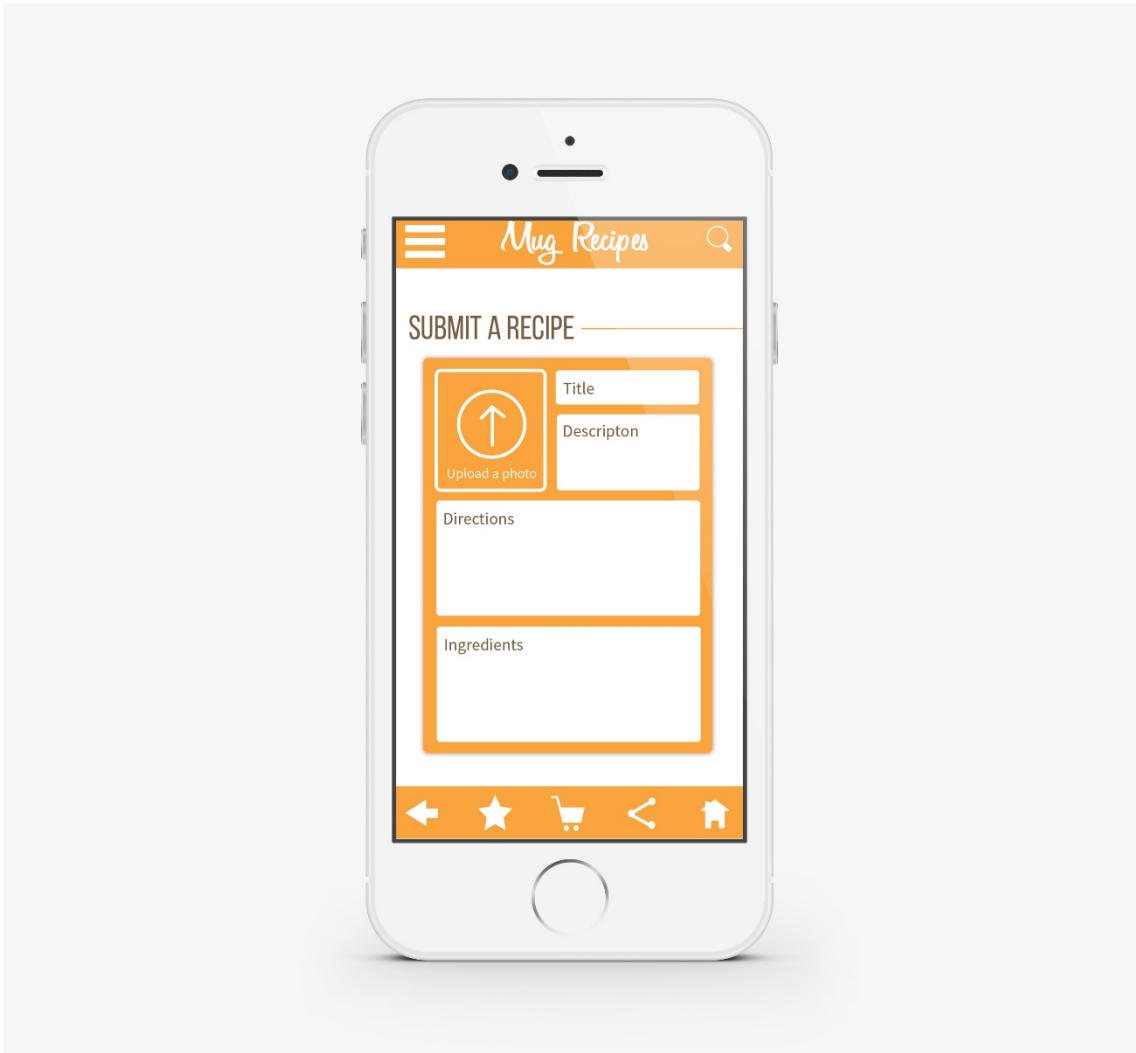


Figure 21: App – Upload

Users can upload recipes of their own to share with the online app community.

Promotional Handouts

Mugs will be handed out on campus, encouraging students to check out the recipe app while also providing them a cute mug of their own to use!



Figure 22: Campaign 2 - Promotional Mugs

Newspaper Advertisement

An advertisement for the app will be featured in the school newspaper to help promote the campaign.



