

Behavioral Changes in Diet and Physical Activities of Engaged U.S. Women Preparing for Their  
Wedding Day

By

Katelynne M. Burghardt, RDN

Submitted to the graduate degree program in Dietetics and Nutrition and the Graduate Faculty of  
the University of Kansas in partial fulfillment of the requirements for the degree of Master of  
Science

---

Debra K. Sullivan PhD, RD – Advisor

---

Jeannine Goetz PhD, RD, LD

---

Holly Hull PhD, FTOS

---

Christie Befort PhD

Date Defended: July 12, 2016

The Thesis Committee for Katelynn Burghardt certifies that this is the approved version of the following thesis:

Behavioral Changes in Diet and Physical Activities of Engaged U.S. Women Preparing for Their Wedding Day

---

Chairperson Debra K. Sullivan PhD, RD

Date Approved: July 28, 2016

## Abstract

### Behavioral Changes in Diet and Physical Activities of Engaged U.S. Women Preparing for Their Wedding Day

Objectives: The purpose of this study is to develop and administer a survey in order to characterize the weight status and dietary and physical activity behaviors of engaged women as they prepare for their wedding day.

Methods: A total of 363 engaged females were recruited using snowball sampling through Facebook survey links, University of Kansas Medical Center broadcast email, and word of mouth. An online REDCap survey was created to assess the demographics, body image perceptions, anthropometrics, wedding/ relationship, dietary behaviors, physical activity behaviors, and health status. To keep the survey anonymous, a second online REDCap survey requesting an email address for future studies was linked to the first survey so the responses would be stored in separate databases. Women were eligible if they were a U.S. citizen, 18-40 years old, female, not pregnant or breastfeeding, and engaged to be married. The consent form and an eligibility questionnaire were built into the beginning of the first REDCap survey.

Results: After exclusions ( $n=6$ ), 357 engaged females were included in the study. The mean age was  $24.8 \pm 2.9$ , and the mean BMI was  $24.9 \pm 5.6$ . Over one-third (36.1%) of the engaged females were overweight or obese and yet, 62% of the women indicated they were currently trying to lose weight. Over half (51.2%) of the women had an ideal wedding weight that was an average of 18 pounds less than their current weight. Women who had a desired wedding weight were statistically heavier than those who did not ( $M=156.7 \pm 5.9$  vs.  $145.6 \pm 32.7$ , respectively,

$p < 0.001$ ). Significant differences were also found between cohabiting and non-cohabiting women. The mean age of cohabiting women was  $25.2 \pm 2.9$  years old compared to  $24.0 \pm 2.9$  years for non-cohabiting women ( $p < 0.001$ ). The mean BMI of cohabiting women was significantly higher than the non-cohabiting women's BMI ( $25.7 \pm 6.0$  vs.  $23.3 \pm 4.4$ ;  $p < 0.001$ ). Cohabiting women also had significantly higher income levels ( $p < 0.001$ ), job status ( $p < 0.001$ ), longer relationships ( $p = 0.024$ ), and more usual weekday screen time ( $p = 0.042$ ).

Conclusion: More than one-third of engaged females in our study were overweight or obese. Over half of these women have a desired wedding weight lower than their current weight, and the majority of them indicated that they were currently trying to lose weight. Previous studies have found similar results and introduced the idea that there are differences between cohabiting and non-cohabiting women. Our study found that cohabiting U.S. engaged females were significantly older, heavier, employed full-time with higher income levels, and had been dating their significant other longer. Future studies should focus on the long-term effects that cohabitation has on weight-related behaviors of women and develop interventions for couples who are beginning to live together.

## **Acknowledgements**

The author would like to thank Debra Sullivan, PhD, RD, Jeannine Goetz, PhD, RD, LD, Holly Hull, PhD, FTOS, and Christie Befort, PhD for advising this project. The assistance with statistical analysis provided by Matt Taylor, MS, RD, LD and Duncan Rotich was much appreciated. The support from loved ones was also an important key to this project's success.

## Table of Contents

|  |    |
|--|----|
| <b>Chapter 1: Introduction</b> .....   | 1  |
| <b>Chapter 2: Review of Literature:</b> .....  | 4  |
| <b>Chapter 3: Methods</b> .....  | 12 |
| Overview .....   | 12 |
| Sample .....   | 12 |
| Setting .....  | 12 |
| Ethics .....   | 13 |
| Description of Tools .....   | 13 |
| Data Analysis .....  | 15 |
| <b>Chapter 4: Results</b> .....  | 16 |
| <b>Chapter 5: Discussion</b> .....   | 36 |
| <b>References Cited</b> .....  | 41 |
| <b>Appendix A:</b> All Questions and Potential Answers of the Baseline Bridal Registry Survey with Consent Form and Brief Eligibility Survey ..... | 45 |
| <b>Appendix B:</b> Baseline Bridal Registry Survey with Consent Form and Brief Eligibility Survey from Participants View Online .....              | 64 |

## Chapter 1: Introduction

Over fifty-five percent of women in the United States (U.S.) who are between 20 and 39 years old are overweight or obese (Body Mass Index,  $BMI \geq 25 \text{ kg/m}^2$ ) (1). For more than 100 years, the median age for U.S. women to get engaged and married for the first time has been between 20 and 28 years old (2). This suggests that over fifty-five percent of engaged females are overweight or obese. Millstein, et al. found that overweight/obesity (elevated BMI) was significantly positively correlated with higher odds of body dissatisfaction (3). Thus, many of these women may engage in behaviors to change their weight prior to their wedding day.

A handful of observational studies have surveyed engaged females in the United States and Australia documenting their pre-wedding behaviors related to appearance. Appearance was ranked one of the most important factors in terms of the wedding day by 879 brides-to-be in a study by Prichard and Tiggemann 2009 (4). Among the practices that the brides-to-be have done or intended to do related to appearance (i.e., tanning, teeth whitening, dying their hair, cosmetic surgery) were losing weight by means of changing their diet and or by increasing physical activity/ joining a gym (4-7). Over 85% of those brides-to-be had a desired wedding weight that was less than their current weight by an average of 18 lb. (4). In 2008, Neighbors and Sobal found that over 75% of the brides-to-be were trying to lose weight or prevent weight gain before their wedding (5). Some participants reported partaking in unhealthy weight loss behaviors such as using laxatives or vomiting, skipping meals, taking unprescribed pills, and starting to smoke (6).

Within the first year of cohabitation (marriage or cohabitation with a partner without a legal marriage), women gain an average of 2 kg (8-12). Klos and Sobal found that almost three-fourths of women who are cohabiting or married were overweight or obese (13). As couples

adjust to living with one another and learn each other's preferences, physical activity declines (12, 14) and the dietary habits for women begin to change in adverse ways, such as larger portion sizes leading to excess energy intake and weight gain (11). In order to prevent the snowball effect of behavior changes that occur in women as they transition through life, we must understand the behaviors that effect their life before one of the key milestones: marriage.

Gaps in the literature suggest that there may be differences between cohabiting women in a relationship and non-cohabiting women in relationships. The present study separates cohabiting engaged women from those not-cohabiting and presents the current dietary and physical activity behaviors of U.S. women, as well as their body image perceptions. The habits of U.S. women preparing for marriage have changed vastly in the past 30 years and cohabiting before marriage was not common in the 1980s(15). Further, the data from this study can also be used to develop future interventions for women and/or couples at a transitional stage in their life.

#### Statement of purpose

The purpose of this study was to develop and administer a survey in order to characterize the dietary and physical activity behaviors of engaged women as they prepare for their wedding day.

#### Research question

The research questions were:

1. What are the current obesity rates of engaged U.S. females?
2. What are the weight-related behaviors and perceptions of engaged females?



3. Are there differences between engaged females who are cohabiting and those who are engaged but not cohabiting related to BMI, diet and physical activity behaviors, perceived weight status, and perceived stress?

## **Chapter 2: Review of Literature:**

### Prevalence of Obesity in the U.S.

Over two-thirds of the United States' (U.S.) population is overweight or obese (1), and the prevalence of obesity is rising along with its associated medical complications and costs (16). The World Health Organization (WHO) defines overweight as a body mass index (BMI) of 25-29.9 kg/m<sup>2</sup>, and obesity as a BMI of 30 kg/ m<sup>2</sup> or above (17). In 1985, every state in the U.S. had an obesity prevalence less than 15%; however, by 2010, not a single state was under 20% prevalence (18). Additionally, the most recently published Behavioral Risk Factor Surveillance Survey (BRFSS) from 2013 showed that all states were above a 20% obesity prevalence (19). Overweight and obesity are linked to the leading causes of preventable death in the United States, such as, type 2 diabetes, cardiovascular diseases, and certain types of cancer (16, 17, 20). The cause-specific mortality from these adverse health conditions is positively associated with BMI (17, 20). Higher medical costs are also positively associated with obesity (16). The dominance of overweight and obese persons in the U.S. and their related risks and high medical costs demand the need for interventions to lower the prevalence leading to lower adverse health outcomes and lessened medical costs.

### Body Dissatisfaction in Women and the Desire to Lose Weight

Women are more prone to body dissatisfaction which is associated with efforts of weight loss (3). The trait predictors of body size dissatisfaction are being female, overweight or obese, younger (ages 18-59), married or previously married, and being a college graduate (3). Overweight and obesity affects over two-thirds of women over twenty years of age, and over 55% of women age 20 to 39 years old, are overweight or obese (1). These issues may intensify during times such as weddings when the pressure of appearance is increased. For over 100 years,

the median age for U.S. women to get engaged and married has been between 20 and 28 years old (2). Thus, currently in the U.S. over half of brides-to-be are overweight or obese. Previous research shows that as women transition into marriage, they gain weight and become less satisfied with their bodies (10, 11, 13).

### Single Women

Women who are single have the least amount of body dissatisfaction, but also, usually have a lower BMI than cohabiting or married women. Klos and Sobal found that the highest percentage of women with a normal BMI had never been married (13). Compared to women who were currently married or previously married, women who have never been married expressed the least amount of body dissatisfaction (3). Despite their BMI status and being more satisfied than married or previously married women, the majority of single women still wish to weigh less, and about one-third of the single women reported they were active in their weight loss attempts (3, 13). A limitation to these data is that most of the studies mentioned did not differentiate whether the single women were in a relationship, and if so, how serious the relationship was (e.g., casual dating, engagement, cohabitation).

### Engaged Women

An 'ideal wedding weight' is not uncommon for engaged females to try to attain when planning for their wedding. Five studies surveying engaged females found that about half of the brides studied had an ideal wedding weight lower than their current weight (4-7, 10). More than 65% of the brides reported they were participating in or intending to use exercise and or altered eating behaviors to lose weight or prevent weight gain before their wedding day (4-7). On average, brides wished to weigh about eighteen pounds lighter than their current weight (4-7, 10). Forty-five percent of brides who had an ideal wedding weight stated they would be unhappy

if the desired weight loss was not achieved (5). The majority of engaged women usually intend to take actions to reduce their body to a more satisfactory size (4-7, 10).

### Married Women

Married women are at a greater risk of gaining weight than engaged or single women. Prichard and Tiggemann found that regardless of whether women had lost weight, gained weight, or stayed the same weight during their engagement leading up to the wedding day, a minimum of two kilograms were gained six months after the wedding (10). On average, women who had lost weight before the wedding gained back over twice as much (10). This trend is only the beginning of the increase in weight that typical married women experience. A retrospective cohort study using a nationally representative sample of U.S. adults from 1999-2002 by Klos and Sobal found that 73.9% of married or cohabiting women were overweight or obese (13). Cohabiting women are sometimes grouped with married women due to small sample sizes in studies which can limit the analyses of the data (11, 13). Other studies have found similar patterns of weight gain in married or cohabiting women (11, 21-23). Consistent with the previously mentioned theory that higher BMI correlates with higher body dissatisfaction, currently married women had higher odds of being dissatisfied with their bodies than women who were never married or were previously married (3).

### Importance of Appearance at the Wedding

Most women rank appearance as one of the most important outcomes of a successful wedding (4, 5, 24). Prichard and Tiggemann surveyed 347 engaged females and 122 bridesmaids and found that the wedding photos were the most important aspect to looking their best on the wedding day (5). For brides, the next most important aspects included, in the following order: the

“grand nature of the wedding day,” feeling attractive, and being in the spotlight (5). Appearance-related wedding factors, such as the fit of the dress, feeling/ looking attractive, and the wedding photography, are significantly associated with wanting to lose weight (4). One study found that over 90% of the bride’s studied were trying to lose weight or prevent weight gain (6). Brides were surveyed by Prichard and Tiggeman using the Appearance Schemas Inventory – Revised (ASI-R) which measures perceptions of self-worth based on appearance (self-evaluative salience) and motivation to prolong their physical appearance (motivation salience) (7, 25). When compared to normative data of women from the ASI-R, brides had higher scores of self-evaluative salience and motivational salience, but neither were significant (7). However, this trend does show that negative self-perceptions about their body image will motivate behavior change in bride’s to strive for a more satisfying appearance. Brides with reported higher motivational salience are the most likely to change their exercise and eating behaviors (7).

#### *Pre-Wedding Exercise Behaviors*

Exercising is the preferred method used by women to lose weight before a wedding (4-7, 24). In four studies conducted with brides and bridesmaids, over 65% of the women studied reported they intended to exercise more before the wedding (4-7). Women who intended to exercise before their weddings had a significantly higher difference between their current weight and ideal wedding weight than women who did not intend to exercise before their weddings (4). Also, women who indicated that they were attempting to lose weight were more likely to participate in exercising behaviors than women who indicated they were only trying to prevent weight gain (6). Prichard and Tiggemann found that BMI, self-evaluative salience, motivational salience, and dietary restraint, were significantly, positively associated with the behaviors of exercising and eating related to the upcoming wedding (7). Most women who intended to

exercise, also intended to change their dietary habits as well (4). These findings are different than results from Millstein, et al who found that over 90% of women of all marital statuses who are dissatisfied with their bodies chose to diet rather than use a combination of exercise and diet or exercise alone (3). It is important to note that this group of women was general and not specific to engaged females.

### *Pre-Wedding Dietary Behaviors*

Although in previous studies, exercise was stated as the preferred method for losing weight, many brides also change their diet before their weddings; some even participate in extremely unhealthy behaviors (4-7, 24). The intended change in eating behaviors of engaged females ranged from eating healthier foods to specific low-fat or low-carb diets and from skipping meals to using laxatives (4, 6, 7). Over 70% of brides intended to or had already begun changing their dietary behaviors in preparation for the wedding (4, 7). Neighbors & Sobal found that 26% of women who indicated they were trying to lose weight used at least one unhealthy weight loss behavior such as beginning to smoke, taking laxatives or vomiting, or taking unprescribed pills or supplements (6). Fourteen percent of women who indicated they were trying to prevent weight gain before their wedding reported using at least one of those “more extreme weight loss behaviors” (6). To further these concerns, the percentages of women trying to lose weight and women trying to prevent weight gain who used two or more of those methods were 20% and 5%, respectively (6). Other extreme methods of weight loss that have been documented include skipping meals, fasting for one day or more, and gastric banding surgery (4, 6). With women indicating unhappiness at the potential failure to achieve their ideal wedding weight, the dangers of disordered eating tied to body dissatisfaction are increased (5, 26).

### *How Brides Are Affected By the Suggestions of Weight Loss*

Many brides are told to lose weight before their weddings (4, 5, 10). Prichard and Tiggemann suggest that brides feel pressured from these suggestions of weight loss (4, 5, 10). Brides who are overweight are more likely to be told to lose weight than their normal weight counterparts, and this suggestion often comes from their mothers (4, 5). Other people who have told brides to lose weight include the bride's fiancé, friends, family (including extended family), and even some bridal dress shop employees (4, 5). A model created by Rodgers, Paxton, and Chabrol exposed that negative comments about body image from parents are significantly linked to internalization and appearance comparison. Both of those links are significantly connected in the model to body dissatisfaction leading to more significant associations with a "drive for thinness" which may lead to bulimia (27). This model suggests that the comments brides receive about their bodies from their parents is what drives them to use dangerous behaviors to achieve their ideal wedding weight. Prichard and Tiggemann found that brides who were told to lose weight before their weddings actually gained significantly more weight 6-months after their weddings compared to brides who were not told to lose weight (10). The previous evidence supports the need for interventions to help overweight brides lose weight at a steady, reasonable pace to prevent them from re-gaining their weight loss plus extra after marriage.