Figure 23: Campaign 2 - Newspaper Advertisement

The copy for the advertisement reads: "Tired of eating the same old dining hall food? Wish you could cook meals of your own in the comfort of your dorm? Download Mug Recipes from the App Store and gain access to simple, delicious recipes you can make with just a few ingredients, mug and a microwave!"

Chapter 5: Conclusions

Campaign 1 Limitations

Despite the easy accessibility of a webpage, some students may be unwilling to spend the time to track details such as the number of drinks they have had or how much they have exercised that day. Although this resource is meant to help users be more conscious of the calories ingested from drinking, it is possible that some students could abuse the website by obsessively monitoring their calorie balance or exercising excessively to counteract the amount of alcohol they drank.

Campaign 2 Limitations

The intent of this app is to address students' inability to prepare their own meals. However, it does not feature recipes specific to certain dietary restrictions or needs, such as vegetarian or gluten-free options. For these reasons, some students may not find the app very useful.

General Limitations

The biggest limitation is the number of freshman insights collected. Connecting with members from the freshman class was difficult and I experienced barriers in trying to send out mass surveys via the residence halls. If I had the opportunity to implement my campaigns, I would focus on gathering more data from freshman to better support my executions.

Weight gain can also be a touchy issue and must be addressed in a mature and considerate manner. In creating these educational resources, I am not assuming that every freshman gains weight during their first year in college but rather, hope to serve

as an aid to those students who wish to create healthier lifestyles, inform themselves about their nutritional decisions and are interested in this overall topic.

Final Thoughts

Although there are many factors which can contribute to freshman weight gain, the two campaigns created sought to address two main factors: 1) the caloric effect of alcohol on one's diet and 2) the total reliance on dorm food and students inability to prepare their own meals.

This project is important on both a personal level as well as in a larger, social context. As someone who is very aware of my own nutritional choices and eager to learn more about this field of study, creating a campaign that teaches others about this topic is something I am passionate about. Reflecting on freshman year, I can remember the difficulties I encountered being independent for the first time and having to make decisions regarding my diet without my parent's guidance. I struggled with learning to create a healthy balanced diet (especially with the not so healthy temptations offered in the dining halls) and I'm sure many of my peers shared similar experiences. Freshman year was also the first time I was exposed to drinking alcohol in a social setting and looking back, wish that I had been more aware of the caloric impact it has on one's diet.

Educational resources such as the ones I'm proposing to create, would have been especially helpful during this transitional period and I'm hoping that they will be beneficial for future incoming freshman, or even older college students who are trying to become more health-conscious. Moreover, by targeting students early on in their college careers can hopefully help lay the foundation for creating healthier lifestyles and positive attitudes towards drinking in the long-term.

Appendix A

Strategy Brief

Campaign 1: Alcohol Education

Key Fact:

Telling college students to abstain from consuming alcohol is not an effective or probable solution.

Background:

In college, not only are there more opportunities to drink but increased levels of drinking as well. According to the NIH 2015 Survey, “almost 60% of college students age 18-22 consumed alcohol in the past month and almost 2 out of 3 of them engaged in binge drinking during that same time frame.” Consumption of a few drinks can pack on hundreds of calories in just one night and can contribute to additional weight gain over time.

Consumer Insights:

Responses regarding alcohol were varied. Survey results showed that 20% of subjects consumed between 2-3 drinks/session, 60% consumed between 4-5 drinks/session and 20% consumed between 8-9 drinks/session. Over half the the respondents said they drank alcohol three days out of the week.

Problem that Advertising Must Solve:

Instead of telling students to stop drinking alcohol, find a way to inform them about how calories from alcohol can contribute to weight gain.

Advertising Objective:

To inform students about how many calories they are drinking by demonstrating the caloric equivalent found in common foods.

Creative Strategy:

- **Target Audience:** Freshman students who consume alcohol
- **Tone & Concept:** Educational, User-friendly
- **Key Consumer Benefits:** To help students become aware of how many calories they consume per drink and encourage them to drink more responsibly and health consciously.

Media Assignments:

- **Interactive/Social:** A website that displays detailed nutritional information about various types of drinks, a personal tracker that helps users keep track of their daily calorie balance from alcohol and exercise, as well as a database full of healthy drink recipes.
- **Traditional:** Promotional posters featuring elements from the website, encouraging students to check out the website.
- **Non-Traditional:** Two-sided coasters that on one side, show a type of drink and on the other side, it's caloric equivalent in a common food.

Appendix B

Strategy Brief

Campaign 2: Dorm Room Cooking

Key Fact:

Many dorm rooms are without kitchens, which limits students ability in preparing their own meals and results in total reliance on dining halls and restaurants for food.

Background:

The transition from living at home to a college environment also results in a transition in diet. No longer able to cook their own meals or rely on food prepared by their parents, freshman end up eating the majority of their meals in campus dining halls. The options available are not always healthy, portion sizes are much larger than normal and there is easy access to junk food and fast food options.

Consumer Insights:

Although many students like the convenience and accessibility that the dining halls offer, respondents expressed a lack of variety to choose from, that the options become boring over time and stated their frustration over no longer being able to cook their own meals.

Problem that Advertising Must Solve:

Find creative ways for students to create their own meals in their dorms, with the limited resources (appliances and ingredients) they have.

Advertising Objective:

To show students the variety of meals they can make with just a few simple ingredients, a mug and a microwave.

Creative Strategy:

- **Target Audience:** Freshman students who are dissatisfied with dorm food and wish to take charge of making their own meals
- **Tone & Concept:** Educational, User-friendly
- **Key Consumer Benefits:** Mug meals are easy to prepare (requiring few ingredients and only a microwave), convenient and portable

Media Assignments:

- **Interactive/Social:** Recipe app that provides a database for students to look up recipes and post their own creative ideas.
- **Traditional:** Advertisements for the app will be placed in the newspaper to help promote the campaign.
- **Non-Traditional:** Mugs will be handed out on campus, encouraging students to check out the recipe app while also providing them a cute mug of their own to use.