### Declining Physical Activity

About one-third of the adult female population in the United States does not get enough physical activity (28). As defined by the WHO, the recommended standards for physical activity are "150 minutes of moderate-intensity physical activity per week, or at least 75 minutes of vigorous-intensity physical activity per week, or equivalent" (28). As previously mentioned,

Millstein, et al., found that women of all marital statuses who were dissatisfied with their bodies were less likely to use physical activity or a combination of diet and exercise to lose weight than dieting alone (3). Conversely, studies looking at the physical activity patterns of women in relationships varies with the type of relationship (e.g., dating, cohabiting, married) and has no clear conclusions.

### *Physical Activity Patterns of Couples*

As couples progress in their relationships from dating to marriage, the consistency of physical activity in coupled individuals becomes unclear. Rapp and Schneider studied physical activity in a variety of relationships and posed “the marriage market hypothesis,” which states that as the strength of a relationship progresses, the motivation to participate in weekly physical activity declines (14). This hypothesis was supported in the relationship transitions of ‘single to dating,’ ‘dating to cohabiting,’ and ‘dating to marriage,’ but not in the ‘cohabiting to marriage’ relationship (14). Brown, Heesch, and Miller showed contrasting data to the “marriage market hypothesis” in terms of ‘single to dating,’ but not in ‘dating to marriage,’ indicating that women who started a new relationship had better odds of participating in physical activity, but women that became married increased their odds towards reducing physical activity (29). Contrary to the previous findings, Burke, Dunbar and Kevan, found that women who cohabited, marital status not mentioned, increased their physical activity by 0.4 Watts/kg in a 7-year span which was equivalent to a one percent increase (11). The unsettled conclusions about whether relationships increase or decrease physical activity warrant further research in this area.

### *Cohabiting Effects on Dietary Patterns*

Cohabiting negatively impacts women’s dietary behaviors, usually leading to weight gain. Studies have alluded to the idea that couples adopt each other’s dietary behaviors when



they cohabit together (9, 11, 30). Couples have stated that food “temptations” (e.g., snacking and pre-dinner drinks) may become less resistible in a shared environment (9). However, a contrasting study from China showed that dietary patterns associated with increased meat consumption, such as poultry, beef, and mutton were inversely associated with weight gain in marital transition for both males and females (21). However, the limitation to this study is that it is based in China and may not be generalizable to the U.S. population. In a 2004 study, some women reported consuming more alcohol after transitioning into marriage (9). Though generally, women tend to increase energy intake after cohabitation leading to weight gain (11). As previously mentioned, studies often combine cohabiting data with married women due to small sample sizes (11, 13), which could lead to skewed data about how the relationships between married and cohabiting couples differ.

### Conclusion

With the notable impacts that marriage transition has on women, it is important to evaluate variables that influence body weight before and after marriage. This study aims to examine how the lifestyle behaviors of engaged, American women are impacted as they transition into their married lives. The hypothesis tested will be that the lifestyle behaviors of engaged, American women change in the direction of less physical activity and adoption of their partner’s dietary behaviors and patterns usually leading to increased weight.

## **Chapter 3: Methods**

### Overview

This study documents the dietary and physical activity behaviors of engaged U.S. females. We recruited engaged women by snowball sampling on Facebook, through word of mouth, and broadcast emails at the University of Kansas Medical Center, as well as, at bridal shops in the Greater Kansas City area using fliers. The women completed an electronic REDCap™ survey with a minimum of 48 questions and a maximum of 84 questions depending their responses regarding their eligibility, demographics, body image perceptions, anthropometrics, wedding/ relationship, dietary behaviors, physical activity behaviors, health status, and stress levels. This study aimed to determine the dietary and physical activity behaviors of engaged women as they prepare for their wedding day.

### Sample

English speaking U.S. females between the ages of 18 and 40 years old who were engaged to be married were eligible for the study. Women who were pregnant, unsure if they were pregnant, or breastfeeding were excluded from the study. Participants filled out a brief eligibility survey to determine if they were eligible for the study.

### Setting

The study was conducted through the University of Kansas Medical Center. The recruitment occurred from April 2016 through June 2016. Women were provided with an electronic link to a REDCap survey and were asked to agree or disagree to participate in the study. If they agreed, they answered questions about their eligibility. If they were eligible, they were given the opportunity to complete the REDCap survey.

## Ethics

The Human Subjects Committee reviewed and approved this proposal (STUDY 00003943). Electronic consent was obtained before the participants could take the survey. Participants were not remunerated for the survey.

## Description of Tools

A survey created by the student, mentor, and thesis committee was used to assess the women who participated in the study. The survey contained several questions that were pulled verbatim or modified from the Behavioral Risk Factor Surveillance System (BRFSS) as well as questions obtained from the literature. Refer to Table 1 for the BRFSS and other published questions. In addition, the survey contained two validated assessments tools described later and questions related to demographics, body image perceptions, anthropometrics, wedding/relationship, dietary behaviors, physical activity behaviors, and health status.

**Table 1.** BRFSS and Other Published Questions

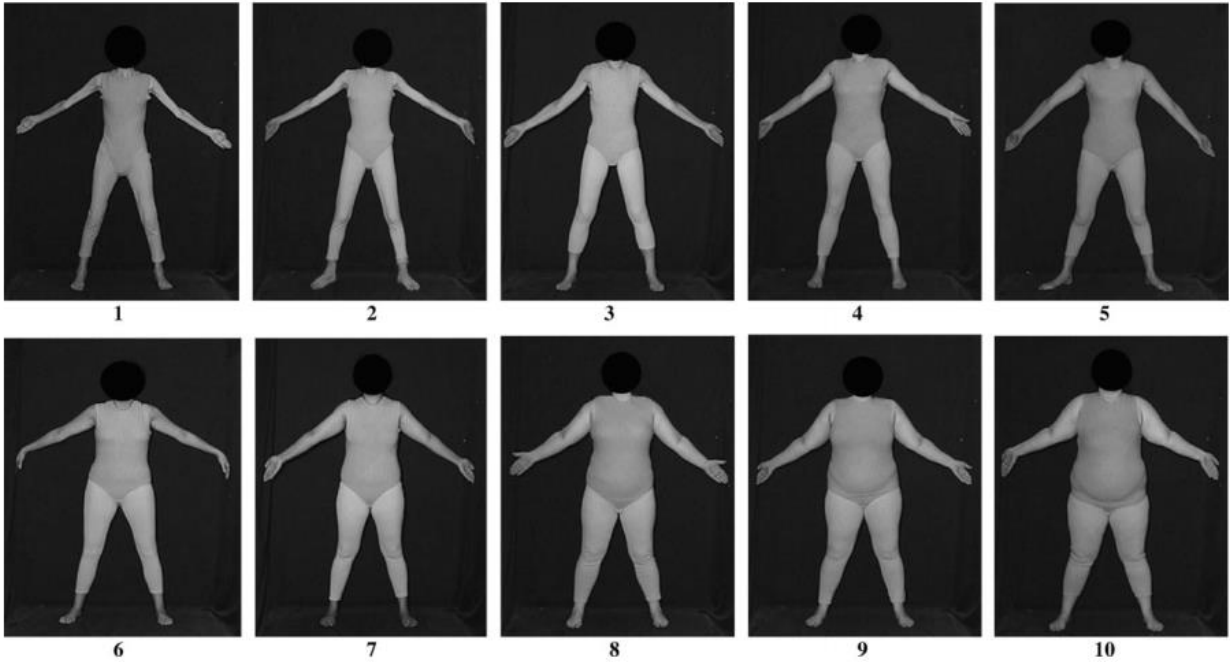
| <b>Question</b>   | <b>Source</b>     |
|---|-------------------|
| “Over the last month, how many times per month, week, or day did you eat fruit? Count any kind of fruit – fresh, canned, and frozen. Do not count juices. Include fruit you ate you ate at all mealtimes and for snacks.”                   | BRFSS (reference) |
| “Over the last month, how many times per month, week, or day did you eat vegetables? Count any kind of fruit – fresh, canned, and frozen. Do not count white potatoes. Include vegetables you ate you ate at all mealtimes and for snacks.” | BRFSS             |
| “About how often do you eat fast food, such as McDonald’s, Burger King, Pizza Hut, KFC, Taco Bell, etc.?”   | BRFSS             |
| “About how often do you eat at full-service restaurants, such as Applebee’s, T.G.I. Friday’s, Chile’s, IHop, Bob Evans, Jack Stack Barbeque, etc.?”   | BRFSS             |
| “Overall, when you think about the foods you ate over the past 6 months, would you say your diet was high, medium, or low in fat?”  | BRFSS             |

|  |                                |
|--|--------------------------------|
| “How would you describe your current weight?”              | Resnicow K, et al. (31)        |
| “Do you have a desired wedding weight?”                    | Prichard & Tiggemann (5)       |
| “Were you told to lose weight by anyone for your wedding?” | Prichard & Tiggemann (4, 5,10) |

The two previously validated assessment tools included in the survey were the Photogenic Figure Rating Scale and Cohen Perceived Stress Scale (32, 33).

The Photogenic Figure Rating Scale (PFRS) was used to assess the perceived current body size women identify with, as well, as the body size they desire (Ideal Body Size). The ten body images in Figure 1 represent two BMIs from each category ranging from the first photo, an emancipated figure with a BMI of 12.51, to the tenth photo, an obese figure with a BMI of 41.23.

**Figure 1.** Photogenic Figure Rating Scale (PFRS)



Stress was evaluated in two ways. A Likert scale was used to assess the stress levels of the women related to the wedding planning, while the Cohen Perceived Stress Scale-4 (PSS-4) gauged the perceived stress in their lives.

A second survey was linked directly to the end of the first survey which requested the women's email address if they wanted to be contacted again in the future for later studies. The second survey was also a REDCap survey that was a separate project built into REDCap's database in order to keep the survey results anonymous. Refer to Appendix A and B for the assessment tools.

### Data Analysis

Descriptive statistics (i.e., frequencies, percentages, means, and standard deviations) were used to characterize the data. A Q-Q plot was used to test the normality and homogeneity of dependent variables (i.e., height, weight, and BMI). Weight and BMI were log transformed to normalize the data and increase the homogeneity of the variables. A one-way ANOVA, Univariate ANOVA, and Fisher's Exact Tests were used to determine significant differences between cohabiting and non-cohabiting engaged females. The level of significance was set at  $p=0.05$ . All data were analyzed using the SPSS, version 23, software (SPSS, Inc., Chicago, IL).

## Chapter 4: Results

This study aimed to characterize the dietary and physical activity behaviors of engaged women as they prepared for their wedding day. Data were available for 363 engaged females. However, six surveys were excluded due to the stated wedding date preceding the survey timestamp (n=5) and an implausible height (n=1). The final sample size was 357 engaged females who met eligibility requirements.

The second survey asking women to provide an email address if they wanted to be contacted later for future studies received twenty-six email addresses.

### Demographics

The mean age of the sample was  $24.8 \pm 2.93$  years with ages ranging from 18 to 40 years old. The majority of the sample was Not Hispanic or Latino (95%) and White (92.2%). The highest level of education completed by most participants was a Bachelor's degree (61.3%). There were no participants recruited with less than a high school diploma or GED. Sixty-three percent of women reported being employed full-time. The yearly income of participants ranged from less than \$20,000 to more than \$150,000, with most participants being in the category of \$35,000-\$49,999 (23.2%). Refer to Table 2 for the demographics.

**Table 2.** Demographics

|   | Overall     | Living Arrangements |                | p-value |
|---|-------------|---------------------|----------------|---------|
|   | (n=357)     | Cohabiting          | Non-Cohabiting |         |
|   | Mean ± SD   | (n=231)             | (n=126)        |         |
| Age, years                                | 24.8 ± 2.9  | 25.2 ± 2.9          | 24.0 ± 2.9     | <0.001* |
| <b>Ethnicity</b>                          |             |                     |                | 0.915   |
| Hispanic or Latino                        | 14 (3.9%)   | 10 (4.3%)           | 4 (3.2%)       |         |
| Not Hispanic or Latino                    | 339 (95%)   | 218 (94.4%)         | 121 (96%)      |         |
| Unknown                                   | 4 (1.1%)    | 3 (1.3%)            | 1 (0.8%)       |         |
| <b>Race</b>                               |             |                     |                | 0.994   |
| Black or African American                 | 5 (1.4%)    | 4 (1.7%)            | 1 (0.8%)       |         |
| American Indian or Native Alaskan         | 2 (0.6%)    | 1 (0.4%)            | 1 (0.8%)       |         |
| Asian                                     | 12 (3.4%)   | 8 (3.5%)            | 4 (3.2%)       |         |
| Native American or Other Pacific Islander | 3 (0.8%)    | 2 (0.9%)            | 1 (0.8%)       |         |
| White                                     | 329 (92.2%) | 212 (91.8%)         | 117 (92.9%)    |         |
| Unknown                                   | 6 (1.7%)    | 4 (1.7%)            | 2 (1.6%)       |         |
| <b>Highest Level of Education</b>         |             |                     |                | 0.988   |
| Less than high school                     | 0 (0%)      | 0 (%)               | 0 (0%)         |         |
| High school/ GED                          | 1 (0.3%)    | 1 (0.4%)            | 0 (0%)         |         |
| Some college but no degree                | 42 (11.8%)  | 28 (12.1%)          | 14 (11.1%)     |         |
| Associate's degree                        | 13 (3.6%)   | 9 (3.9%)            | 4 (3.2%)       |         |
| Bachelor's degree                         | 219 (61.3%) | 140 (60.6%)         | 79 (62.7%)     |         |
| Graduate degree                           | 82 (23%)    | 53 (22.9%)          | 29 (23%)       |         |
| <b>Employment Status</b>                  |             |                     |                | <0.001* |
| Employed full-time                        | 226 (63.3%) | 169 (73.2%)         | 57 (45.2%)     |         |
| Employed part-time                        | 26 (7.3%)   | 20 (8.7%)           | 6 (4.8%)       |         |
| Out of work for less than 1 year          | 4 (1.1%)    | 1 (0.4%)            | 3 (2.4%)       |         |
| Homemaker                                 | 1 (0.3%)    | 1 (0.4%)            | 0 (0%)         |         |
| Student                                   | 99 (27.7%)  | 40 (17.3%)          | 59 (46.8%)     |         |
| Retired                                   | 1 (0.3%)    | 0 (0%)              | 1 (0.8%)       |         |
| <b>Yearly Income</b>                      |             |                     |                | <0.001* |
| Less than \$20,000                        | 112 (31.4%) | 50 (21.6%)          | 62 (49.2%)     |         |
| \$20,000 - \$34,999                       | 68 (19%)    | 49 (21.2%)          | 19 (15.1%)     |         |
| \$35,000 - \$49,999                       | 83 (23.2%)  | 55 (23.8%)          | 28 (22.2%)     |         |
| \$50,000 - \$74,999                       | 74 (20.7%)  | 63 (27.8%)          | 11 (8.7%)      |         |
| \$75,000 - \$99,999                       | 11 (3.1%)   | 8 (3.5%)            | 3 (2.4%)       |         |
| \$100,000 - \$149,999                     | 8 (2.2%)    | 6 (2.6%)            | 2 (1.6%)       |         |
| \$150,000 or more                         | 1 (0.3%)    | 0 (0%)              | 1 (0.8%)       |         |

## Relationship Statistics

Nearly all (98%) of the women were getting married for the first time (n=349). Women were an average of 255 days, or about eight and a half months, away from their wedding at the time they took the survey. The time to the wedding date ranged from 1 day to 1084 days (~3 years) away. The average length of most relationships was 49 months ( $\pm 24.8$ ), or about 4 years.