Appendix C – Sample Survey Questionnaire

1. What foods do you eat more of now while in college? What foods do you eat less of?

2. In general, have you found yourself eating more or less in college (when compared to high school)?

More

Less

3. Do you sometimes skip meals? (due to a lack of time, busy schedule, etc.)

Yes

No

4. When you consume alcoholic beverages, how many do you consume in one session?

1 2 3 4 5 6 7 8+

5. How many days per week do you drink alcoholic beverages?

1 2 3 4 5 6 7

6. How many hours of sleep do you get each night?

1 2 3 4 5 6 7 8+

7. Has it been difficult adjusting to college so far? List any stressors that have affected you.

8. Do you know about general nutrition guidelines (such as appropriate serving sizes, daily caloric requirements, etc.)?

Yes

No

9. What do you like about the dining halls? Dislike?

10. What would you personally find most useful to help make healthier decisions while eating in the dining halls?

Informational nutrition posters

Flyers/Handouts

Some type of app/website

Other

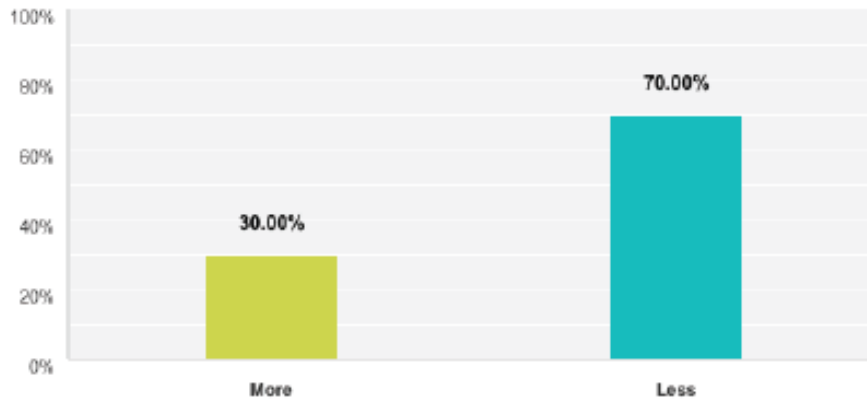
Appendix D – Survey Results

1. What foods do you eat more of now while in college? What foods do you eat less of?

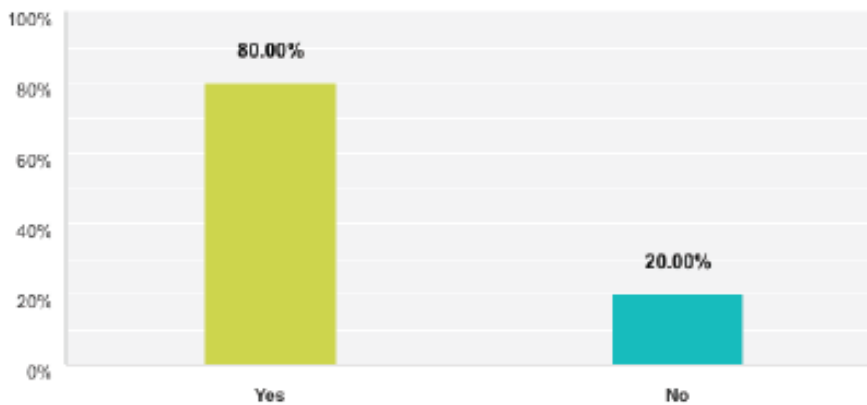
Responses:

- I eat more carbs and pasta and bread. I eat less of fruits and vegetables
- More burgers and burritos, less fruits and veggies
- More bread and pasta
- More chips, less veggies
- More pasta, less protein
- More carbs, less of different kinds of vegetables
- Less breakfast
- More snacks and less of things that take time to cook, like rice or cooked vegetables
- More tofus because it is in a lot of the vegan options, but less salads than I did at home because I prefer making my own dressing which I can't do in the dorm
- I eat more french fries and pasta, and I eat less vegetables and leafy, dark green which I find very frustrating. Probably also less organic foods which bothers me.

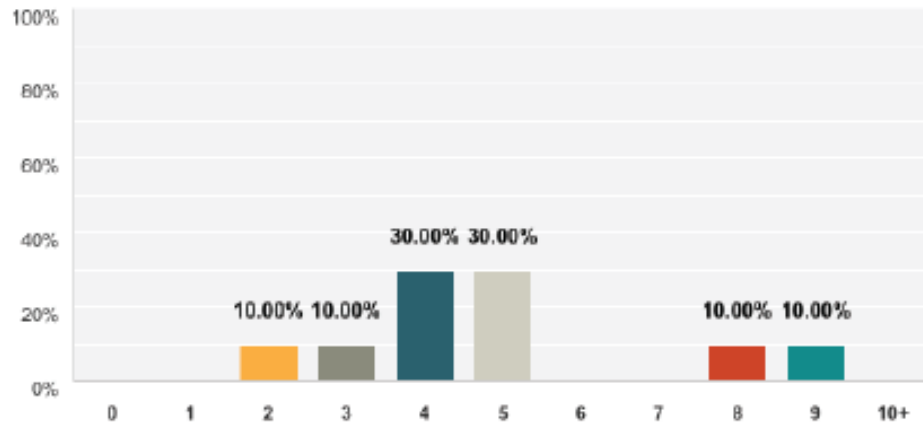
2. In general, have you found yourself eating more or less in college (when compared to high school)?



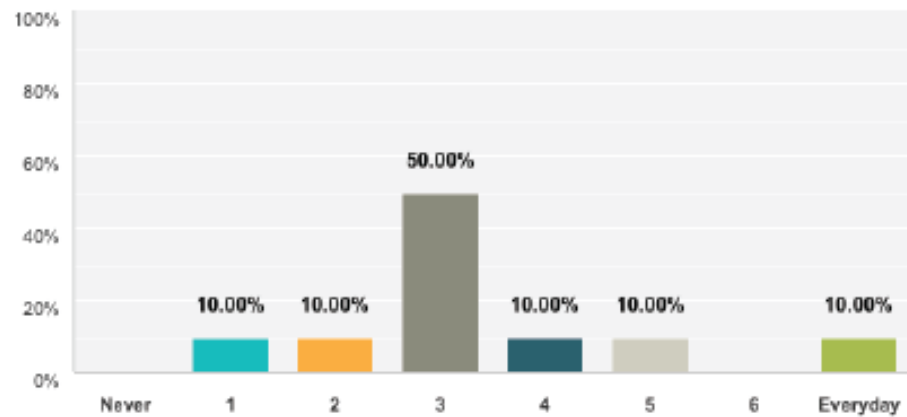
3. Do you sometimes skip meals? (due to a lack of time, busy schedule, etc.)