## Obesity Rates

Women were asked to self-report their height and weight. BMI was calculated from these self-reported measurements, but kept hidden from the participants as they took the survey. The mean BMI was  $24.9 \pm 5.59$ . The majority of women were considered to have a Normal weight BMI (n=215; 60.2%). Refer to Tables 3 and 4 for the anthropometrics and obesity rates.

**Table 3.** Anthropometrics and Desired Wedding Weight

|   | Overall<br>(n=357) | Living Arrangements   |                           | p-value |
|---|--------------------|-----------------------|---------------------------|---------|
|   | Mean $\pm$ SD      | Cohabiting<br>(n=231) | Non-Cohabiting<br>(n=126) |         |
| <b>Anthropometrics</b>                    |                    |                       |                           |         |
| BMI, kg/m <sup>2</sup>                    | 24.9 $\pm$ 5.6     | 25.7 $\pm$ 6.0        | 23.3 $\pm$ 4.4            | <0.001* |
| Height, inches                            | 65.3 $\pm$ 2.8     | 65.3 $\pm$ 2.9        | 65.4 $\pm$ 2.7            | 0.786   |
| Weight, pounds                            | 151.1 $\pm$ 35.3   | 156.0 $\pm$ 37.2      | 142.2 $\pm$ 29.7          | <0.001* |
| Desired wedding weight, pounds<br>(n=183) | 138.7 $\pm$ 26.1   | 141.4 $\pm$ 28.5      | 133.6 $\pm$ 19.6          | 0.054   |
| Weight discrepancy, pounds<br>(n=183)     | 17.6 $\pm$ 20.3    | 19.1 $\pm$ 21.8       | 14.7 $\pm$ 16.89          | 0.166   |



**Table 4.** Obesity Rates

|                              | Overall (n=357) |
|------------------------------|-----------------|
|                              | <i>n</i> (%)    |
| <b>BMI, kg/m<sup>2</sup></b> |                 |
| Underweight ( $\leq 18.50$ ) | 13 (3.6%)       |
| Normal weight (18.50-24.99)  | 215 (60.2%)     |
| Overweight (25.00-29.99)     | 80 (22.4%)      |
| Obese ( $\geq 30.00$ )       | 49 (13.7%)      |
| <b>Obese Classifications</b> |                 |
| Class I (30.00-34.99)        | 24 (6.7%)       |
| Class II (35.00-39.99)       | 15 (4.2%)       |
| Class III ( $\geq 40.00$ )   | 10 (2.8%)       |

Weight-Related Behaviors

Weight-related behaviors assessed were current weight practices and weight loss attempts since engagement. Over 60% ( $n=221$ ) of women reported that they were currently trying to lose weight. Refer to Table 5 for current weight practices.

**Table 5.** Current Weight Practices

|  | Overall (n=357) |
|--|-----------------|
|  | <i>n</i> (%)    |
| <b>Current Weight Practice Statements</b>    |                 |
| I am currently trying to gain weight.        | 6 (1.7%)        |
| I am currently trying to lose weight.        | 221 (61.9%)     |
| I am currently trying to maintain my weight. | 100 (28%)       |
| None of the above statements describe me.    | 30 (8.4%)       |

When asked if they had tried losing weight since being engaged, almost 60% ( $n=212$ ) of the women reported that they had attempted weight loss. Of those 212 women, 146 reported

losing weight (68.9%). An average of  $10.6 \pm 12.0$  pounds was reported being lost since the engagement.

### Dietary Behaviors

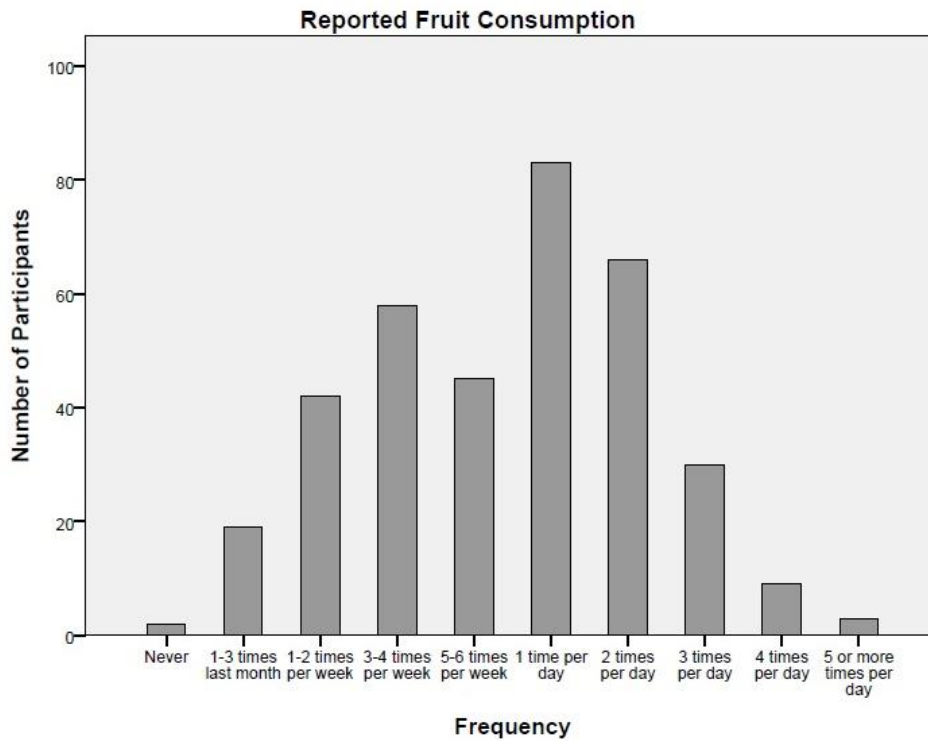
Twenty-seven percent ( $n=97$ ) of women reported using an app or website to track their energy intake. Seventy-two percent ( $n=70$ ) of those women reported using MyFitnessPal. Lose It and FitBit came in second and third for the most used calorie trackers (11.3% and 9.3%, respectively).

Almost 30% of women reported currently following at least one diet. The majority of women who reported following a diet indicated that they were following a “low carb” diet (44.7%). The next two highest diets reported were “low fat” (18.4%) and “vegetarian” (14.6%).

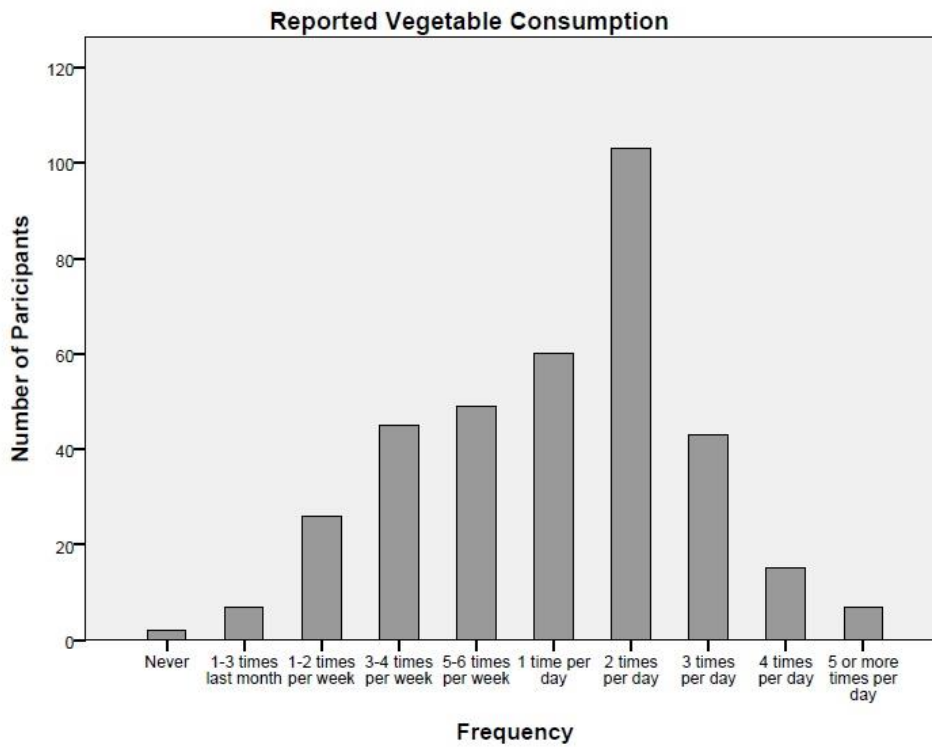
Only ten women reported following a commercial weight loss program. NutriSystem was the most commonly used program ( $n=3$ ) followed by Weight Watchers Diet ( $n=2$ ). Other reported programs used were Beachbody, Slim4Life, 21 Day Fix, Slim180, and Daily Burn.

Fruit and vegetable intake were assessed using 1-question for each adapted from the Behavior Risk Factor Surveillance System (BRFSS) to assess intake in the past month. The majority of women (23.2%) reported eating fruit ~1 time per day and 28.9% reported eating vegetables ~2 times per day. Refer to Figures 2 and 3 for reported fruit and vegetable consumption.

**Figure 2.** Reported Fruit Consumption



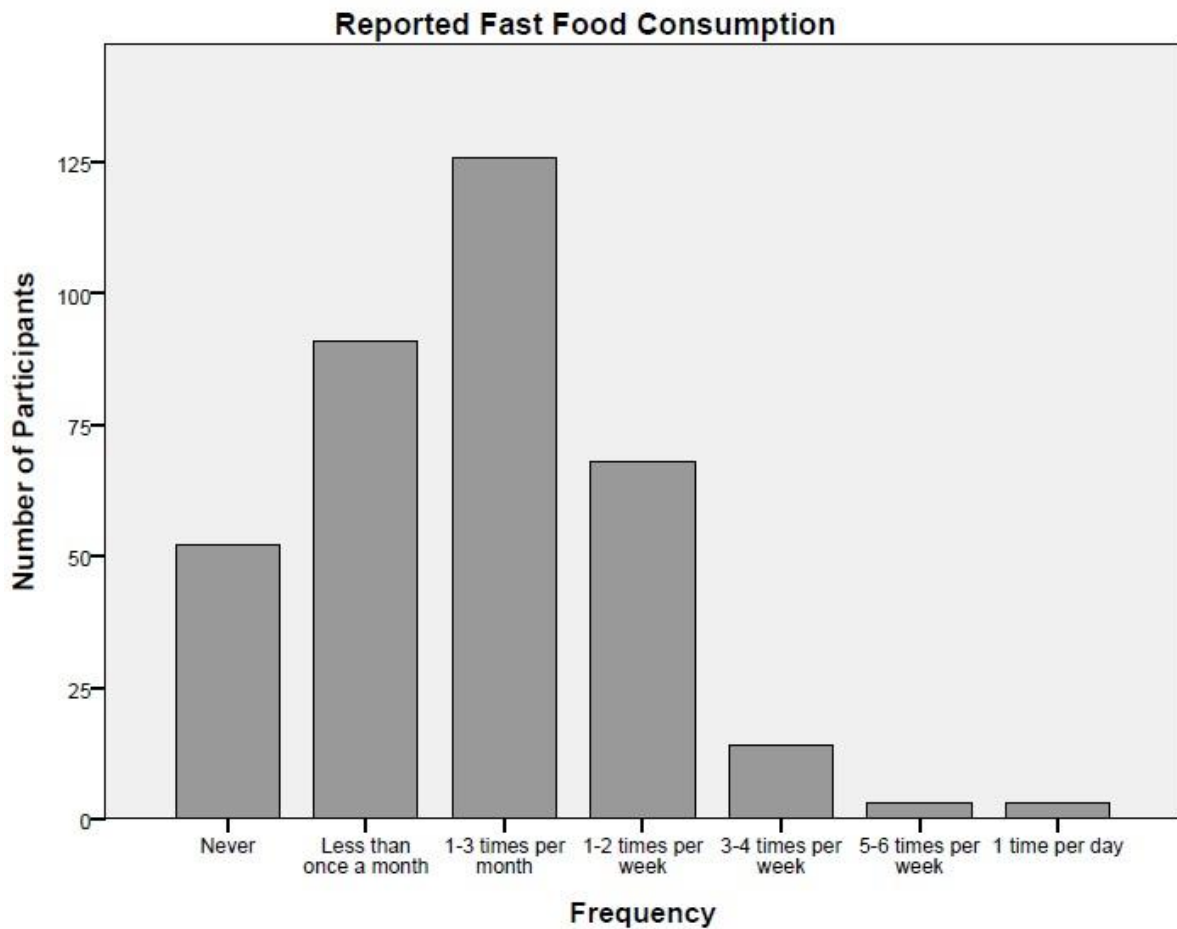
**Figure 3.** Reported Vegetable Consumption



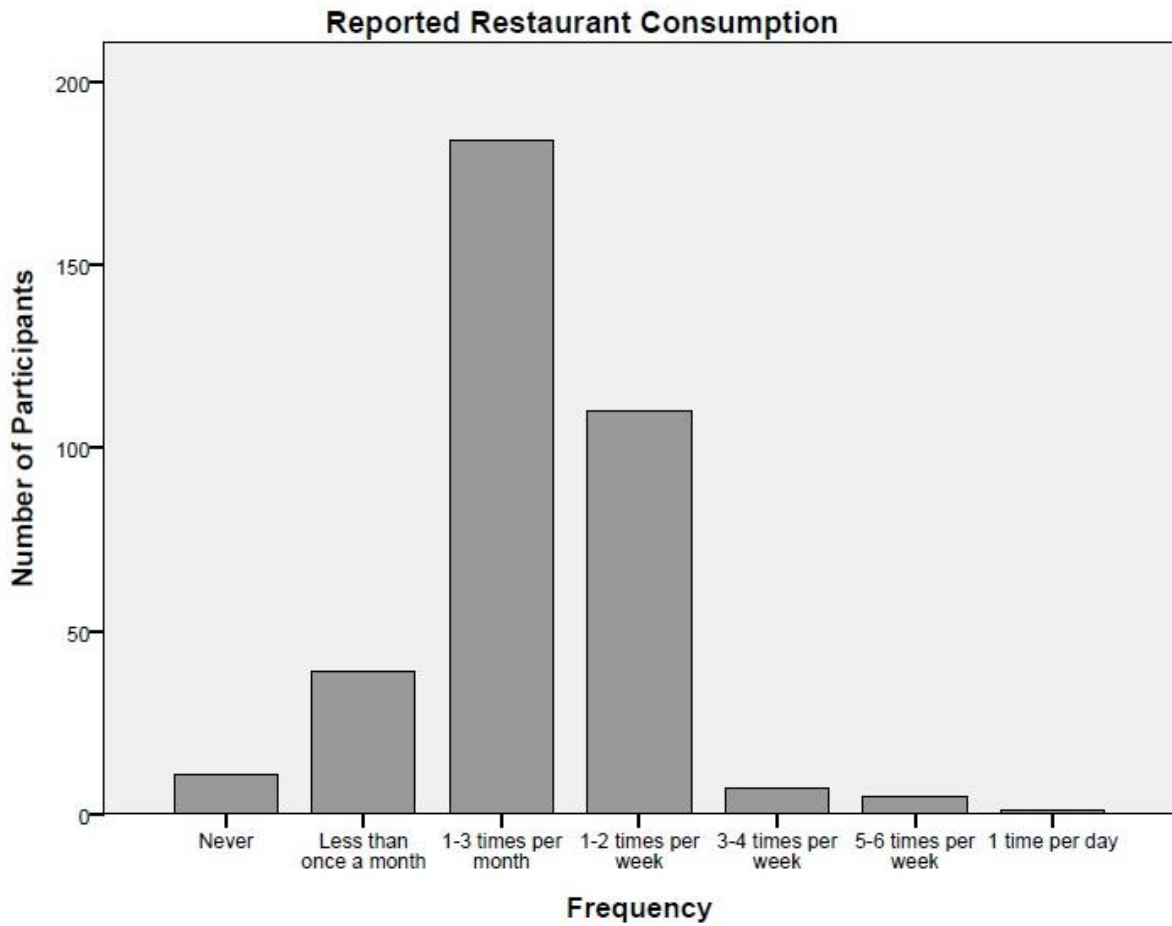
When asked to “think about the foods [they] ate over the past 6 months” and whether they considered their diet to be “High-fat,” “Medium-fat,” or “Low-fat,” most women (72%) reported having a diet with medium-fat. High-fat and low-fat were reported by 17.6% and 10.4% of women, respectively.

Women were also asked how often they go out to eat. Two questions were used to assess this variable based on the type of restaurant (i.e. fast food or full-service). For both questions, the most commonly reported answer 1-3 times per month. Refer to Figures 4 and 5 for fast food and restaurant consumption.

**Figure 4.** Reported Fast Food Consumption



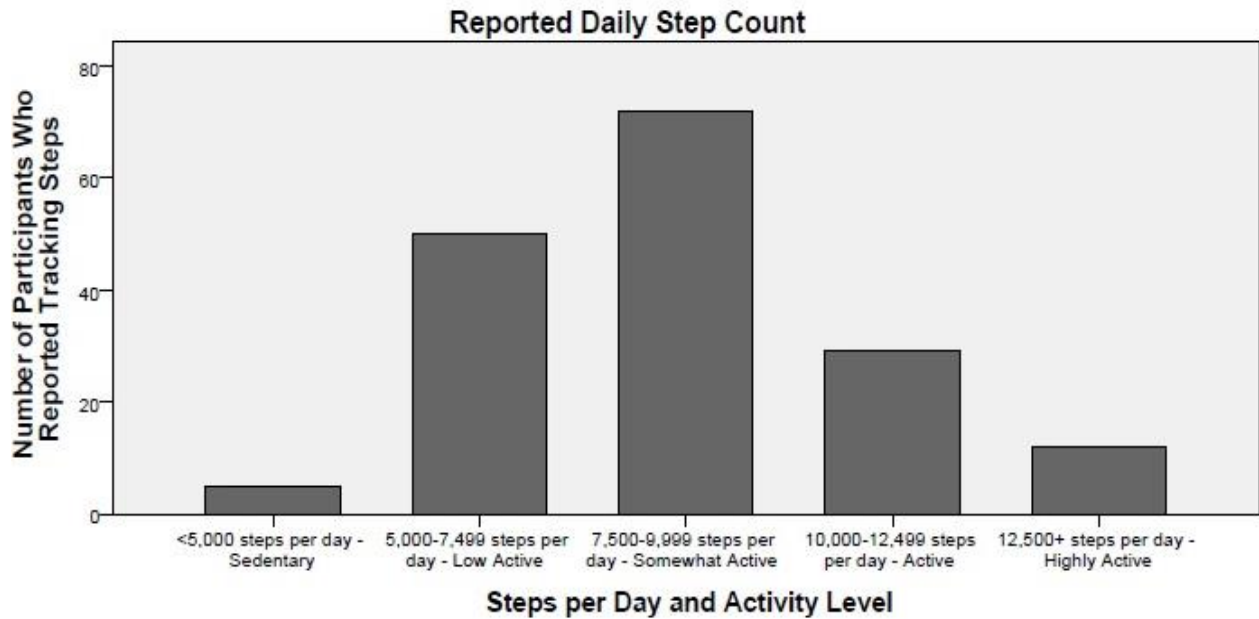
**Figure 5.** Reported Restaurant Consumption



Physical Activity Behaviors

More women (47.1%) track their physical activity than their energy intake. Over half of the women (56%) who tracked their physical activity used FitBit products. If the women were tracking their physical activity (n=168), they were asked to report their daily step count. The majority of the women (42.9%) who were tracking their physical activity were classified as ‘somewhat active.’ Refer to Figure 6 for reported daily step count.

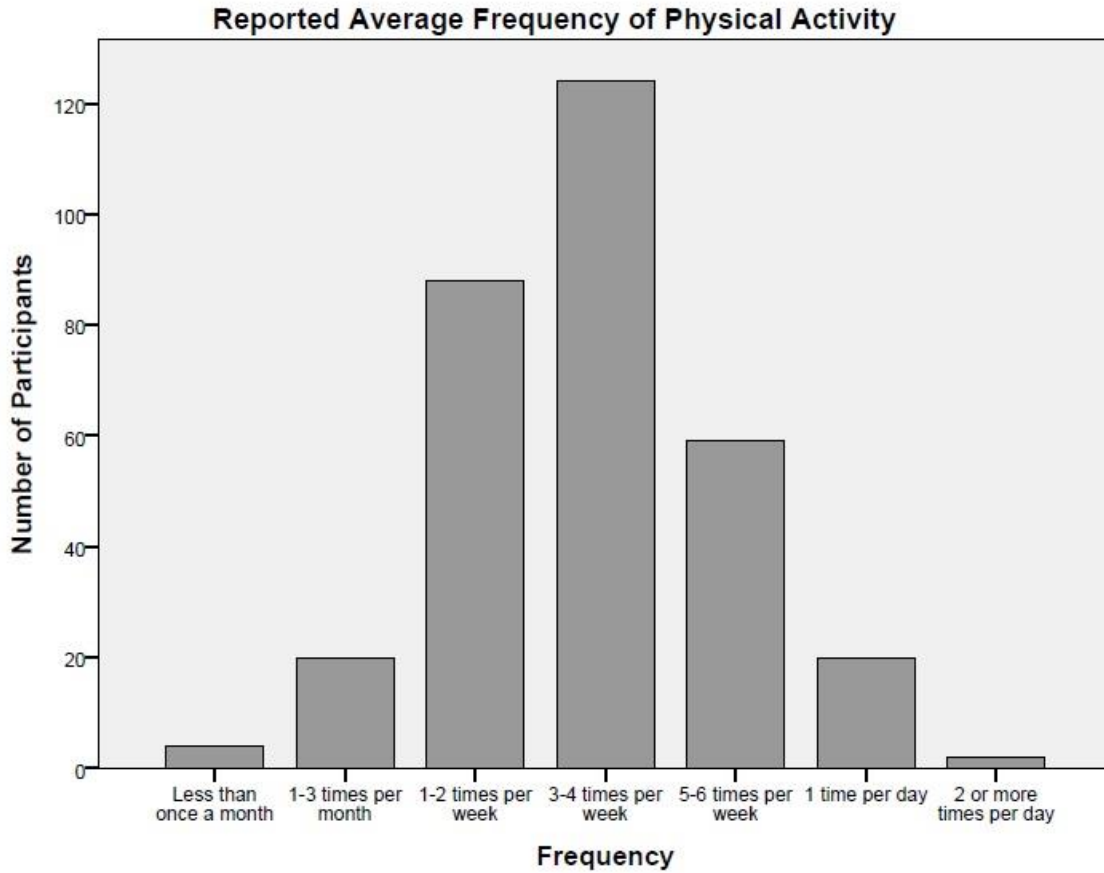
**Figure 6.** Reported Daily Step Count



The type and frequency of physical activities that women partook in the past month were also evaluated. Almost 90% of women reported participating in physical activity in the past month. The most common activities reported were ‘walking, leisurely’ (63.6%), ‘strength training/ weight lifting’ (49.9%), ‘walking, vigorously’ (47.9%), jogging (42%), and running (42%).

Of the women who reported participating in physical activity, the majority of women (34.9%) were usually participating in the activities ‘3-4 times per week.’ Refer to Figure 7 for the reported average frequency of physical activity.

**Figure 7.** Reported Average Frequency of Physical Activity



### Weight Perceptions

Out of the 357 engaged females, over half the women reported having a desired wedding weight ( $n=183$ ). When compared to their current average weight, women desired to be about  $17.6 \pm 20.3$  pounds less. Women who had a desired wedding weight weighed significantly more than those who did not have a desired wedding weight, even after adjusting for age ( $156.3 \pm 37.0$  compared to  $145.6 \pm 32.7$  pounds, respectively,  $p<0.001$ ).

Women surveyed were asked questions related to their body image in order to understand how they perceived themselves. The survey asked women to describe their current weight.

Accuracy of each response was measured by comparing the calculated BMI to the response. Almost half (49%) of the women reported that they were “A little overweight.” However, the majority (63%) of women did accurately identify their weight status. Refer to Table 6 for the accuracy of weight perception results.

**Table 6.** Weight Perceptions and Accuracy

|                                     | Overall<br>(n=357) | Actual BMI Status      |                             |                       |                 |
|-------------------------------------|--------------------|------------------------|-----------------------------|-----------------------|-----------------|
|                                     |                    | Under-weight<br>(n=13) | Normal<br>Weight<br>(n=215) | Over-weight<br>(n=80) | Obese<br>(n=49) |
|                                     |                    | n (%)                  | n (%)                       | n (%)                 | n (%)           |
| <b>Accuracy of Perceived Weight</b> |                    |                        |                             |                       |                 |
| Underestimated Weight               | 24 (6.7%)          | 1 (7.7%)               | 2 (0.9%)                    | 5 (6.3%)              | 16 (32.7%)      |
| Accurate                            | 225 (63%)          | 5 (38.5%)              | 118 (54.9%)                 | 69 (86.3%)            | 33 (67.3%)      |
| Overestimated Weight                | 103 (28.9%)        | 7 (53.8%)              | 90 (41.9%)                  | 6 (7.5%)              | -               |
| Did not have a guess                | 5 (1.4%)           | -                      | 5 (2.3%)                    | -                     | -               |

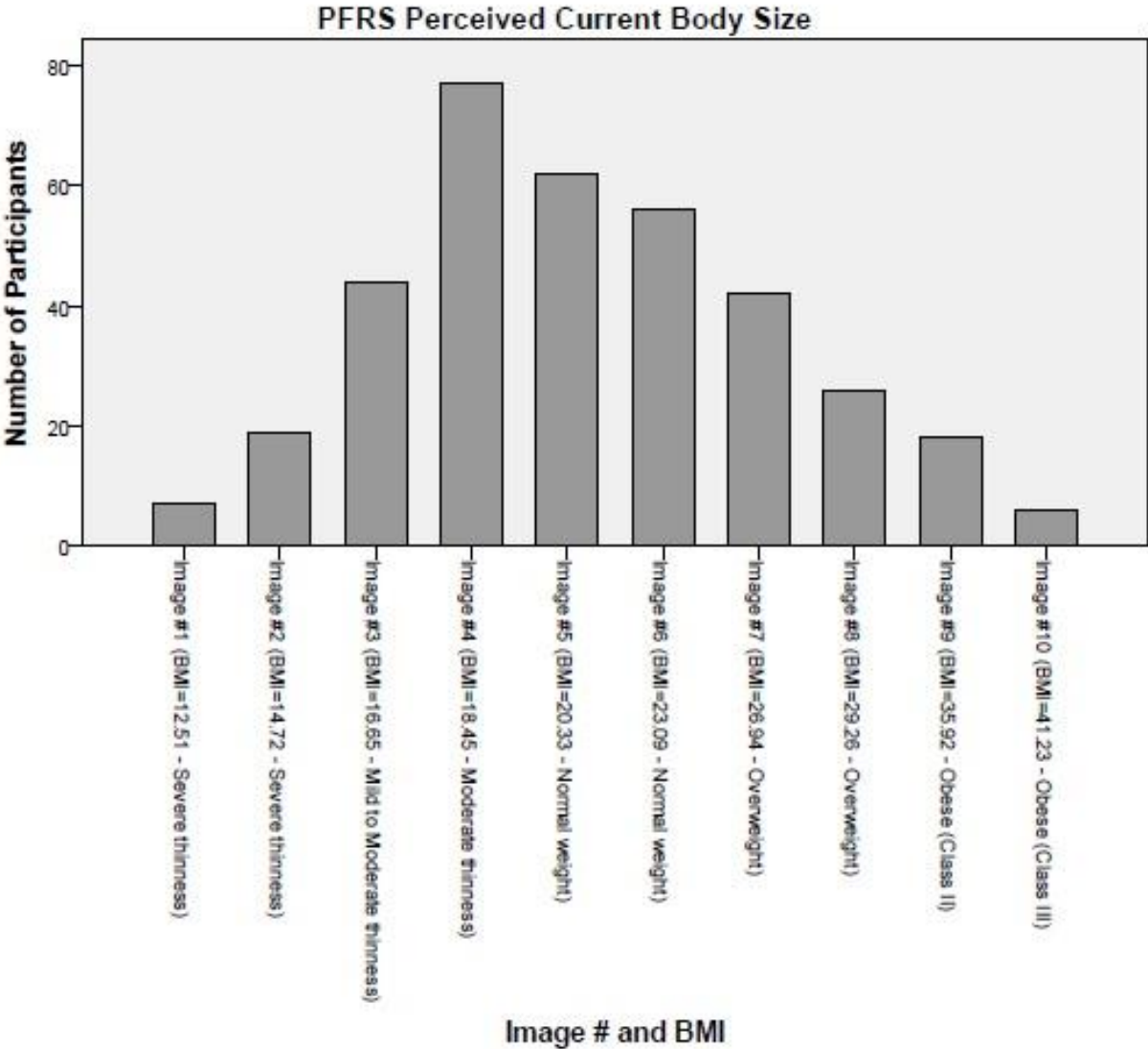
*Perceived weight was based on the question “How would you describe your current weight?(31).*

Despite the majority of women overestimating their weight status, most women chose a PFRS image that was less than their actual BMI. Actual BMI was determined by calculating the PFRS BMI that was closest to the women’s BMI. Most women (21.6%) chose image number four (BMI= 18.45) as how they perceive themselves currently. An average woman from this sample size was closest to image number six (BMI=23.09).

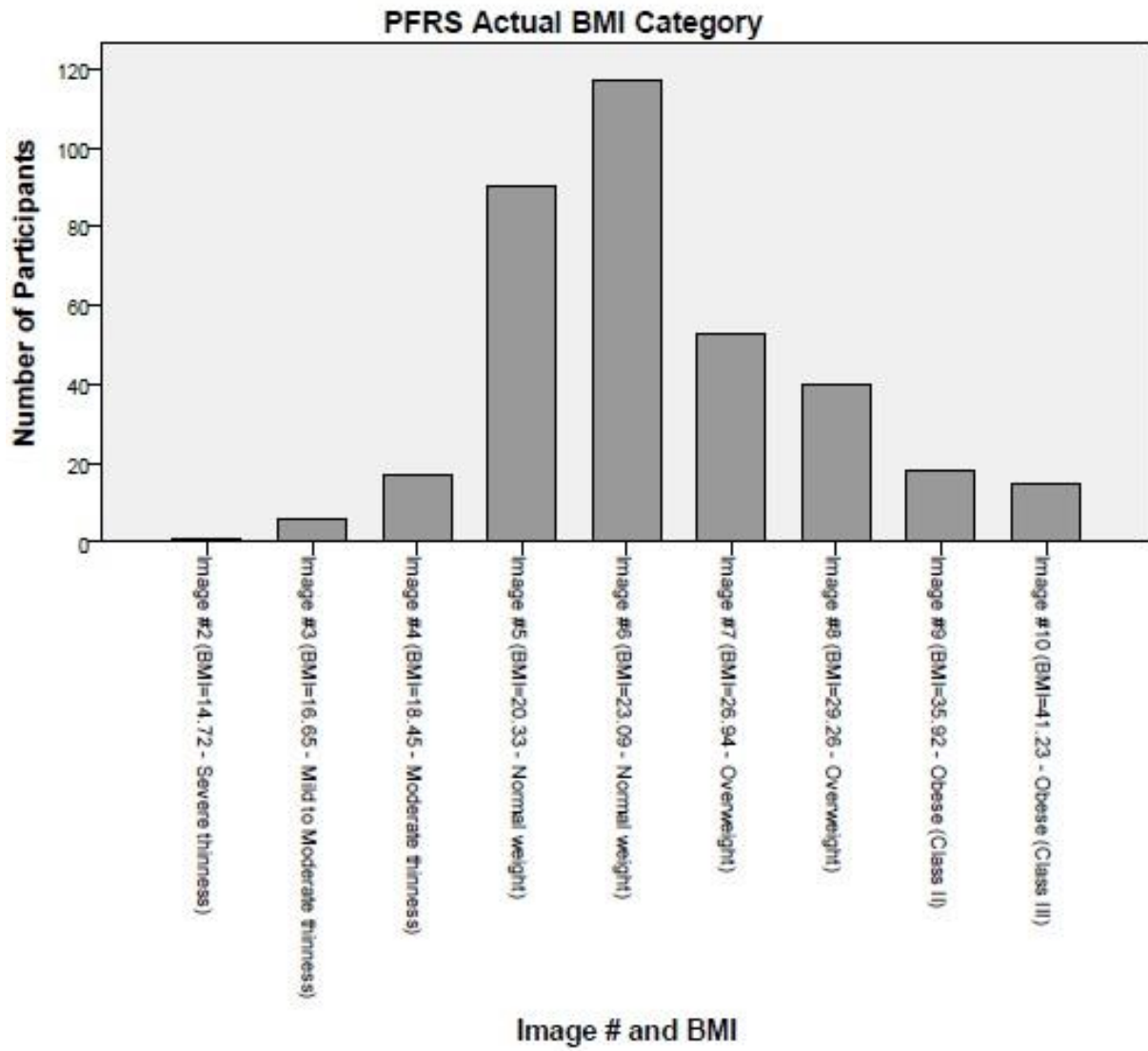
Women were also asked to use the PFRS to identify their ideal body size. The majority of the women chose image number two as their ideal body size. The BMI of the figure pictured in image number two is 14.72. The majority of women chose an ideal body size that was four images below their perceived image number and six images below their actual image number.