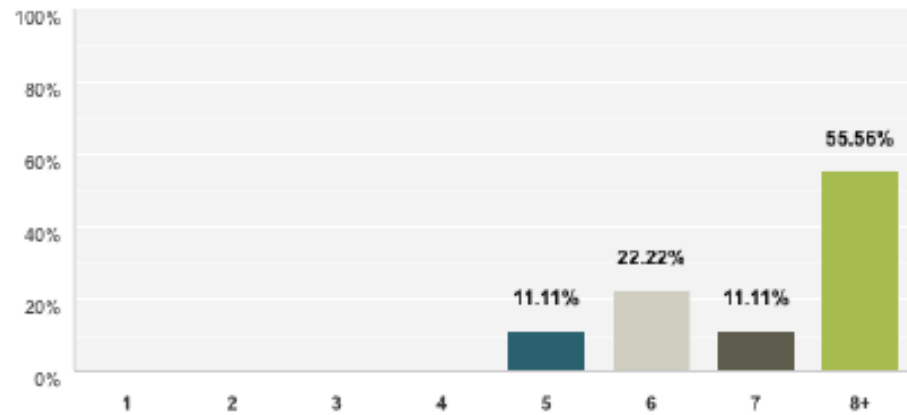
4. When you consume alcoholic beverages, how many do you consume in one session?



5. How many days per week do you drink alcoholic beverages?



6. How many hours of sleep do you get each night?

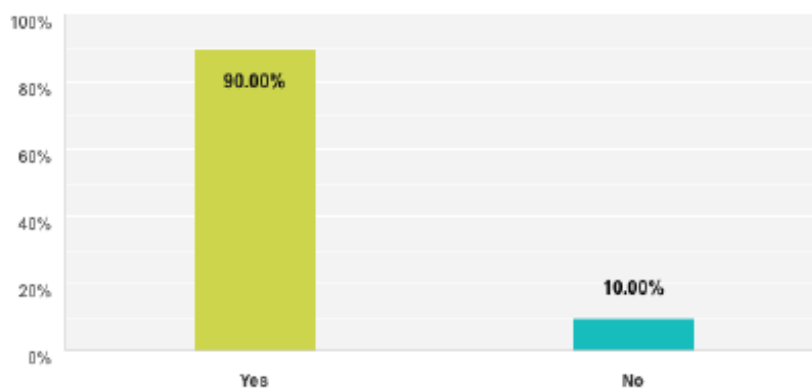


7. Has it been difficult adjusting to college so far? List any stressors that have affected you.

Responses:

- No
- Lots of homework
- It has been a bit stressful because it's hard to get help from teachers
- Kind of. Hard to get alone time or my own space when needed.
- Yes, less sleep, more homework, new friends and living quarters
- School work in general. Finding time in your schedule to just relax is hard. Mainly the amount of homework.
- No
- The amount of homework
- No
- It's hard adjusting to a new roommate, different living environment, and a heavy workload

8. Do you know about general nutrition guidelines (such as appropriate serving sizes, daily caloric requirements, etc.)?

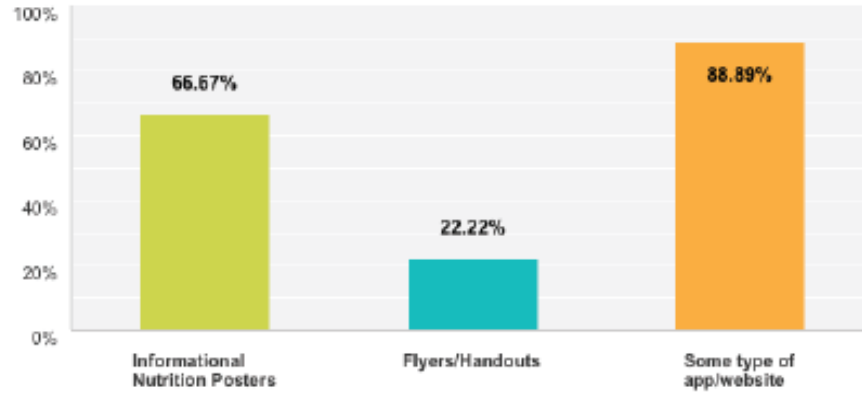


9. What do you like about the dining halls? Dislike?

Responses:

- I like how convenient it is, but I don't like that there isn't enough healthy options. I find myself eating the same dinner every day.
- I liked how close everything was and some food was good. I disliked how there aren't fresh fruits and veggies and how I got tired of eating the same things over and over.
- It's convenient to have food close but at the same time you never really know how unhealthy the food is and I prefer making my own.
- Well I love Carson because it feels like home style cooking. Also I like the dining halls because you don't have to cook or drive to the grocery store.
- Easy and accessible, not good food.
- I like that they're almost always open but I dislike the lack of variety. After awhile it feels like the same food over and over again. Plus it makes you feel bloated.
- I like the food. I don't really get tired of it, but I wish there was more variety.
- It is very convenient and it is easy. But it gets boring.
- I like all the healthy options and that they're all ready to go for me but I miss cooking my own food.
- I like that it is convenient. I dislike the lack of labeling (for example labelling what is vegan, organic, etc.)

10. What would you personally find most useful to help make healthier decisions while eating in the dining halls?



Bibliography

- Brown, Cecelia. "The Information Trail of the 'Freshman 15'—a Systematic Review of a Health Myth within the Research and Popular Literature." *Health Information & Libraries J Health Information and Libraries Journal* 25.1 (2008): 1-12. NCBI. Web.
- "College Drinking." *PsycEXTRA Dataset* (2012): n. pag. *College Drinking Prevention*. NIH National Institute on Alcohol Abuse and Alcoholism, Oct. 2015. Web.
- Graham, Melody A., and Amy L. Jones. "Freshman 15: Valid Theory or Harmful Myth?" *Journal of American College Health* 50.4 (2002): 171-73. NCBI. Web.
- Hoffman, Daniel J., Peggy Policastro, Virginia Quick, and Soo-Kyung Lee. "Changes in Body Weight and Fat Mass of Men and Women in the First Year of College: A Study of the 'Freshman 15'" *Journal of American College Health* 55.1 (2006): 41-46. NCBI. Web.
- Jackson-Michel, Shavon, Dr. "Side Effects of Not Eating Breakfast." *Livestrong*. Livestrong Foundation, 13 Mar. 2014. Web.
- Nelson, Melissa C., Rebecca Kocos, Leslie A. Lytle, and Cheryl L. Perry. "Understanding the Perceived Determinants of Weight-related Behaviors in Late Adolescence: A Qualitative Analysis among College Youth." *Journal of Nutrition Education and Behavior* 41.4 (2009): 287-92. NCBI. Web.
- Sapolsky, Robert M. "Why Do We Eat Junk Food When We're Anxious?" *Wall Street Journal*. N.p., 13 Sept. 2013. Web.
- Schuna, Carly. "What Effect Does Skipping Meals Have on the Body." *Livestrong*. Livestrong Foundation, 27 Mar. 2014. Web.
- Smith-Jackson, Terisue, and Justine J. Reel. "Freshmen Women and the 'Freshman 15': Perspectives on Prevalence and Causes of College Weight Gain." *Journal of American College Health* 60.1 (2012): 14-20. NCBI. Web.
- St-Onge, M.-P., A. L. Roberts, J. Chen, M. Kelleman, M. O'keeffe, A. Roychoudhury, and P. J. Jones. "Short Sleep Duration Increases Energy Intakes but Does Not Change Energy Expenditure in Normal-weight Individuals." *American Journal of Clinical Nutrition* 94.2 (2011): 410-16. NCBI. Web.
- Torres, Susan J., and Caryl A. Nowson. "Relationship between Stress, Eating Behavior, and Obesity." *Nutrition* 23.11-12 (2007): 887-94. NCBI. Web.
- "Why Stress Causes People to Overeat." *Harvard Medical School*. Harvard Health Publications, 1 Feb. 2012. Web.

Zagorsky, Jay L., and Patricia K. Smith. "The Freshman 15: A Critical Time for Obesity Intervention or Media Myth?" *Social Science Quarterly* (2011): n. pag. *Wiley Online Library*. Web.