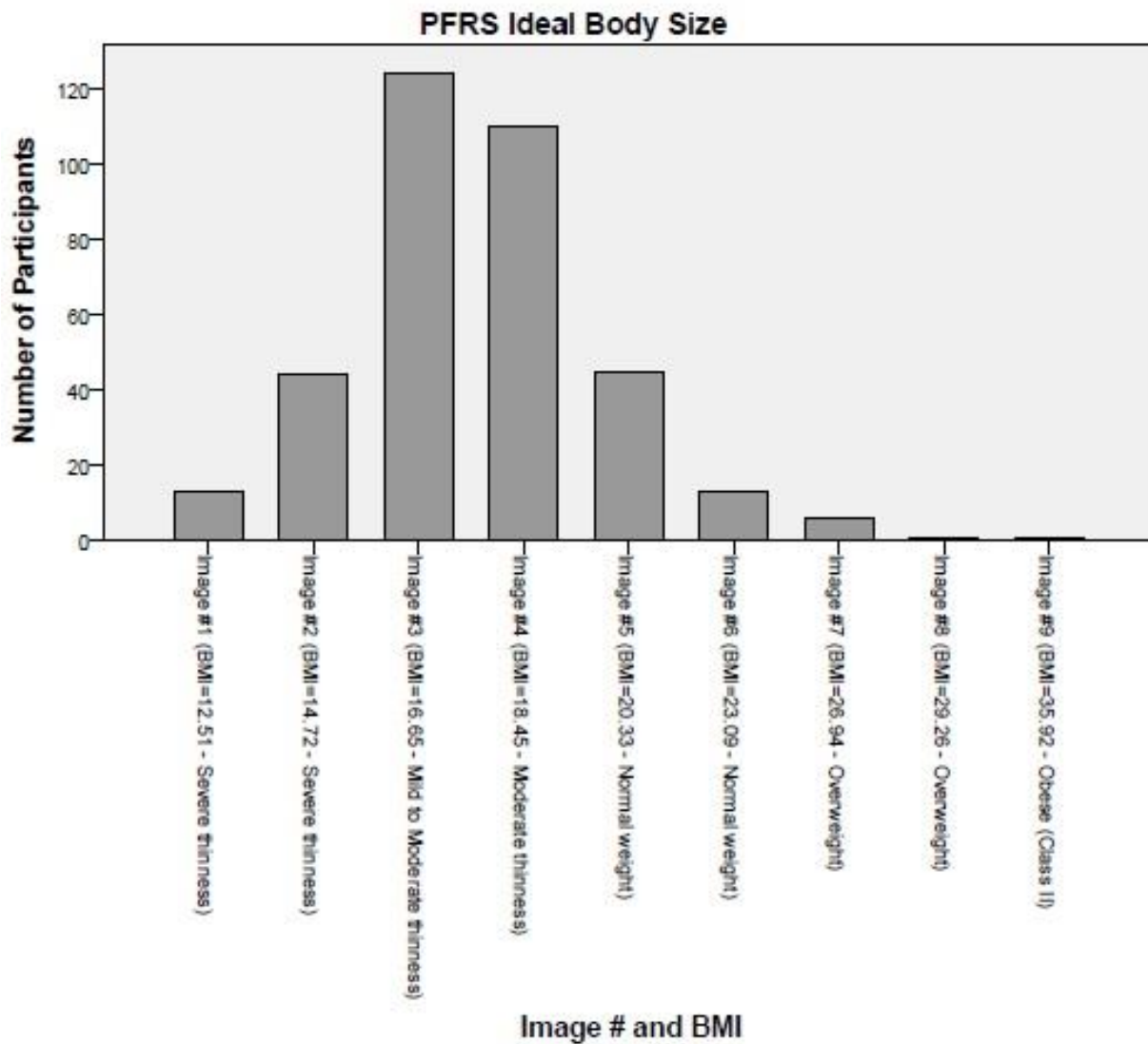
Figure 8. PFRS Perceived Current Body Sizes



**Figure 9.** PFRS Actual BMI



**Figure 10.** PFRS Ideal Body Size



Suggestions of Weight Loss

Women were asked to report if anyone had told them to lose weight before their wedding and if so, by whom. Twenty-seven engaged females (7.6%) were told to lose weight before their wedding. Nineteen (70%) of those women reported that their mother had told them to lose weight. Mothers were reported as the number one person to tell their daughters to lose weight

before their wedding. Other people reported were bridal shop employees (26%), future mother-in-law (22%), friends (22%), sister(s) (19%), future sister-in-law (15%), significant other/fiancé(e) (11%), father (11%), brother(s) (7%), grandmother (4%), aunt(s) (4%), grandfather (4%), future father-in-law (4%), cousin (4%), colleagues (4%), and an “old weight loss coach” (4%). Most women who reported being told to lose weight reported that more than one person had told them.

Relationship Satisfaction and Stress.

Women were asked “In general, how satisfied are you with your relationship?” Nearly 70% of the women reported being “Extremely satisfied.” None of the women reported being “Not at all satisfied” or “Slightly satisfied.” Refer to Table 7 for relationship satisfaction.

**Table 7.** Relationship Satisfaction

|                                  | Overall<br>(n=357) | Living Arrangements   |                           | p-value |
|----------------------------------|--------------------|-----------------------|---------------------------|---------|
|                                  | Mean ± SD          | Cohabiting<br>(n=231) | Non-Cohabiting<br>(n=126) |         |
| <b>Relationship Satisfaction</b> |                    |                       |                           | 0.062   |
| Not at all satisfied             | -                  | -                     | -                         |         |
| Slightly satisfied               | -                  | -                     | -                         |         |
| Moderately satisfied             | 11 (3.1%)          | 5 (2.2%)              | 6 (4.8%)                  |         |
| Very satisfied                   | 100 (28%)          | 73 (31.6%)            | 27 (21.4%)                |         |
| Extremely satisfied              | 246 (68.9%)        | 153 (66.2%)           | 93 (73.8%)                |         |

The majority of women reported wedding planning as being “Moderately stressful” (34.7%). The mean of the total scores was 5.62 (± 3.14). Refer to Tables 8 and 9 for the stress results.

**Table 8.** Stress-Related Statistics

|                               | Overall<br>(n=357) | Living Arrangements   |                           | p-value |
|-------------------------------|--------------------|-----------------------|---------------------------|---------|
|                               | Mean ± SD          | Cohabiting<br>(n=231) | Non-Cohabiting<br>(n=126) |         |
| <b>Wedding-Related Stress</b> |                    |                       |                           | 0.331   |
| Not at all stressful          | 68 (19%)           | 42 (18.2%)            | 26 (20.6%)                |         |
| Slightly stressful            | 113 (31.7%)        | 72 (31.2%)            | 41 (32.5%)                |         |
| Moderately stressful          | 124 (34.7%)        | 82 (35.5%)            | 42 (33.3%)                |         |
| Very stressful                | 38 (10.6%)         | 27 (11.7%)            | 11 (8.7%)                 |         |
| Extremely stressful           | 14 (3.9%)          | 8 (3.5%)              | 6 (4.8%)                  |         |

**Table 9.** Perceived Stress Scale

| <b>PSS-4 Questions</b>   | Never                      | Almost<br>Never | Sometimes      | Fairly<br>Often | Very<br>Often |
|--|----------------------------|-----------------|----------------|-----------------|---------------|
| 1. In the last month, how often have you felt that you were unable to control the important things in your life?         | 58<br>(16.2%)              | 104<br>(29.1%)  | 115<br>(32.2%) | 58<br>(16.2%)   | 22<br>(6.2%)  |
| 2. In the last month, how often have you felt confident about your ability to handle your personal problems?             | 7<br>(2%)                  | 15<br>(4.2%)    | 89<br>(24.9%)  | 153 (42.9%)     | 93<br>(26.1%) |
| 3. In the last month, how often have you felt that things were going your way?   | 3<br>(0.8%)                | 21<br>(5.9%)    | 102<br>(28.6%) | 176 (49.3%)     | 55<br>(15.4%) |
| 4. In the last month, how often have you felt that difficulties were piling up so high that you could not overcome them? | 74<br>(20.7%)              | 111<br>(31.1%)  | 99<br>(27.7%)  | 51<br>(14.3%)   | 22<br>(6.2%)  |
|  | <b>Living Arrangements</b> |                 |                |                 |               |
|  | Overall                    | Cohabiting      |                | Non-            |               |
| <b>Perceived Stress Total Score</b>  | M ± SD                     | Cohabiting      | Cohabiting     |                 | p-value       |
| Perceived Stress Score (Scale: 0-16)   | 5.62 ± 3.1                 | M ± SD          | M ± SD         |                 |               |
|  |                            | 5.74 ± 3.2      | 5.38 ± 2.92    |                 | 0.296         |

## Rates of Cohabitation

Women were classified as non-cohabiting if they indicated they were living independently, with their parents/ family, or roommate(s). Refer to Table 10 for living arrangement statistics. One-hundred twenty-six women (35%) were classified as non-cohabiting, and two-hundred thirty-one women (65%) were classified as cohabiting.

**Table 10.** Wedding, Relationship, and Living Arrangement Statistics

|   | Overall<br>( <i>n</i> =357) | Living Arrangements            |                                    | p-value |
|---|-----------------------------|--------------------------------|------------------------------------|---------|
|   | Mean ± SD                   | Cohabiting<br>( <i>n</i> =231) | Non-Cohabiting<br>( <i>n</i> =126) |         |
| <b>Non-Cohabiting Living Arrangements</b> |                             |                                |                                    |         |
| Independently                             | 33 (26.2%)                  | -                              | 33 (26.2%)                         | -       |
| Parents/ family                           | 47 (37.3%)                  | -                              | 47 (37.3%)                         | -       |
| Roommate(s)                               | 46 (35.5%)                  | -                              | 46 (35.5%)                         | -       |
| <b>Wedding / Relationship</b>             |                             |                                |                                    |         |
| Length of cohabitation, months            | 24.1 ± 18.4                 | 24.1 ± 18.4                    | -                                  | -       |
| Length of relationship, months            | 48.9 ± 24.8                 | 51.09 ± 23.4                   | 44.9 ± 26.8                        | 0.024*  |
| Number of days until the wedding          | 255.3 ± 204.0               | 242.2 ± 193.2                  | 282.4 ± 220.8                      | 0.063   |

## Differences Between Non-Cohabiting and Cohabiting Women

### Demographic Differences

Significant differences were found between non-cohabiting and cohabiting women's age, job status, and income level. The mean age of non-cohabiting women was 24.0 ± 2.9 years old; whereas, the mean age of cohabiting women was 25.2 ± 2.9 years ( $p < 0.001$ ). More cohabiting women (73.2%) were employed full-time compared to non-cohabiting women (45.2%)

( $p < 0.001$ ). Most non-cohabiting women were students (46.8%). Refer to Table 1 for the demographic differences.

### Relationship Statistics

There were no significant differences between cohabiting and non-cohabiting women in terms of wedding date proximity, but there was a significant difference in the length of relationship ( $p = 0.024$ ). Cohabiting women reported longer relationships than non-cohabiting women. There was no difference in the number of current children; however, non-cohabiting women planned to wait significantly longer before having children ( $p = 0.021$ ).

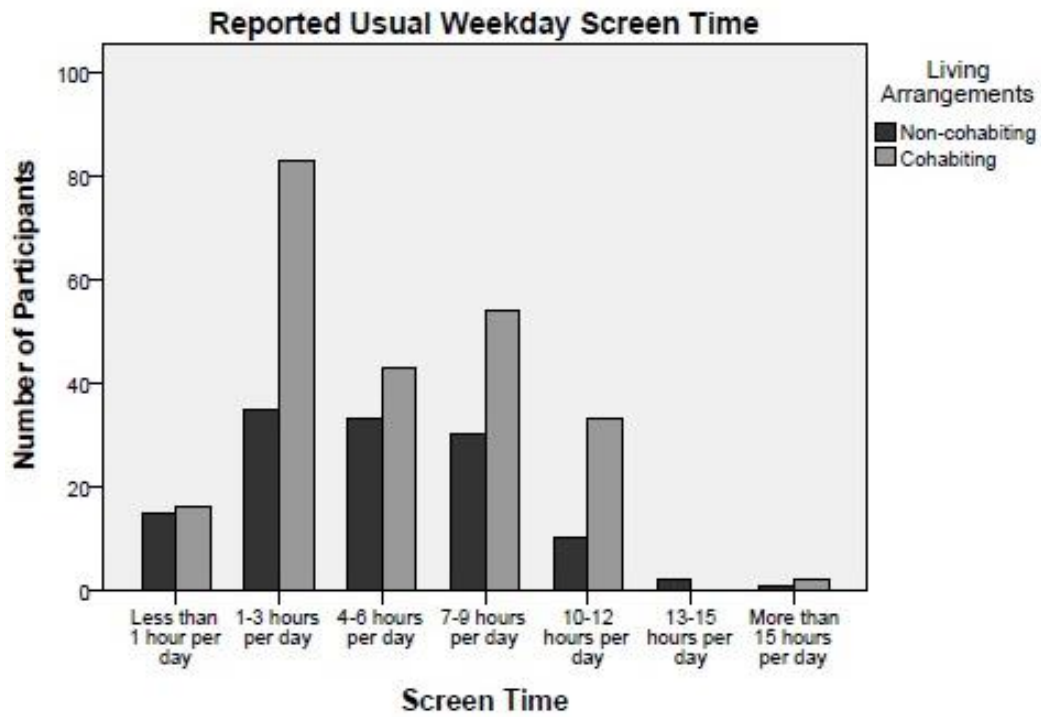
### Weight-Related Statistics, Perceptions, & Behaviors

The mean BMIs of cohabiting and non-cohabiting women were  $25.7 \pm 6.0$  and  $23.3 \pm 4.4$ , respectively. A significant difference was found between the groups, even after adjusting for age ( $p < 0.001$ ). Refer to Table 2 for the anthropometrics.

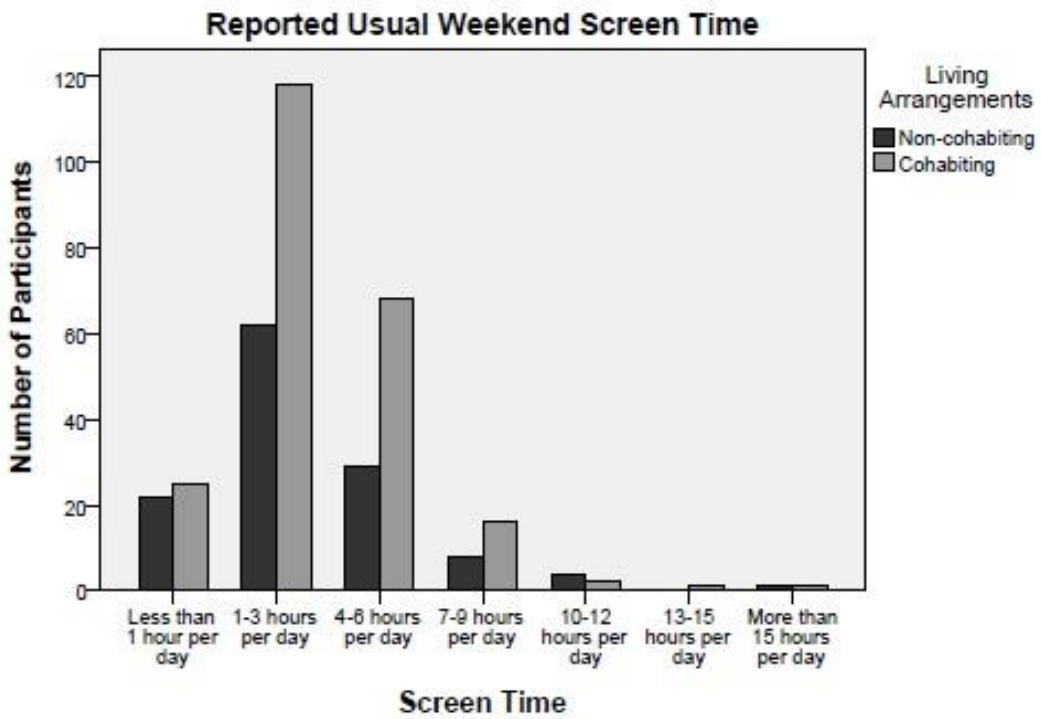
When asked how they perceive their weight status, cohabiting women reported higher weight categories (i.e. 'A little overweight,' 'Very overweight') more frequently than non-cohabiting women ( $p = 0.006$ ). The majority of women perceived their weight accurately though and between groups accuracy comparison was not statistically different.

A statistical difference was found for reported usual weekday screen time ( $p = 0.042$ ), but not reported usual weekend screen time. The majority of women answered '1-3 hours per day' for both weekday and weekend screen time; 33.1% and 50.4%, respectively. Refer to Figures 11 and 12 for screen time frequencies.

**Figure 11.** Reported Usual Weekday Screen Time



**Figure 12.** Reported Usual Weekend Screen Time





## Additional Information: General health and Family planning

### General health

The majority of our sample did not report many health problems. Almost three-fourths of the women reported seeing their doctor for a routine checkup within the past year. Within the past year, about 19% of women reported their doctors had talked to them about their nutrition or eating habits, ~20% reported their doctors had talked to them about physical activity or exercise, and ~9% reported their doctors had talked to them about cigarette smoking. Health problems were inquired on the survey and women reported having or being told that they have diabetes or high sugar (2%), hypertension or high blood pressure (4.5%), high cholesterol (5.6%), asthma or emphysema (16%), heart attack or heart disease (0.3%), and cancer (1.4%).

### Family planning

More than 95% of women reported not having children; only fifteen reported having children and fourteen of those women stated that they had given birth to those children. Of those who reported giving birth to children, eleven women had given birth to one child, two women reported giving birth to two children, and one woman had given birth to three children. Of the women who reported having children, nine (60%) were planning on having more children and six were not planning on having more children. Of the women who did not have children already, 95% were planning on having children eventually (n=325). The majority of women who planned on having children eventually selected the option that they were planning to have children “2-5 years from now” (n=187; 56%). The other options provided were “In the next 6 months,” “6 months to a year from now,” “1-2 years from now,” and “More than 5 years from now” with the results 1.8% (n=6), 3.3% (n=11), 26.6% (n=89), and 12.3% (n=41), respectively.

## Chapter 5: Discussion

This study provides an understanding of the demographics, obesity rates and weight-related behaviors and perceptions of engaged females in the U.S. The data from this study support some of the previous findings of differences between cohabiting and non-cohabiting women (22).

### Demographics

Our sample was an accurate representation of the average age that women have gotten married at in the U.S. for more than 100 years (2). The mean age and majority race of the women from our sample are comparable to the studies of engaged females conducted by Klos and Sobal in the U.S., as well as, Prichard and Tiggemann in Australia (4-7, 10).

There were no differences between education levels of cohabiting and non-cohabiting women, but there were differences between job status and income level. Almost three-fourths of cohabiting women were employed full-time compared to less than half of non-cohabiting women, who were mostly students. This could be a factor in the difference between their income statuses. Nearly half non-cohabiting women reported their yearly income as less than \$20,000 compared to only 21.6% of cohabiting women, whose majority reported a yearly income of \$50,000-\$74,999.

### Weight-Related Statistics, Perceptions, & Behaviors

The present study's overweight and obesity rates (36.1%) are less than the U.S. prevalence rates (58.5%) (1). However, the mean weight ( $151.1 \pm 35.3$  pounds) and BMI ( $24.9 \pm 5.6 \text{ kg/m}^2$ ) of our sample are similar to five other studies that surveyed engaged females (4-7, 10). Even though only 36.1% of the sample was overweight or obese, ~62% of women reported

they were currently trying to lose weight and ~28% of women were trying to maintain their weight. Similarly, Neighbors and Sobal found about 70% of their sample were currently trying to lose weight, while an additional 21% were attempting to prevent weight gain (6).

Fifty-one percent of engaged women indicated they had an ideal wedding weight lower than their current weight. Those who did weighed significantly more than those who did not. These results are almost identical to Prichard and Tiggemann, 2014 and Neighbors and Sobal 2008. Both studies found about half or more of the women desired a wedding weight lower than their current weight (6, 10). Prichard and Tiggemann's results show that the women desired to be about 20.25 pounds lighter which was a little higher than Neighbors and Sobal's sample who desired to be about 16.4 pounds lighter (6, 10). Neighbors and Sobal's sample was also a U.S. sample that is comparable to our sample who desired to be 17.63 pounds lighter.

As found by Prichard and Tiggemann, the bride-to-be's mother was the most commonly reported person to suggest weight loss for the wedding in our study as well (4). Our study had a relatively small sample size of women (7.6%) who were told to lose weight for the wedding compared to other studies that reported rates from 12% up to 33% (4, 5, 10). Perhaps this could be due to cultural differences between the U.S. and Australia. Additionally, with more than two-thirds of women ages 20-39 years old in the U.S. being overweight or obese, it is possible that the cultural norms are shifting towards acceptance of larger body sizes (1). However, Rodgers, Paxton, and Chabrol created a model that showed how negative comments about body image from parents are internalized and could lead to harmful dietary practices (27).

The current study does not support the findings from other studies about differences in physical activity or dietary behaviors between cohabitating and non-cohabitating women (9, 11,

14, 21, 29, 30). These studies were looking at women in all different stages of their life, not specifically engaged females who have been shown to desire weight loss and actively work to get in shape for their weddings; therefore, these results may not be comparable.

Comparing the results of cohabiting versus non-cohabiting women in the present study to previous studies is difficult due to differences in the structure of the studies. Most previous studies grouped engaged non-cohabiting females into categories of ‘never married’ or ‘single’ and cohabiting engaged females with ‘married’ women (3, 11, 13). These groupings over-generalize the differences between groups in regards to engaged females. This current study’s results will hopefully help future studies focus on the needs of engaged females and breakthrough the over-generalization.

### Dietary Behaviors

The majority of women in this study reported consuming fruit once per day (23.2%) and vegetables twice per day (28.9%) which is comparable to the BRFSS data found in 2013 (34). Our study found that engaged females reported going out to eat, at either fast-food or full-service restaurants 1-3 times per month. Contrasting our study, almost three-quarters of 700 adults in a New Jersey study reported going out to eat at least once a week (35).

### Limitations

Despite the strengths of this study, there are limitations. The first limitation is that height and weight are self-reported. Measuring height and weight is the gold standard, but self-reported height and weight for women of reproductive age has been shown to be accurate (36).

The time frame in which the data were collected also adds another limitation. Marriages and engagements take place throughout the year in all seasons; however, we only surveyed engaged females in the months of April to June of 2016. Engaged females preparing for their wedding in different months of the year might have different behaviors depending on the season and length of engagement.

Most of the engaged females were recruited through Facebook survey links which could have altered the sample's demographics or weight perceptions.

The majority of the women sampled were white and not Hispanic or Latino. This limits the generalizability of the results to other races and ethnicities. Millstein et al. found that even though national surveys report higher frequencies of overweight and obesity, Hispanic/Latina and black women were more satisfied with their weight compared to white women (3).

The cross-sectional design of this study is a limitation and only provides a snapshot of the behaviors and perceptions of engaged females in the U.S. Longitudinal studies would be more beneficial to follow women as they transition into marriage.

Even with the limitations, the data in this study provides a more thorough understanding of the behaviors of engaged females in the U.S.

### Implications and Future Studies

Most engaged females who are preparing for their wedding are currently trying to lose weight despite their BMI classification. Their ideal body size reflects a figure with an 18.45 BMI. These desires to be thin for their wedding could be harmful to their health as they transition into marriage. Health professionals should assess their body image perceptions, provide them

with support, and talk with them about how to have and maintain a healthy body image. Future studies should focus on how wedding-related media and messages impact brides-to-be.

Future research with dietary and physical activity interventions for engaged couples may be beneficial to potentially reduce obesity and chronic disease rates in the U.S. At this transition time in their lives, they may be more receptive to behavior change. Even if couples were in the first year of their marriage, interventions might be valuable since both partners will most likely still be adjusting to one another's lifestyle. With cohabiting before marriage becoming the majority norm, it may be even more beneficial to intervene within the first year of cohabitation since it has been shown that cohabiting women weigh more. Longitudinal studies that follow women from before cohabitation into marriage are warranted.

### Conclusion

More than one-third of engaged females in our study were overweight or obese. Over half of these women have a desired wedding weight lower than their current weight, and the majority of them indicated that they were currently trying to lose weight. Previous studies have found similar results and introduced the idea that there are differences between cohabiting and non-cohabiting women. Our study found that cohabiting U.S. engaged females were significantly older, heavier, employed full-time with higher income levels, and had been dating their significant other longer. Future studies should focus on the long-term effects that cohabitation has on weight-related behaviors of women and develop interventions for couples who are beginning to live together.

## References Cited

1. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*. 2014;311(8):806-14. doi: 10.1001/jama.2014.732.
2. U.S. Census Bureau. Table MS-2. Estimated Median Age at First Marriage: 1890 to present. January 2015. Internet: <http://www.census.gov/hhes/socdemo/marriage/> (accessed 28 July 2015).
3. Millstein RA, Carlson SA, Fulton JE, Galuska DA, Zhang J, Blanck HM, Ainsworth BE. Relationships between body size satisfaction and weight control practices among US adults. *Medscape J Med*. 2008;10(5):119.
4. Prichard I, Tiggemann M. Unveiled: pre-wedding weight concerns and health and beauty plans of Australian brides. *J Health Psychol*. 2009;14(7):1027-35. doi: 10.1177/1359105309342905.
5. Prichard I, Tiggemann M. An examination of pre-wedding body image concerns in brides and bridesmaids. *Body Image*. 2008;5(4):395-8. doi: 10.1016/j.bodyim.2008.05.001.
6. Neighbors LA, Sobal J. Weight and weddings: women's weight ideals and weight management behaviors for their wedding day. *Appetite*. 2008;50(2-3):550-4. doi: 10.1016/j.appet.2007.11.001.
7. Prichard I, Tiggemann M. Appearance investment in Australian brides-to-be. *Body Image*. 2011;8(3):282-6. doi: 10.1016/j.bodyim.2011.03.001.
8. Rauschenbach B, Sobal J, Frongillo EA, Jr. The influence of change in marital status on weight change over one year. *Obes Res*. 1995;3(4):319-27.
9. Anderson AS, Marshall DW, Lea EJ. Shared lives-an opportunity for obesity prevention? *Appetite*. 2004;43(3):327-9. doi: 10.1016/j.appet.2004.07.007.
10. Prichard I, Tiggemann M. Wedding-related weight change: the ups and downs of love. *Body Image*. 2014;11(2):179-82. doi: 10.1016/j.bodyim.2013.12.005.
11. Burke V, Beilin LJ, Dunbar D, Kevan M. Changes in health-related behaviours and cardiovascular risk factors in young adults: associations with living with a partner. *Prev Med*. 2004;39(4):722-30. doi: 10.1016/j.ypped.2004.02.038.

12. Craig PL, Truswell AS. Dynamics of food habits of newly married couples: weight and exercise patterns. *Australian Journal of Nutrition and Dietetics*. 1990;47(2):42-6.
13. Klos LA, Sobal J. Marital status and body weight, weight perception, and weight management among U.S. adults. *Eat Behav*. 2013;14(4):500-7. doi: 10.1016/j.eatbeh.2013.07.008.
14. Rapp I, Schneider B. The impacts of marriage, cohabitation and dating relationships on weekly self-reported physical activity in Germany: a 19-year longitudinal study. *Soc Sci Med*. 2013;98:197-203. doi: 10.1016/j.socscimed.2013.09.024.
15. Manning WD. Trends in cohabitation: Over twenty years of change, 1987-2010. *Studies*. 2013;54:29-41.
16. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Adult Obesity Facts. 16 June 2015. Internet: <http://www.cdc.gov/obesity/data/adult.html> (accessed 6 July 2015).
17. World Health Organization. Media centre Fact sheets: Overweight and Obesity. January 2015. Internet: <http://www.who.int/mediacentre/factsheets/fs311/en/> (accessed 25 July 2015).
18. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Obesity Trends Among U.S. Adults Between 1985 and 2010. 2010. Internet: [http://www.cdc.gov/obesity/downloads/obesity\\_trends\\_2010.pdf](http://www.cdc.gov/obesity/downloads/obesity_trends_2010.pdf) (accessed July 6 2015).
19. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services. Data, Trends and Maps. 16 June 2015. Internet: <http://www.cdc.gov/obesity/data/prevalence-maps.html> (accessed 22 July 2015).
20. Whitlock G, Lewington S, Sherliker P, Clarke R, Emberson J, Halsey J, Qizilbash N, Collins R, Peto R. Body-mass index and cause-specific mortality in 900 000 adults: collaborative analyses of 57 prospective studies. *Lancet*. 2009;373(9669):1083-96. doi: 10.1016/s0140-6736(09)60318-4.



21. Zhang Y, Tan H, Dai X, Huang H, He G. Dietary patterns are associated with weight gain in newlyweds: findings from a cross-sectional study in Shanghai, China. *Public Health Nutr.* 2012;15(5):876-84. doi: 10.1017/s1368980011002692.
22. The NS, Gordon-Larsen P. Entry into romantic partnership is associated with obesity. *Obesity* (Silver Spring, Md). 2009;17(7):1441-7. doi: 10.1038/oby.2009.97.
23. Sobal J, Rauschenbach B, Frongillo EA. Marital status changes and body weight changes: a US longitudinal analysis. *Soc Sci Med.* 2003;56(7):1543-55.
24. Neighbors LA, Sobal J. Weight and weddings: expectations about wedding-specific body weight and shape ideals and dieting and exercise behavior among university students. *Eat Behav.* 2008;9(4):430-7. doi: 10.1016/j.eatbeh.2008.06.003.
25. Cash TF, Melnyk SE, Hrabosky JI. The assessment of body image investment: an extensive revision of the appearance schemas inventory. *Int J Eat Disord.* 2004;35(3):305-16. doi: 10.1002/eat.10264.
26. Stice E. Risk and maintenance factors for eating pathology: a meta-analytic review. *Psychol Bull.* 2002;128(5):825-48.
27. Rodgers RF, Paxton SJ, Chabrol H. Effects of parental comments on body dissatisfaction and eating disturbance in young adults: a sociocultural model. *Body Image.* 2009;6(3):171-7. doi: 10.1016/j.bodyim.2009.04.004.
28. Global Health Observatory (GHO) data, World Health Organization. Prevalence of insufficient physical activity, 2010. 2010. Internet: [http://www.who.int/gho/ncd/risk\\_factors/physical\\_activity/en/](http://www.who.int/gho/ncd/risk_factors/physical_activity/en/) (accessed 6 July 2015).
29. Brown WJ, Heesch KC, Miller YD. Life events and changing physical activity patterns in women at different life stages. *Ann Behav Med.* 2009;37(3):294-305. doi: 10.1007/s12160-009-9099-2.

30. Craig PL, Truswell AS. Dynamics of food habits of newly married couples: food-related activities and attitudes towards food. *Journal of Human Nutrition and Dietetics*. 1988;1(6):409-19.
31. Resnicow K, Taylor R, Baskin M, McCarty F. Results of go girls: a weight control program for overweight African-American adolescent females. *Obes Res*. 2005;13(10):1739-48. doi: 10.1038/oby.2005.212.
32. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *J Health Soc Behav*. 1983:385-96.
33. Swami V, Salem N, Furnham A, Tovée MJ. Initial examination of the validity and reliability of the female photographic figure rating scale for body image assessment. *Pers Individ Dif*. 2008;44(8):1752-61.
34. Moore LV, Thompson FE. Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2013. *Morbidity and Mortality Weekly Report*, 2015;64:709-13. Internet: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a1.htm> (accessed 27 July 2016).
35. Steward H, Blisard N, Jolliffe D. *Let's Eat Out: Americans Weigh Taste, Convenience, and Nutrition*. United States Department of Agriculture, Economic Research Service, 2006.
36. Brunner Huber LR. Validity of self-reported height and weight in women of reproductive age. *Maternal and child health journal*. 2007;11(2):137-44. doi: 10.1007/s10995-006-0157-0.

**Appendix A: All Questions and Potential Answers of the Baseline Bridal Registry Survey with  
Consent Form and Brief Eligibility Survey**

## Baseline Bridal Registry Questionnaire

My name is Katelynne Burghardt, a Master's level student at the University of Kansas Medical Center. We are recruiting research participants to help us observe the dietary and physical activity behaviors of engaged women as they prepare for their wedding day. Participation involves completing this survey that will take about 15 minutes. In addition to the survey questions, we will request information about your demographics, body image perceptions, height and weight, wedding/ relationship, dietary behaviors, physical activity behaviors, health status, and stress level. The survey will not be linked to any personal identifiers and will be anonymous.

There are no personal benefits or risks to participating in this study. Participation is voluntary, and you can stop taking the survey at any time.

If you have any questions, please contact Katelynne Burghardt at [kburghardt@kumc.edu](mailto:kburghardt@kumc.edu). For questions about the rights of research participants, you may contact the KUMC Institutional Review Board (IRB) at (913) 588-1240 or [humansubjects@kumc.edu](mailto:humansubjects@kumc.edu)

Please choose one of following options:

- I do not agree.
- I agree.

---

---

**Brief Eligibility Questionnaire**

- Are you a U.S. citizen?  Yes  
 No
- Are you between the ages of 18 to 40 years old?  Yes  
 No
- What is your gender?  Female  
 Male  
 Other
- Are you engaged to be married?  Yes  
 No
- Are you pregnant or breastfeeding?  Yes  
 No  
 Unsure

---

---

**Demographics**

- 1 What is your age?  

\_\_\_\_\_

(years)
- 2 What is your ethnicity?
  - Hispanic or Latino
  - Not Hispanic or Latino
  - Unknown
- 3 What is your race?
  - Black or African American
  - American Indian or Alaskan Native
  - Asian
  - Native American or Other Pacific Islander
  - White
  - Unknown
- 4 What is the highest level of education you have completed?
  - Less than high school
  - High School/ GED
  - Some college but no degree
  - Associate's degree
  - Bachelor's degree
  - Graduate degree
- 5 Are you currently:
  - Employed full-time
  - Employed part-time
  - Out of work for more than 1 year
  - Out of work for less than 1 year
  - Homemaker
  - Student
  - Retired
  - Unable to work
- 6 What is your yearly income?
  - Less than \$20,000
  - \$20,000 - \$34,999
  - \$35,000 - \$49,999
  - \$50,000 - \$74,999
  - \$75,000 - \$99,999
  - \$100,000 - \$149,999
  - \$150,000 or more
- 7 Who are you currently living with?
  - Independently
  - Significant other/ fiancé(e)
  - Roommate(s)
  - Parents/family

How long have you been living together?

- 1 month
- 2 months
- 3 months
- 4 months
- 5 months
- 6 months
- 7 months
- 8 months
- 9 months
- 10 months
- 11 months
- 1 year
- 2 years
- 3 years
- 4 years
- 5 years
- 6 years
- 7 years
- 8 years
- 9 years
- 10 years
- 11 years
- 12 years
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years
- 19 years
- 20 years
- 21 years
- 22 years



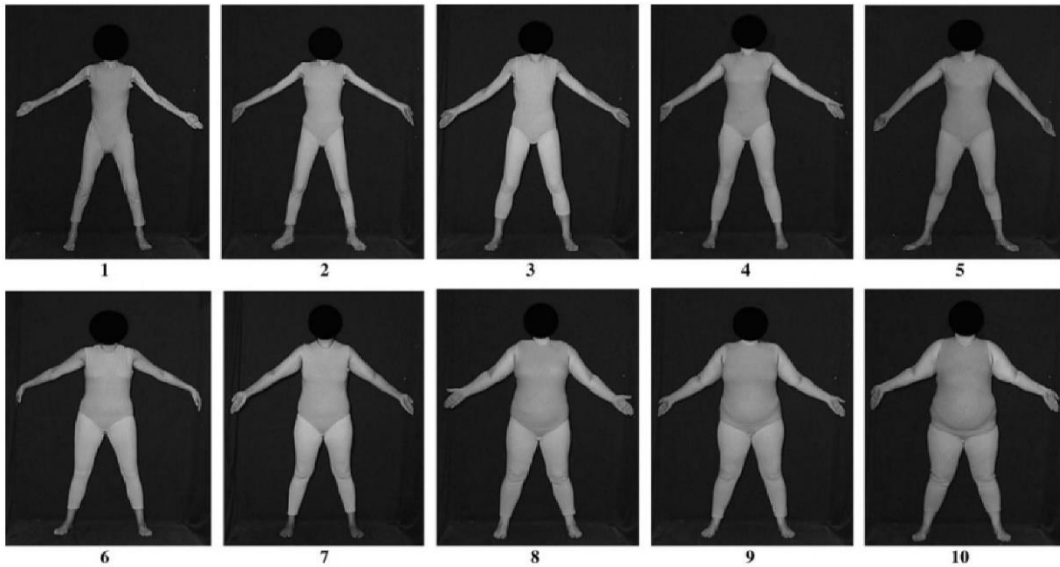


15 Please pick the image number below that most accurately depicts your current body size.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

16 Please pick the image number below that most accurately depicts your ideal body size.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10



---

---

**Wedding & Relationship**

17 Is this your first marriage?

- Yes  
 No

18 What is the date of your wedding?

\_\_\_\_\_ (Format MM/DD/YYYY (If you haven't picked a date, type in a potential date.))

- 19 How long have you and your fiancé(e) been a couple?  
(Choose the best option)
- 6 months
  - 1 year
  - 1 year 6 months
  - 2 years
  - 2 years 6 months
  - 3 years
  - 3 years 6 months
  - 4 years
  - 4 years 6 months
  - 5 years
  - 5 years 6 months
  - 6 years
  - 6 years 6 months
  - 7 years
  - 7 years 6 months
  - 8 years
  - 8 years 6 months
  - 9 years
  - 9 years 6 months
  - 10 years
  - 10 years 6 months
  - 11 years
  - 11 years 6 months
  - 12 years
  - 12 years 6 months
  - 13 years
  - 13 years 6 months
  - 14 years
  - 14 years 6 months
  - 15 years
  - 15 years 6 months
  - 16 years
  - 16 years 6 months
  - 17 years
  - 17 years 6 months
  - 18 years
  - 18 years 6 months
  - 19 years
  - 19 years 6 months
  - 20 years
  - 20 years 6 months
  - 21 years
  - 21 years 6 months
  - 22 years
  - 22 years 6 months
  - 23 years
  - 23 years 6 months
  - 24 years
  - 24 years 6 months
  - 25 years
- 20 In general, how satisfied are you with your relationship?
- Not at all satisfied
  - Slightly satisfied
  - Moderately satisfied
  - Very satisfied
  - Extremely satisfied
- 21 How stressful has the wedding planning been since your engagement?
- Not at all stressful
  - Slightly stressful
  - Moderately stressful
  - Very stressful
  - Extremely stressful

22 Do you have children?

- Yes
- No

How many children have you given birth to?

\_\_\_\_\_

How much weight did you gain in your 1st pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 2nd pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 3rd pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 4th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 5th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 6th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 7th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 8th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 9th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

How much weight did you gain in your 10th pregnancy?

- Less than 5 lb.
- 5-10 lb.
- 10.1-20 lb.
- 20.1-30 lb.
- 30.1-40 lb.
- 40.1-50 lb.
- More than 50 lb.

Do you plan on having more children eventually?

- Yes
- No

Do you plan on having children eventually?

- Yes
- No

When do you plan on having children?

- In the next 6 months
- 6 months to a year from now
- 1-2 years from now
- 2-5 years from now
- More than 5 years from now

---

---

**Dietary Behaviors**

23 Do you currently use an app or website to track your calories?

- Yes
- No

If yes, which one?

- ControlMyWeight
- Cron-o-meter
- Fat Secret
- Fooducate
- Livestrong (MyPlate Calorie Counter)
- Lose It
- MyFitnessPal
- My Diet Diary
- My Net Diary
- Noom Coach
- Simple Calorie Count
- SuperTracker
- Other

If other, please specify: \_\_\_\_\_

24 Are you currently following any of these diets? (Check all that apply)

- Vegetarian
- Vegan
- Gluten-free
- Low fat
- Low carb
- Atkins
- Paleo
- Ketogenic
- Whole 30
- Mediterranean
- Other
- I am not following any diet

If other, please specify: \_\_\_\_\_

25 Are you currently following a commercial weight loss program? (ex: WeightWatchers, Jenny Craig, NutriSystem, etc.)

- Yes
- No

If yes, which one?

- Biggest Loser Diet
- Flat Belly Diet
- HMR Program
- ItWorks
- Jenny Craig Diet
- Medifast
- NutriSystem
- Plexus
- Slim Fast Diet
- South Beach Diet
- Weight Watchers Diet
- Other

If other, please specify: \_\_\_\_\_

- 26 Over the last month, how many times per month, week, or day did you eat fruit? Count any kind of fruit - fresh, canned, and frozen. Do not count juices. Include fruit you ate at all mealtimes and for snacks.
- Never
  - 1-3 times last month
  - 1-2 times per week
  - 3-4 times per week
  - 5-6 times per week
  - 1 time per day
  - 2 times per day
  - 3 times per day
  - 4 times per day
  - 5 or more times per day
- 27 Over the last month, how many times per month, week, or day did you eat vegetables? Count any kind of vegetables - fresh, canned, and frozen. Do not count white potatoes. Include vegetables you ate at all mealtimes and for snacks.
- Never
  - 1-3 times last month
  - 1-2 times per week
  - 3-4 times per week
  - 5-6 times per week
  - 1 time per day
  - 2 times per day
  - 3 times per day
  - 4 times per day
  - 5 or more times per day
- 28 About how often do you eat fast food, such as McDonald's, Burger King, Pizza Hut, KFC, Taco Bell, etc.?
- Never
  - Less than once a month
  - 1-3 times per month
  - 1-2 times per week
  - 3-4 times per week
  - 5-6 times per week
  - 1 time per day
  - 2 or more times per day
- 29 About how often do you eat at full-service restaurants, such as Applebee's, T.G.I. Friday's, Chile's, IHop, Bob Evans, Jack Stack Barbecue, etc.?
- Never
  - Less than once a month
  - 1-3 times per month
  - 1-2 times per week
  - 3-4 times per week
  - 5-6 times per week
  - 1 time per day
  - 2 or more times per day
- 30 Overall, when you think about the foods you ate over the past 6 months, would you say your diet was high, medium, or low in fat?
- High-fat
  - Medium-fat
  - Low-fat

---

---

**Physical Activity Behaviors**

31 Do you use an app, fitness band, pedometer, or accelerometer to track your physical activity?

- Yes
- No

If yes, which one?

- Pedometer (generic)
- Basis band
- FitBit band/ gear
- Garmin band
- iPhone Health App
- Mio band
- Nike band
- Samsung Gear or App
- Under Armor band
- UP band
- Other

If other, please specify: \_\_\_\_\_

If yes, about how many steps do you take on an average day?

- < 5,000 steps
- 5,000-7,499 steps
- 7,500-9,999 steps
- 10,000-12,499 steps
- 12,500+ steps

32 During the past month, did you participate in any physical activities (examples: running, yoga, aerobics, dancing, Pilates, weight lifting, Zumba, or walking for exercise)?

- Yes
- No

Within the past month, which activities have you participated in? (Check all that apply)

- Walking, leisurely
- Walking, vigorously
- Jogging
- Running
- Biking
- Dancing (competitively or for fun)
- Pilates/ Barre
- Yoga
- Swimming
- Strength training/ weight lifting
- Sports (all kinds)
- Gymnastics
- CrossFit
- Zumba
- Kickboxing
- Other

If other, please list any additional activities you participated in this past month: \_\_\_\_\_

On average, how often do you usually participate in these activities?

- Less than once a month
- 1-3 times per month
- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 1 time per day
- 2 or more times per day



33 On a usual weekday, about how much time do you spend on the computer (for work and for fun), watching television, movies, Netflix, videos, DVDs, or playing games on electronic devices?

- Less than 1 hour per day
- 1-3 hours per day
- 4-6 hours per day
- 7-9 hours per day
- 10-12 hours per day
- 13-15 hours per day
- More than 15 hours per day

34 On a usual weekend day, about how much time do you spend on the computer (for work and for fun), watching television, movies, Netflix, videos, DVDs, or playing games on electronic devices?

- Less than 1 hour per day
- 1-3 hours per day
- 4-6 hours per day
- 7-9 hours per day
- 10-12 hours per day
- 13-15 hours per day
- More than 15 hours per day

---

---

**Health Concerns**

**The next few questions ask about your health. Do you have, or have you ever been told that you have...**

- |   | Yes                   | No                    |
|---|-----------------------|-----------------------|
| 35 Diabetes or high sugar?              | <input type="radio"/> | <input type="radio"/> |
| 36 Hypertension or high blood pressure? | <input type="radio"/> | <input type="radio"/> |
| 37 High cholesterol?                    | <input type="radio"/> | <input type="radio"/> |
| 38 Asthma or emphysema?                 | <input type="radio"/> | <input type="radio"/> |
| 39 Heart attack or heart disease?       | <input type="radio"/> | <input type="radio"/> |
| 40 Cancer?                              | <input type="radio"/> | <input type="radio"/> |

---

---

**Health Concerns Continued**

**Has a doctor or other health professional ever talked to you about...**

|  | No                    | Yes, within the past<br>12 months | Yes, within the past 3<br>years   | Yes, 3 or more years<br>ago |
|--|-----------------------|-----------------------------------|---|-----------------------------|
| 41 Nutrition, your diet, or your eating habits?                                      | <input type="radio"/> | <input type="radio"/>             | <input type="radio"/>   | <input type="radio"/>       |
| 42 Cigarette smoking?  | <input type="radio"/> | <input type="radio"/>             | <input type="radio"/>   | <input type="radio"/>       |
| 43 Physical activity or exercise?  | <input type="radio"/> | <input type="radio"/>             | <input type="radio"/>   | <input type="radio"/>       |
| 44 About how long has it been since you last visited a doctor for a routine checkup? |                       |                                   | <input type="radio"/> Within the past year<br><input type="radio"/> Within the past 2 years<br><input type="radio"/> Within the past 5 years<br><input type="radio"/> 5 or more years ago |                             |

---

---

**Cohen Perceived Stress Scale**

**The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.**

**For each statement please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time)**

|  | Never                 | Almost Never          | Sometimes             | Fairly Often          | Very Often            |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 45 In the last month, how often have you felt that you were unable to control the important things in your life?         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 46 In the last month, how often have you felt confident about your ability to handle your personal problems              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 47 In the last month, how often have you felt that things were going your way?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 48 In the last month, how often have you felt that difficulties were piling up so high that you could not overcome them? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Contact Information

Please provide your email if you would like to be contacted for future studies.

This email will not be linked to any of the previous responses you just provided. It will be stored in a completely different database.

If you do not want to provide you email, please browser now.

Thank you!

1) Email address:

---

**Appendix B:** Baseline Bridal Registry Survey with Consent Form and Brief Eligibility Survey  
from Participants View Online

## Baseline Bridal Registry Questionnaire

Resize font:



Page 1 of 10

My name is Katelynne Burghardt, a Master's level student at the University of Kansas Medical Center. We are recruiting research participants to help us observe the dietary and physical activity behaviors of engaged women as they prepare for their wedding day. Participation involves completing this survey that will take about 15 minutes. In addition to the survey questions, we will request information about your demographics, body image perceptions, height and weight, wedding/ relationship, dietary behaviors, physical activity behaviors, health status, and stress level. The survey will not be linked to any personal identifiers and will be anonymous.

There are no personal benefits or risks to participating in this study. Participation is voluntary, and you can stop taking the survey at any time.

If you have any questions, please contact Katelynne Burghardt at [kburghardt@kumc.edu](mailto:kburghardt@kumc.edu). For questions about the rights of research participants, you may contact the KUMC Institutional Review Board (IRB) at (913) 588-1240 or [humansubjects@kumc.edu](mailto:humansubjects@kumc.edu)

Please choose one of following options:

- I do not agree.  
 I agree.

[reset](#)

[Next Page >>](#)

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 2 of 10

## Brief Eligibility Questionnaire

Are you a U.S. citizen?

- Yes  
 No

reset

Are you between the ages of 18 to 40 years old?

- Yes  
 No

reset

What is your gender?

- Female  
 Male  
 Other

reset

Are you engaged to be married?

- Yes  
 No

reset

Are you pregnant or breastfeeding?

- Yes  
 No  
 Unsure

reset

<< Previous Page

Next Page >>



# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 3 of 10

## Demographics

|   |  |   |       |
|---|--|---|-------|
| 1 | What is your age?  | <input type="text"/>  | years |
| 2 | What is your ethnicity?                                    | <input type="radio"/> Hispanic or Latino<br><input type="radio"/> Not Hispanic or Latino<br><input type="radio"/> Unknown   | reset |
| 3 | What is your race?   | <input type="radio"/> Black or African American<br><input type="radio"/> American Indian or Alaskan Native<br><input type="radio"/> Asian<br><input type="radio"/> Native American or Other Pacific Islander<br><input type="radio"/> White<br><input type="radio"/> Unknown  | reset |
| 4 | What is the highest level of education you have completed? | <input type="radio"/> Less than high school<br><input type="radio"/> High School/ GED<br><input type="radio"/> Some college but no degree<br><input type="radio"/> Associate's degree<br><input type="radio"/> Bachelor's degree<br><input type="radio"/> Graduate degree   | reset |
| 5 | Are you currently:   | <input type="radio"/> Employed full-time<br><input type="radio"/> Employed part-time<br><input type="radio"/> Out of work for more than 1 year<br><input type="radio"/> Out of work for less than 1 year<br><input type="radio"/> Homemaker<br><input type="radio"/> Student<br><input type="radio"/> Retired<br><input type="radio"/> Unable to work | reset |
| 6 | What is your yearly income?                                | <input type="radio"/> Less than \$20,000<br><input type="radio"/> \$20,000 - \$34,999<br><input type="radio"/> \$35,000 - \$49,999<br><input type="radio"/> \$50,000 - \$74,999<br><input type="radio"/> \$75,000 - \$99,999<br><input type="radio"/> \$100,000 - \$149,999<br><input type="radio"/> \$150,000 or more                                | reset |
| 7 | Who are you currently living with?                         | <input type="radio"/> Independently<br><input type="radio"/> Significant other/ fiancé(e)   |       |

- Roommate(s)
- Parents/family

reset

<< Previous Page

Next Page >>

REDCap Software - Version 6.11.5 - © 2016 Vanderbilt University

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 4 of 10

## Anthropometrics

8 What is your height (in inches)?   
Number only. Do not type "inches" Example: 1 foot = 12 inches;  
5 foot = 60 inches

9 What is your weight (in pounds)?   
Number only

10 How would you describe your current weight?

- Very underweight
- A little underweight
- My weight is just right
- A little overweight
- Very overweight
- I don't know

reset

11 Please choose the statement that describes you best:

- I am currently trying to lose weight.
- I am currently trying to maintain my weight.
- I am currently trying to gain weight.
- None of the above statements describe me.

reset

12 Do you have a desired wedding weight?

- Yes
- No

reset

13 Were you told to lose weight by anyone for your wedding?

- Yes
- No

reset

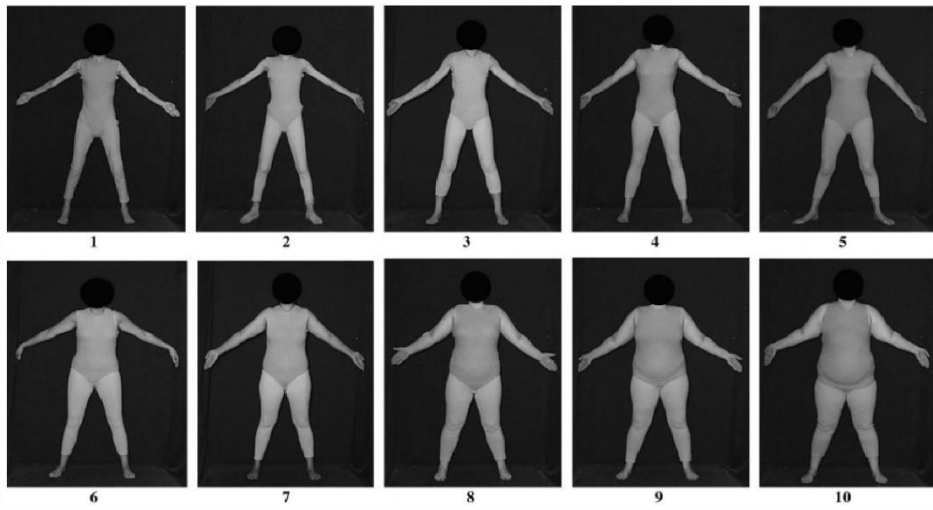
14 Have you tried to lose weight since being engaged?

- Yes
- No

reset

15 Please pick the image number below that most accurately depicts your current body size.

16 Please pick the image number below that most accurately depicts your ideal body size.



<< Previous Page



Next Page >>

REDCap Software - Version 6.11.5 - © 2016 Vanderbilt University

# Baseline Bridal Registry Questionnaire

Resize font: 

Page 5 of 10

| Wedding & Relationship |   |
|------------------------|---|
| 17                     | <p>Is this your first marriage?</p> <p><input type="radio"/> Yes<br/><input type="radio"/> No</p> <p>reset</p>  |
| 18                     | <p>What is the date of your wedding?</p> <p><input type="text"/>  Today M-D-Y<br/>Format MM/DD/YYYY (If you haven't picked a date, type in a potential date.)</p>  |
| 19                     | <p>How long have you and your fiancé(e) been a couple? (Choose the best option)</p> <p><input type="text"/> </p>   |
| 20                     | <p>In general, how satisfied are you with your relationship?</p> <p><input type="radio"/> Not at all satisfied<br/><input type="radio"/> Slightly satisfied<br/><input type="radio"/> Moderately satisfied<br/><input type="radio"/> Very satisfied<br/><input type="radio"/> Extremely satisfied</p> <p>reset</p>          |
| 21                     | <p>How stressful has the wedding planning been since your engagement?</p> <p><input type="radio"/> Not at all stressful<br/><input type="radio"/> Slightly stressful<br/><input type="radio"/> Moderately stressful<br/><input type="radio"/> Very stressful<br/><input type="radio"/> Extremely stressful</p> <p>reset</p> |
| 22                     | <p>Do you have children?</p> <p><input type="radio"/> Yes<br/><input type="radio"/> No</p> <p>reset</p>   |

[<< Previous Page](#)      [Next Page >>](#)

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 6 of 10

## Dietary Behaviors

|    |  |  |       |
|----|--|--|-------|
| 23 | Do you currently use an app or website to track your calories?   | <input type="radio"/> Yes<br><input type="radio"/> No  | reset |
| 24 | Are you currently following any of these diets? (Check all that apply)   | <input type="checkbox"/> Vegetarian<br><input type="checkbox"/> Vegan<br><input type="checkbox"/> Gluten-free<br><input type="checkbox"/> Low fat<br><input type="checkbox"/> Low carb<br><input type="checkbox"/> Atkins<br><input type="checkbox"/> Paleo<br><input type="checkbox"/> Ketogenic<br><input type="checkbox"/> Whole 30<br><input type="checkbox"/> Mediterranean<br><input type="checkbox"/> Other<br><input type="checkbox"/> I am not following any diet |       |
| 25 | Are you currently following a commercial weight loss program? (ex: WeightWatchers, Jenny Craig, NutriSystem, etc.)   | <input type="radio"/> Yes<br><input type="radio"/> No  | reset |
| 26 | Over the <u>last month</u> , how many times per month, week, or day did you eat fruit? Count any kind of fruit - fresh, canned, and frozen. Do not count juices. Include fruit you ate at all mealtimes and for snacks.                        | <input type="radio"/> Never<br><input type="radio"/> 1-3 times last month<br><input type="radio"/> 1-2 times per week<br><input type="radio"/> 3-4 times per week<br><input type="radio"/> 5-6 times per week<br><input type="radio"/> 1 time per day<br><input type="radio"/> 2 times per day<br><input type="radio"/> 3 times per day<br><input type="radio"/> 4 times per day<br><input type="radio"/> 5 or more times per day  | reset |
| 27 | Over the <u>last month</u> , how many times per month, week, or day did you eat vegetables? Count any kind of vegetables - fresh, canned, and frozen. Do not count white potatoes. Include vegetables you ate at all mealtimes and for snacks. | <input type="radio"/> Never<br><input type="radio"/> 1-3 times last month<br><input type="radio"/> 1-2 times per week<br><input type="radio"/> 3-4 times per week<br><input type="radio"/> 5-6 times per week<br><input type="radio"/> 1 time per day<br><input type="radio"/> 2 times per day<br><input type="radio"/> 3 times per day<br><input type="radio"/> 4 times per day<br><input type="radio"/> 5 or more times per day  | reset |

|    |   |   |       |
|----|---|---|-------|
| 28 | About how often do you eat fast food, such as McDonald's, Burger King, Pizza Hut, KFC, Taco Bell, etc.?   | <input type="radio"/> Never<br><input type="radio"/> Less than once a month<br><input type="radio"/> 1-3 times per month<br><input type="radio"/> 1-2 times per week<br><input type="radio"/> 3-4 times per week<br><input type="radio"/> 5-6 times per week<br><input type="radio"/> 1 time per day<br><input type="radio"/> 2 or more times per day | reset |
| 29 | About how often do you eat at full-service restaurants, such as Applebee's, T.G.I. Friday's, Chile's, Ihop, Bob Evans, Jack Stack Barbecue, etc.? | <input type="radio"/> Never<br><input type="radio"/> Less than once a month<br><input type="radio"/> 1-3 times per month<br><input type="radio"/> 1-2 times per week<br><input type="radio"/> 3-4 times per week<br><input type="radio"/> 5-6 times per week<br><input type="radio"/> 1 time per day<br><input type="radio"/> 2 or more times per day | reset |
| 30 | Overall, when you think about the foods you ate over the past 6 months, would you say your diet was high, medium, or low in fat?                  | <input type="radio"/> High-fat<br><input type="radio"/> Medium-fat<br><input type="radio"/> Low-fat   | reset |

[<< Previous Page](#)      [Next Page >>](#)

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 7 of 10

## Physical Activity Behaviors

- 31 Do you use an app, fitness band, pedometer, or accelerometer to track your physical activity?  Yes  No [reset](#)
- 32 During the past month, did you participate in any physical activities (examples: running, yoga, aerobics, dancing, Pilates, weight lifting, Zumba, or walking for exercise)?  Yes  No [reset](#)
- 33 On a usual weekday, about how much time do you spend on the computer (for work and for fun), watching television, movies, Netflix, videos, DVDs, or playing games on electronic devices?  Less than 1 hour per day  1-3 hours per day  4-6 hours per day  7-9 hours per day  10-12 hours per day  13-15 hours per day  More than 15 hours per day [reset](#)
- 34 On a usual weekend day, about how much time do you spend on the computer (for work and for fun), watching television, movies, Netflix, videos, DVDs, or playing games on electronic devices?  Less than 1 hour per day  1-3 hours per day  4-6 hours per day  7-9 hours per day  10-12 hours per day  13-15 hours per day  More than 15 hours per day [reset](#)

<< Previous Page

Next Page >>



# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 8 of 10

## Health Concerns

The next few questions ask about your health. Do you have, or have you ever been told that you have...

|   | Yes                   | No                    |       |
|---|-----------------------|-----------------------|-------|
| 35 Diabetes or high sugar?              | <input type="radio"/> | <input type="radio"/> | reset |
| 36 Hypertension or high blood pressure? | <input type="radio"/> | <input type="radio"/> | reset |
| 37 High cholesterol?                    | <input type="radio"/> | <input type="radio"/> | reset |
| 38 Asthma or emphysema?                 | <input type="radio"/> | <input type="radio"/> | reset |
| 39 Heart attack or heart disease?       | <input type="radio"/> | <input type="radio"/> | reset |
| 40 Cancer?                              | <input type="radio"/> | <input type="radio"/> | reset |

<< Previous Page

Next Page >>

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 9 of 10

## Health Concerns Continued

Has a doctor or other health professional ever talked to you about...

|  | No  | Yes, within the past 12 months | Yes, within the past 3 years | Yes, 3 or more years ago |       |
|--|---|--------------------------------|------------------------------|--------------------------|-------|
| 41 Nutrition, your diet, or your eating habits?                                      | <input type="radio"/>   | <input type="radio"/>          | <input type="radio"/>        | <input type="radio"/>    | reset |
| 42 Cigarette smoking?  | <input type="radio"/>   | <input type="radio"/>          | <input type="radio"/>        | <input type="radio"/>    | reset |
| 43 Physical activity or exercise?  | <input type="radio"/>   | <input type="radio"/>          | <input type="radio"/>        | <input type="radio"/>    | reset |
| 44 About how long has it been since you last visited a doctor for a routine checkup? | <input type="radio"/> Within the past year<br><input type="radio"/> Within the past 2 years<br><input type="radio"/> Within the past 5 years<br><input type="radio"/> 5 or more years ago |                                |                              |                          | reset |

<< Previous Page

Next Page >>

# Baseline Bridal Registry Questionnaire

Resize font:  
+ | -

Page 10 of 10

## Cohen Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

For each statement please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time)

|    |   | Never                 | Almost Never          | Sometimes             | Fairly Often          | Very Often            |       |
|----|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------|
| 45 | In the last month, how often have you felt that you were unable to control the important things in your life?         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | reset |
| 46 | In the last month, how often have you felt confident about your ability to handle your personal problems              | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | reset |
| 47 | In the last month, how often have you felt that things were going your way?   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | reset |
| 48 | In the last month, how often have you felt that difficulties were piling up so high that you could not overcome them? | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | reset |

[<< Previous Page](#)      [Submit](#)

## Contact Information

Resize font:  
+ | -

**Please provide your email if you would like to be contacted for future studies.**

**This email will not be linked to any of the previous responses you just provided. It will be stored in a completely different database.**

**If you do not want to provide you email, please browser now.**

Thank you!

1) **Email address:**

Submit

Close survey

**Thank you.**

Have a nice day!

REDCap Software - Version 6.11.5 - © 2016 Vanderbilt University